Ideas for action

Driving the green transition through transport electrification

Analysis of electric mobility in Spain: current situation, key challenges, and proposals to increase electric vehicles uptake

Results of the working group "Facing the future: the challenge of the electric vehicle sector," led by **alinnea**

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alinnea has been a key player in Spain's climate action ecosystem since mid-2024. As part of IE University and supported by the European Climate Foundation, **alinnea** specializes in comparative analysis, identification, and articulation of climate change measures and actions that engage the public and private sectors, as well as civil society.

Operating under a multi-stakeholder, dialogue-research-action framework, **alinnea** seeks to develop solutions that overcome climate action barriers while ensuring they are socially just, economically viable, and beneficial for the environment and biodiversity protection.

Between May and July 2024, **alinnea** conducted interviews and workshops with over seventy key stakeholders from the private sector, public administration, NGOs, trade unions, and academia, gathering insights on their concerns and priorities. Based on these discussions, a working group was formed to develop proposals to advance the mitigation and adaptation objectives of the agri-food sector.

Introduction

This report presents the main conclusions of the working group convened by alinnea, whose primary objective was to identify the key challenges facing the electric mobility sector regarding climate action.

The group's deliberations are reflected in the sections on challenges and recommendations, with the aim of contributing to a just and competitive transition to sustainable mobility. We would like to thank the participants in this working group for generously sharing their ideas, insights, and time.

Table 1: Members of the alinnea working group

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MIGUEL ANGEL	JIMENEZ	AEDIVE	Head of Communications
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SHEILA	FERRER LOPEZ	MINISTERIO DE TRANSPORTES Y MOVILIDAD SOSTENIBLE	Advisory Officer
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SANTIAGO	PALMERO	MINISTERIO DE TRANSPORTES Y MOVILIDAD SOSTENIBLE	Coordinator, General Secretariat for Sustainable Mobility

The working group received technical support from researchers Xaquín García and Mikel González of the Basque Centre for Climate Change (BC3), together with Cristina Monge Lasierra, who is a BC3 collaborator and facilitated the working sessions.

Three dialogue sessions were held between June 2024 and January 2025. These included presentations on the following topics and entities, to whom we also extend our gratitude for their time and contributions:

- Priorities of the automotive sector in Spain. Félix García, ANFAC.
- General rules for means of payment. Luis Barroso, Mobi.E
- Guide to promoting electric mobility. Laura Vélez Mendizábal, T&E.
- Social leasing. Cristian Quílez, ECODES.
- Planning the distribution of charging points. Isabel Gómez, Iberdrola.
- Solar car parks with charging points 2024. Raquel Paule, Fundación Renovables.
- Draft Law on Sustainable Mobility and its legislative progress. Carlos Bravo.
- ETS2 in transport. Cristina García, Technical Section, Spanish Office for Climate Change.

Objectives

The purpose of this document is to assess the current situation of electric mobility in Spain, in order to identify the main barriers and propose recommendations for action to accelerate the transition to decarbonized transport.

In the context of the fight against climate change, the transport sector is the largest emitter of greenhouse gases. According to the latest available data for 2023 (MITECO 2024) the transport sector accounts for 32.6% of total emissions, most of which are generated by road transport. This makes its transformation critical to achieving national mitigation targets. Meanwhile, Spain lags behind other European countries in terms of transport electrification and electric vehicles uptake.

Decarbonizing this sector therefore requires the implementation of structural, far-reaching, and urgent measures that encourage a modal shift from private vehicle use towards more sustainable modes of transport, such as public transport, active mobility, and other low-emission alternatives.

It is equally essential to address the decarbonization of freight transport, given its heavily reliance on road transport. In this regard, recent studies (OIKOS 2023, T&E 2019) have addressed heavy-duty transport decarbonization and other necessary aspects such as modal shift and the role of low-emission zones, which can complement the measures proposed in this document (MITMA 2021, ECODES 2022, OMM 2023).

This report focuses primarily on the electrification of the passenger car and light vehicle fleet, with particular emphasis on achieving the objectives of the Integrated National Energy and Climate Plan (PNIEC) 2023–2030: reaching 5.5 million electrified vehicles by 2030.

Methodology

The methodology was based on collaborating with relevant stakeholders to analyse the current state of electric vehicles in Spain, identify existing barriers and key challenges, and develop proposals and measures.

This work engaged a diverse group of stakeholders from the transport sector, including companies, non-governmental organizations (NGOs), and public administrations, who participated in three in-person working sessions. The first session focused on conducting a shared diagnosis of the situation and identifying the main barriers. The second was dedicated to proposing and discussing measures to address these barriers. Finally, the third session examined in greater depth several of the key measures identified during the process, which form part of the set of recommendations.

In addition, a series of targeted bilateral meetings were organized to analyse certain barriers in detail and to enrich and finalize the proposals for action.

1. *MITECO (2024). "Briefing note on the progress of greenhouse gas emissions for 2023", https://www.miteco.gob.es/content/dam/miteco/es/calidad-y-evaluacion-ambiental/temas/sistema-espanol-de-inventario-sei-/avance-GEI-2023.pdf.*

2. Diagnosis of electric mobility in Spain

2.1 Analysis of the current situation in the transport sector

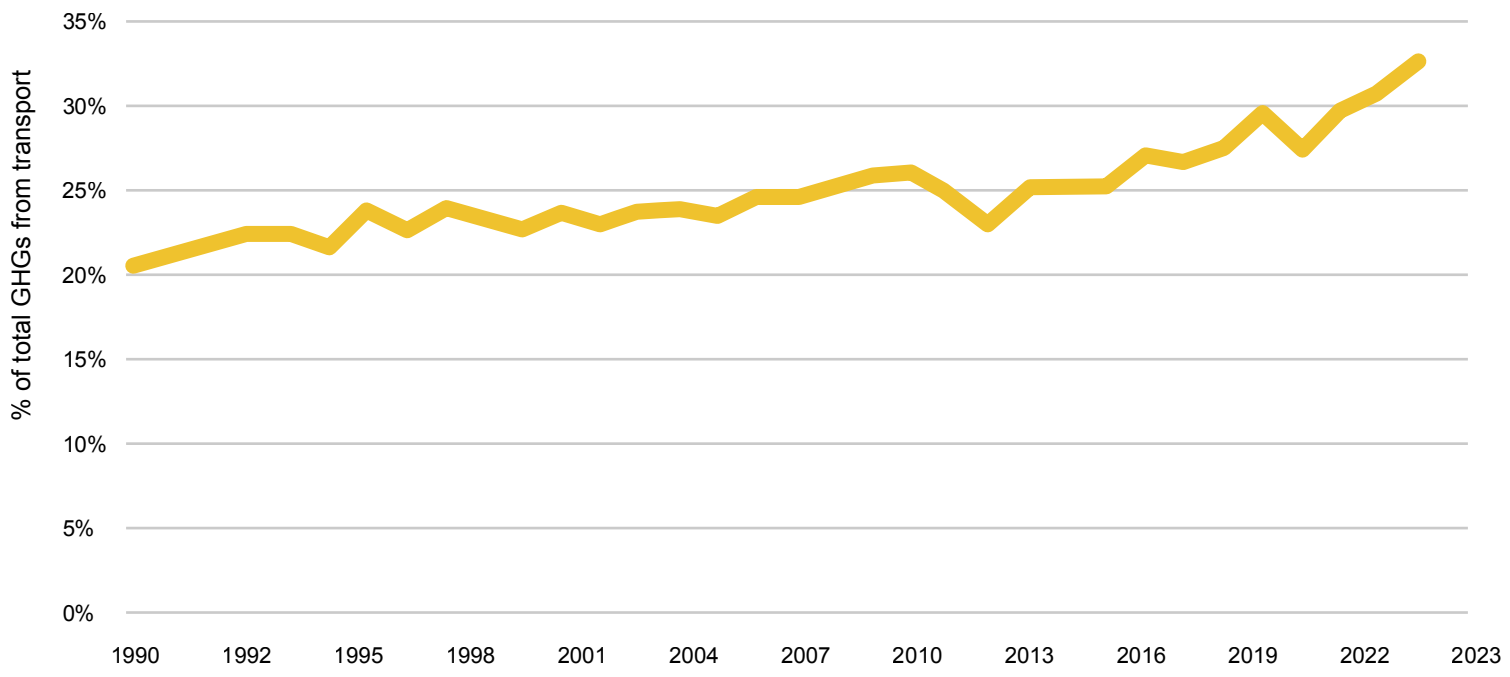
In the context of the energy transition, the transport sector in Spain faces structural, economic, and social challenges that hinder greenhouse gas (GHG) emissions reduction.

Although the country has made notable progress in decarbonizing the electricity sector, driven by the closure of coal plants and the growth of renewable energy sources, transport remains a critical area in the fight against climate change. This sector (see Figure 1) accounts for an increasing share of Spain's gross GHG emissions, generating one in every three tonnes of CO_2 equivalent.

Transport emissions have grown substantially in recent decades, rising by 53% since 1990, from 59 $MtCO_2eq$ to 90 $MtCO_2eq$ in 2023. Although emissions fell in the years following the 2008–2009 crisis, they have trended upwards again over the past decade. In 2023, a slight change in trend was observed, with emissions beginning to decline marginally, suggesting that they may have peaked in 2019. However, the latest economic data from the Observatory of Energy Transition and Climate Action (OTEA) indicate that transport emissions will rise again in 2024 , which is a warning sign if Spain is to meet its decarbonization targets for the sector.

The updated version of the PNIEC, approved on 24 September 2024, substantially increases the mitigation target to 32% compared with 1990 levels. For the transport sector, emissions should return to levels similar to those of 1990, around 60 $MtCO_2eq$ (see Figure 2). To meet this target, emissions would need to fall at an average annual rate of 5% over the next seven years. Yet, according to OTEA data for the first half of 2024, transport emissions are in fact growing at a rate of 5.8%.

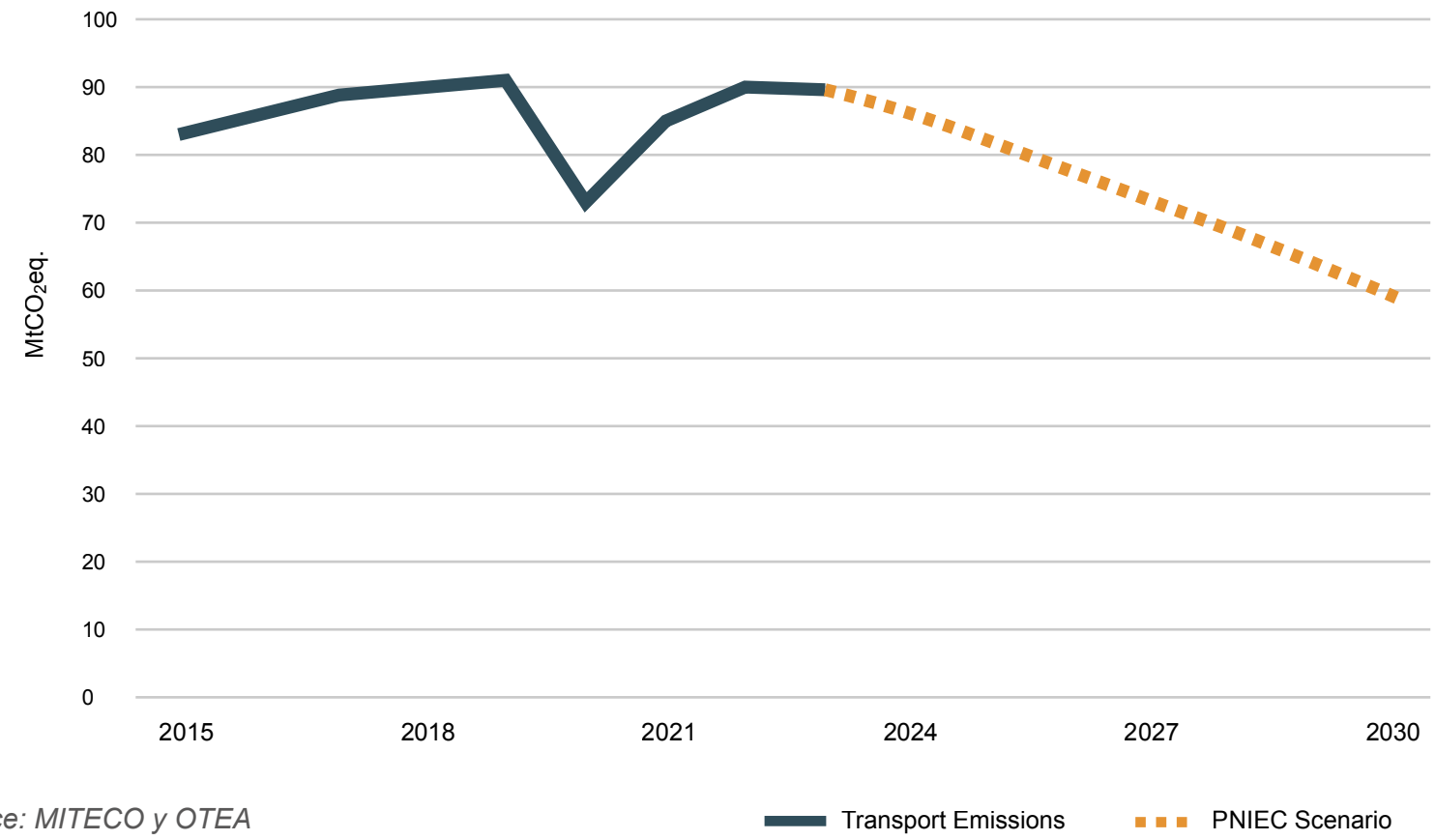
Figure 1. GHG emissions from the transport sector as a share of the total (%), 1990–2023



Source: MITECO and OTEA

2. *Energy Transition Situation Table (second quarter). Available at: https://api.otea.info/storage/2024/09/27/034954514b2347c7842f994e3d69a884fd66723d.pdf.*

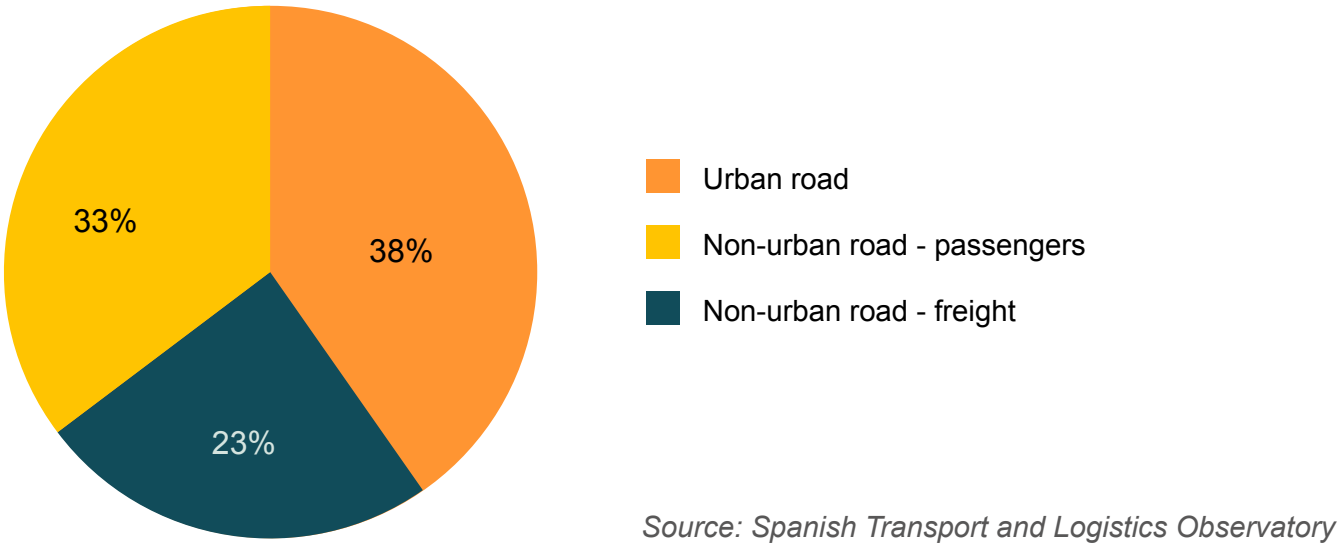
Figure 2. Evolution of GHG emissions from the transport sector ($MtCO_2eq$) and 2030 targets



Source: MITECO y OTEA

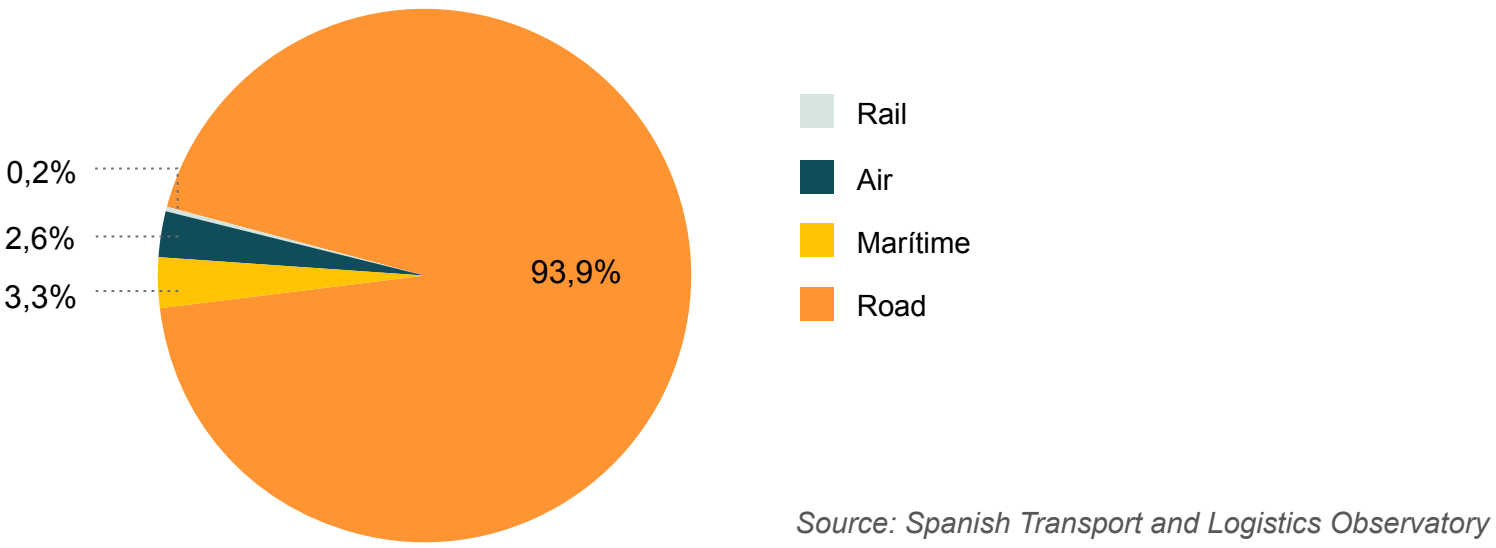
Emissions from the transport sector in Spain come mainly from road transport, which accounts for approximately 94% of sector emissions (see Figure 3). A large share of these emissions is linked to the use of private vehicles for passenger mobility. By mode of transport, interurban freight accounts for 23% of emissions, interurban public transport for 33%, and urban transport for 38%. In addition, according to 2022 data from the Spanish Transport and Logistics Observatory, 77% of passenger travel is by private vehicles.

Figure 3. GHG emissions from road transport by sector and type, 2022



Source: Spanish Transport and Logistics Observatory

Figure 4. GHG emissions from the transport sector by mode, 2022



Source: Spanish Transport and Logistics Observatory

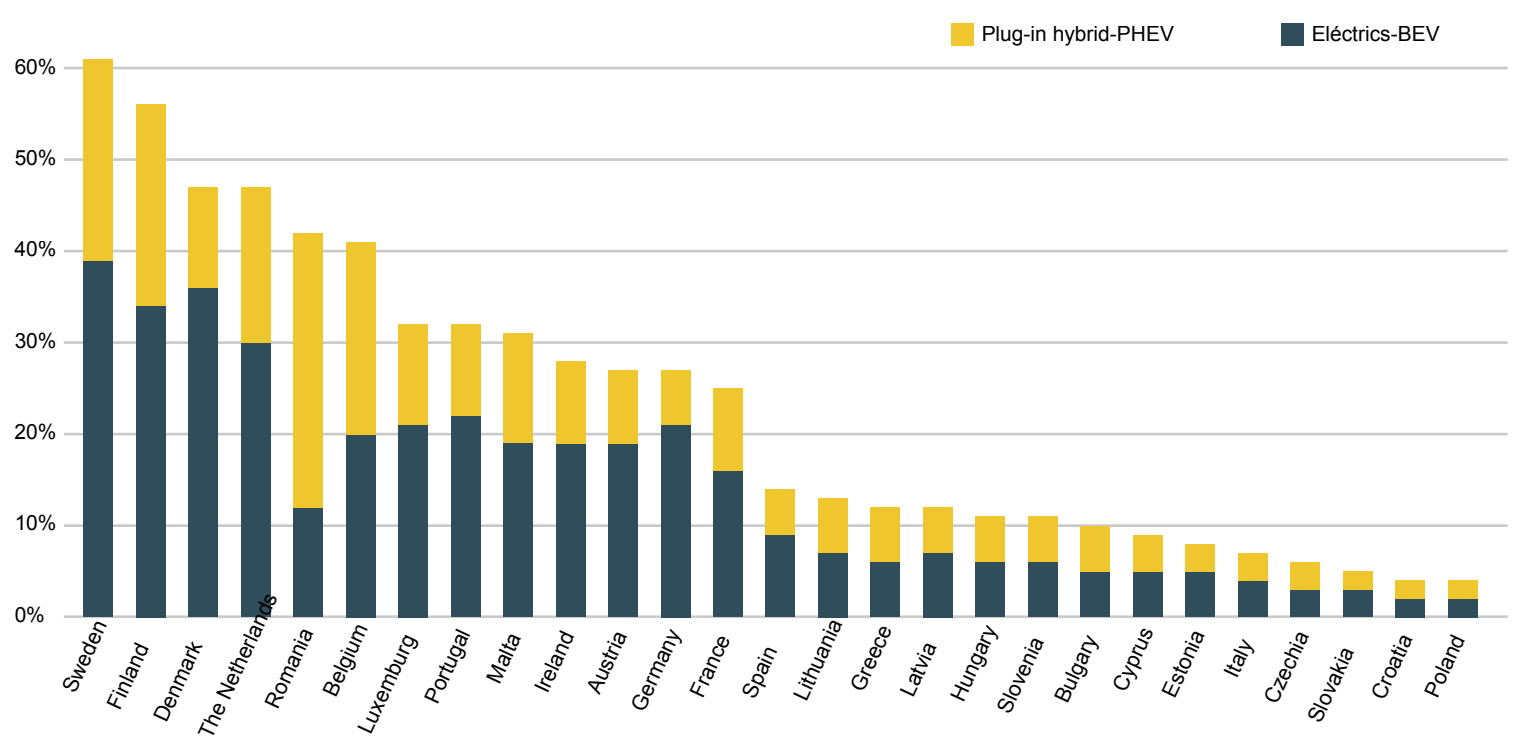
In this regard, although Spain still has scope to reduce freight emissions through modal shift to other transport modes, mainly rail, and through changes in urban mobility, passenger transport electrification will be a key factor in meeting these objectives. The following section therefore examines the situation of electric mobility.

2.2 Analysis of the current situation in terms of electrification

From the perspective of electric mobility, according to ANFAC[3], Spain lags behind other European Union countries in both sales and the rollout of charging infrastructure. On the other hand, it is important to note that AEDIVE data from 2024 indicates that Spain has 40,000 charging points and a growth rate of 33,2% compared to 2023, thus reinforcing the upward trend observed throughout the year.

Data from the European Environment Agency (see Figure 5) show that Spain ranks 19th among the EU-27 in sales of battery electric vehicles (BEVs), and 14th when plug-in hybrid vehicles (PHEVs) are also included. The market for PHEVs is slightly larger than that for BEVs, with 62,729 PHEVs compared with 55,288 BEVs currently in circulation.

Figure 5. Percentage of electrified vehicle sales in the EU-27, 2022

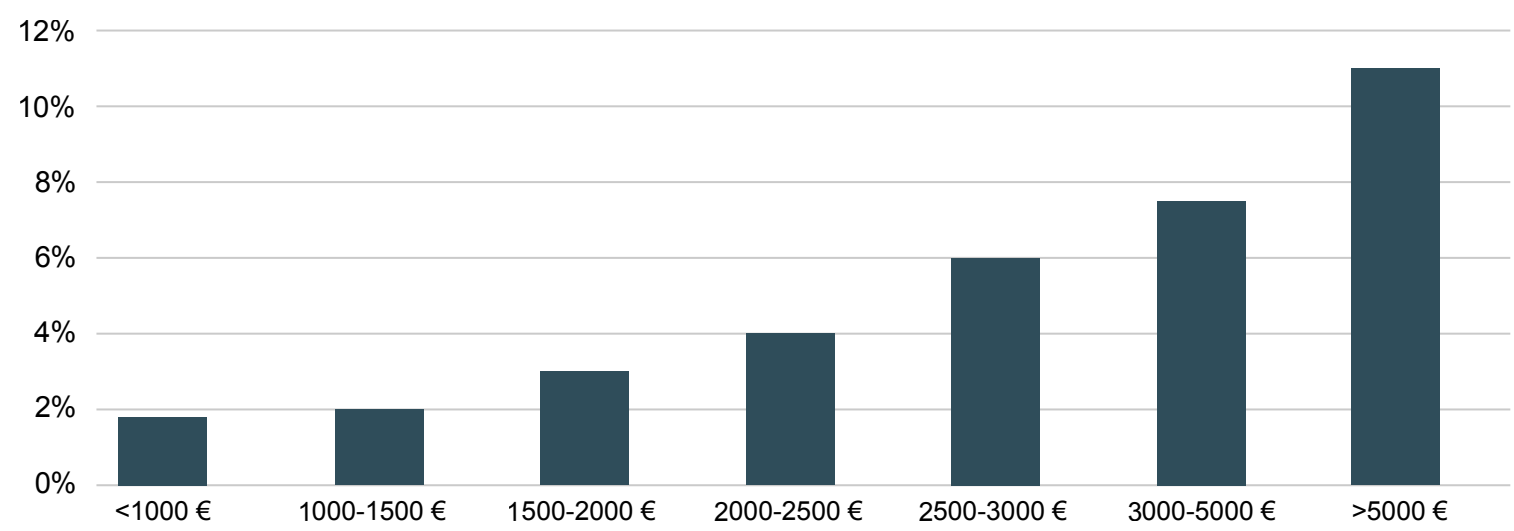


Source: European Environment Agency (2022)

According to 2023 data, battery electric vehicles (BEVs) accounted for 5.2% of car sales in Spain, compared with 15% in Europe. This places Spain far behind countries such as Sweden, Finland, Denmark, and the Netherlands, where the share is in the 30–40% range, or countries such as Portugal, Germany, Ireland, and Austria, where it is around 20%.

Data on electrified vehicle ownership[4] indicate that purchases are largely concentrated among middle and high-income households (see Figure 6). A significant share of the population is still unable to access these vehicles despite existing aid. Moreover, a large proportion of vehicles are concentrated in major urban areas, such as Madrid and Barcelona, suggesting that low-emission zones are influencing purchasing decisions.

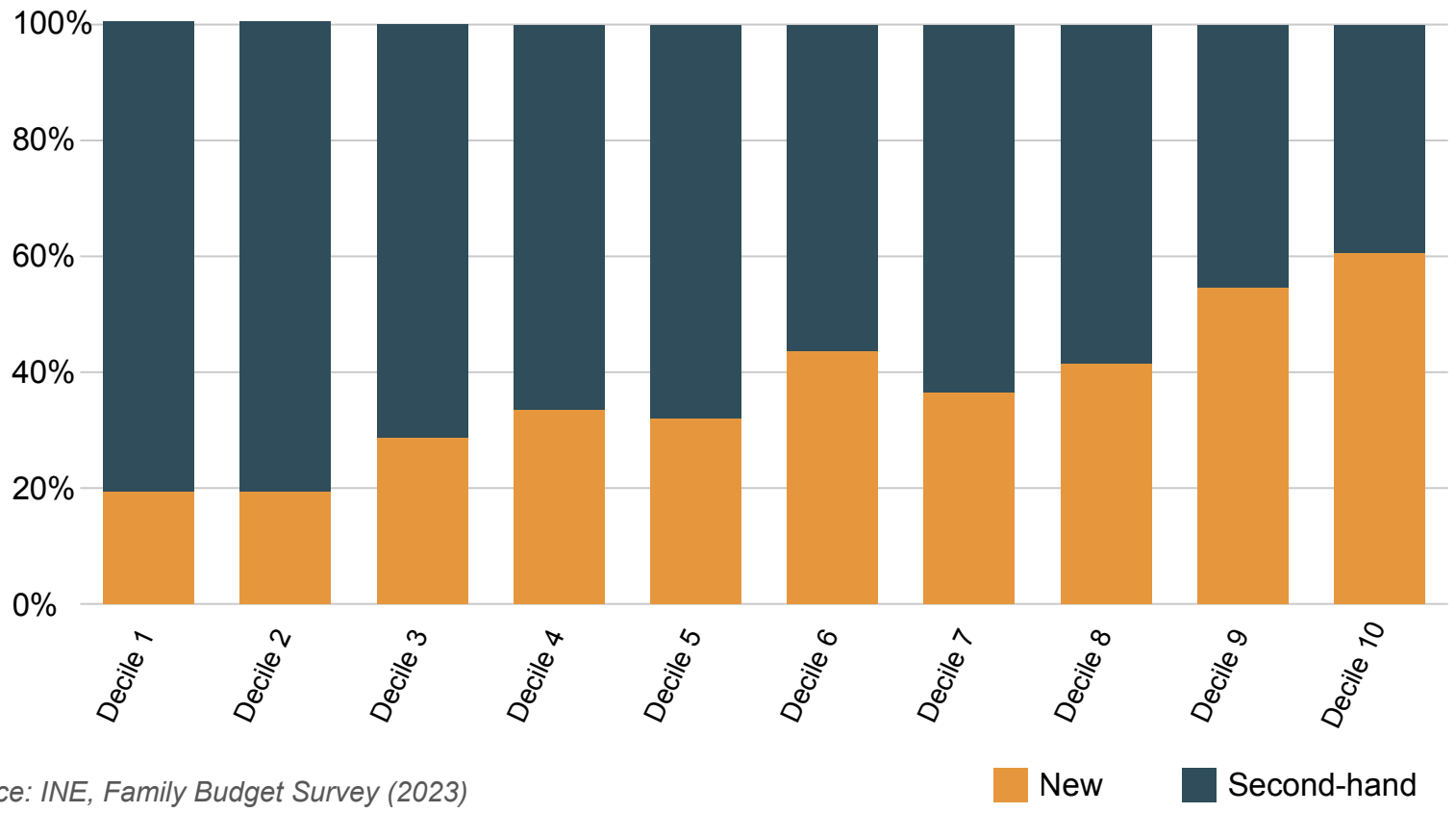
Figure 6. Households (%) with an electrified vehicle, by income bracket



Source: INE, Survey of Essential Characteristics of the Population and Housing (2021)

3. *ANFAC (2023). Electrified Vehicle Annual Report 2023. Available at: https://anfac.com/wp-content/uploads/2024/03/Informe-ANFAC-Vehiculo-Electrificado-2023.pdf (accessed 18 February 2025)*
4. *Instituto Nacional de Estadística (INE) (2021). "Encuesta de Características Esenciales de la Población y las Viviendas 2021" [Survey of Essential Characteristics of the Population and Housing 2021] https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736177092&menu=ultiDatos&idp=1254735572981.*

Figure 7. Distribution of new and used vehicle purchases, by income decile



Source: INE, Family Budget Survey (2023)

Accelerating the uptake of electric vehicles among low and middle-income households will require the rapid development of a second-hand market, since the lowest income deciles seldom purchase new vehicles (see Figure 6). Households with lower incomes (deciles 1 to 3) mainly opt for second-hand vehicles (over 70%), while households in the highest deciles (deciles 9 to 10), by contrast, tend to purchase new cars.

Charging infrastructure is another critical issue. Despite efforts to expand the number of charging points, the lack of an adequate network and limited information on the availability and capacity of charging points continue to hinder the adoption of electric vehicles. The long-standing absence of an accessible, public map depicting the location, availability, and power of charging points, has undermined user confidence in the feasibility of using electric vehicles for long-distance travel. In addition, the lack of planning in charging infrastructure rollout remains a key challenge and it must be adapted to electric vehicle charging patterns rather than the usage patterns of conventional vehicles.

Finally, an important element in diagnosing the transport sector in Spain is the substantial economic weight of the industry, which includes vehicle manufacturing, repair, and transport services. Spain is the second-largest vehicle manufacturer in Europe, with an output of 2.45 million units. The automotive sector (vehicle and component manufacturing and related activities) accounts for 9% of employment and 10% of GDP. This sector therefore contributes considerable economic value, and its transformation towards electric mobility poses challenges that extend beyond the adoption of new technologies. Industrial restructuring and workforce adaptation will be essential to anticipate, manage, and mitigate the potential positive and negative impacts of this transition.

2.3 PNIEC objectives and other public policies

In terms of specific electrification targets, the most relevant reference is the PNIEC, which sets an ambitious goal of reaching 5.5 million electric vehicles by 2030, including cars, vans, motorcycles, and buses. As noted above, in 2023 there were 118,000 electrified passenger cars. Although this figure does not include other vehicle types, the gap to the target is enormous, meaning that urgent and far-reaching measures must be implemented in the short term if the goal is to be met.

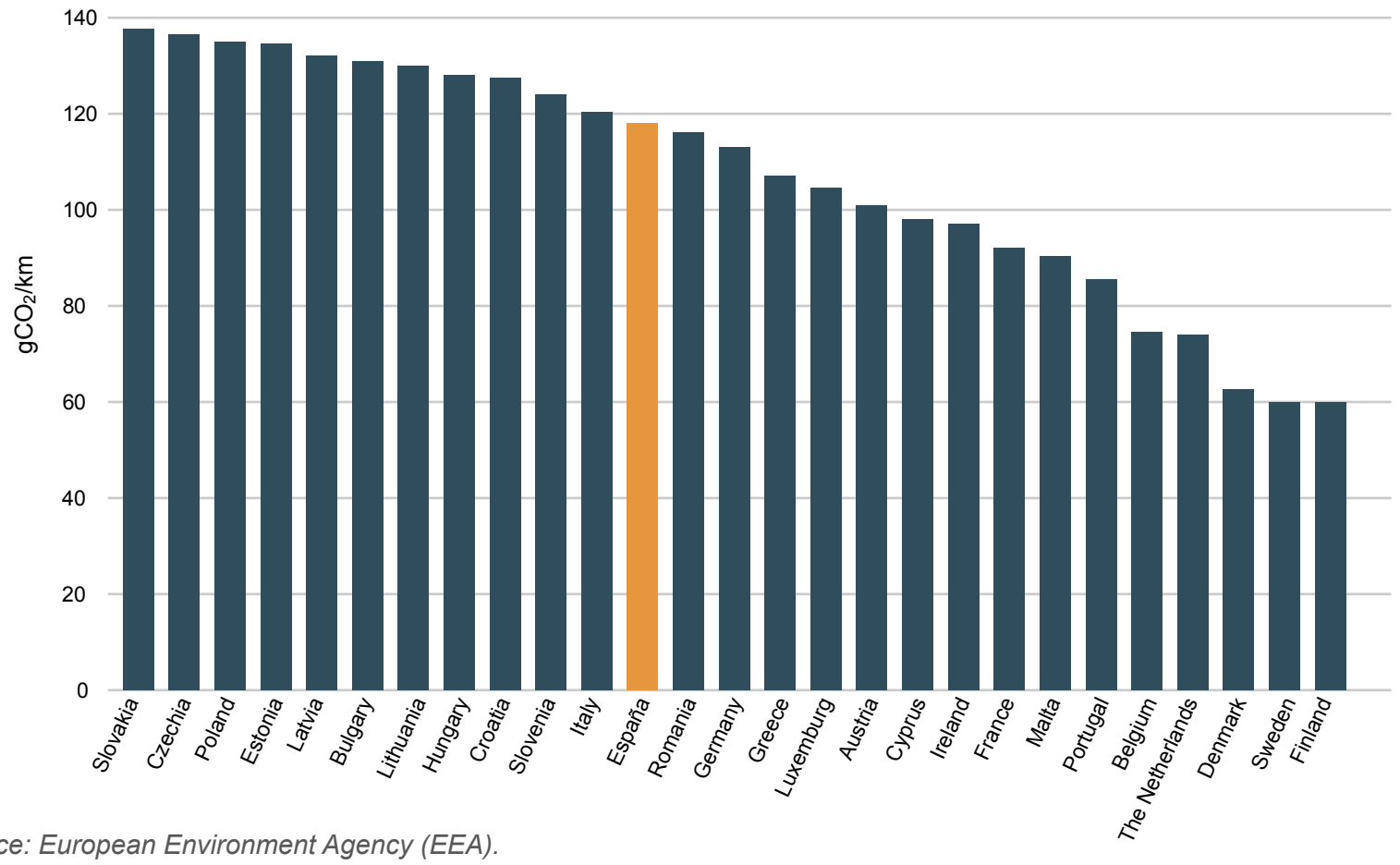
To achieve this objective, the PNIEC promotes a sustainable urban mobility approach that encourages a modal shift towards public transport, shared transport, and zero-emission modes such as walking and cycling. This transition requires a change in how citizens perceive and use transport, moving from dependence on internal combustion vehicles to electric mobility and public transport alternatives.

Another important policy reference is the Sustainable Mobility Law, which began its passage through the Congress of Deputies in the first half of 2025. This law seeks to transform the transport system to make it more efficient, sustainable, and accessible. It frames mobility as a social right, prioritising decarbonisation, digitalisation, and territorial cohesion. Its pillars include strengthening public transport, establishing Low Emission Zones, and promoting alternatives to private vehicles, such as active and shared mobility. The law also provides for the creation of the National Sustainable Mobility System to coordinate policies across administrations.

At the European level, key regulations include the Regulation on CO_2 emissions from new passenger cars and light-duty vehicles (Regulation (EU) 2019/631) and the second Emissions Trading System (Directive (EU) 2023/959), known as ETS2.

The regulation on manufacturer emissions establishes progressive CO_2 reduction standards for the sale of new vehicles. Specifically, it sets ambitious reduction targets of 37.5% for passenger cars and 31% for light commercial vehicles by 2030 compared with 2021 levels, and requires a 100% reduction by 2035, after which only zero-emission vehicles may be sold.

Figure 8. Emissions (gCO_2/km) from new light-duty vehicles in the EU-27, 2023



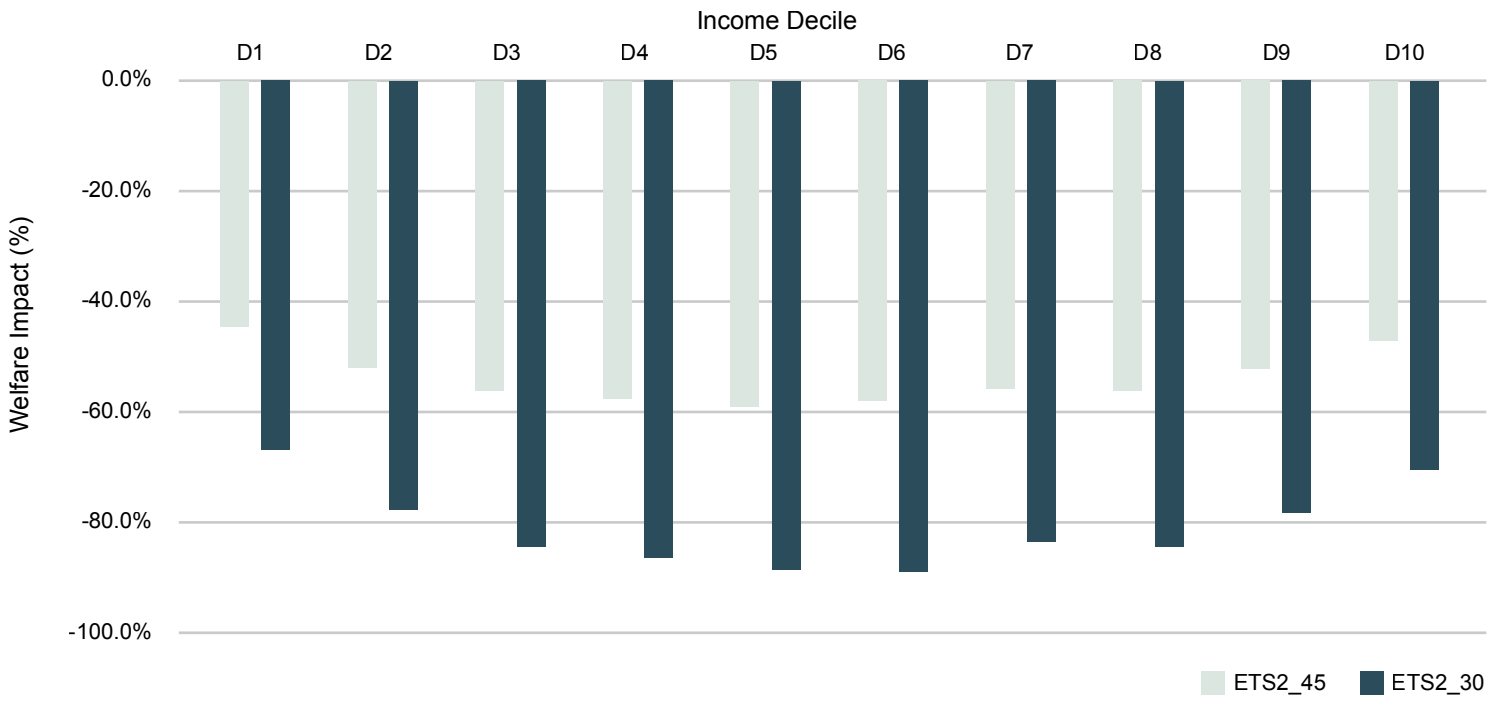
Source: European Environment Agency (EEA).

The European Union's target for 2025 is to reduce the average CO_2 emissions per kilometre for new vehicles to approximately 95 gCO_2/km, taking as a reference the 112 gCO_2/km recorded in 2021. According to analyses by T&E[5] this target is achievable at the European level, although some manufacturers are calling for greater flexibility and, in particular, a delay in compliance deadlines. Meanwhile Spain (see Figure 8) ranks 12th among EU-27 Member States, with an average of 117.5 gCO_2/km in 2023.

It is important to remember that the targets for 2025 and 2030 are not sales mandates for electric vehicles[6], and technically there is no requirement for a mandatory quota of electric vehicle sales. The targets are average CO_2 emissions targets: selling smaller, more efficient petrol cars contributes as much to compliance as selling electric vehicles. In addition, numerous flexibilities are allowed, such as additional credits for sales of low-emission vehicles (ZLEVs) above 25%, as well as the possibility for manufacturers to pool their emissions.

Meanwhile, and pending the completion of environmental tax reform in Spain, the second Emissions Trading System (ETS2) will come into force in 2027. This reform extends the EU Emissions Trading System (ETS), the Union's main tool for reducing GHG emissions, which has achieved a 41% reduction in emissions from the sectors it covers since its introduction in 2005. To date, the ETS has applied to around 40% of the EU's GHG emissions, covering sectors such as electricity and heat generation, energy-intensive industries (e.g. refineries, steel, cement, glass, and paper production), and commercial aviation (within the European Economic Area). Whereas ETS2 adds new sectors such as maritime transport, road transport, residential transport, and fuel suppliers. The reform also introduces more ambitious reduction targets, reduces the number of emission allowances on the market (–117 million in two years), and phases out free allowances for certain sectors.

Figure 9. Impact in Spain of ETS2 implementation by income decile



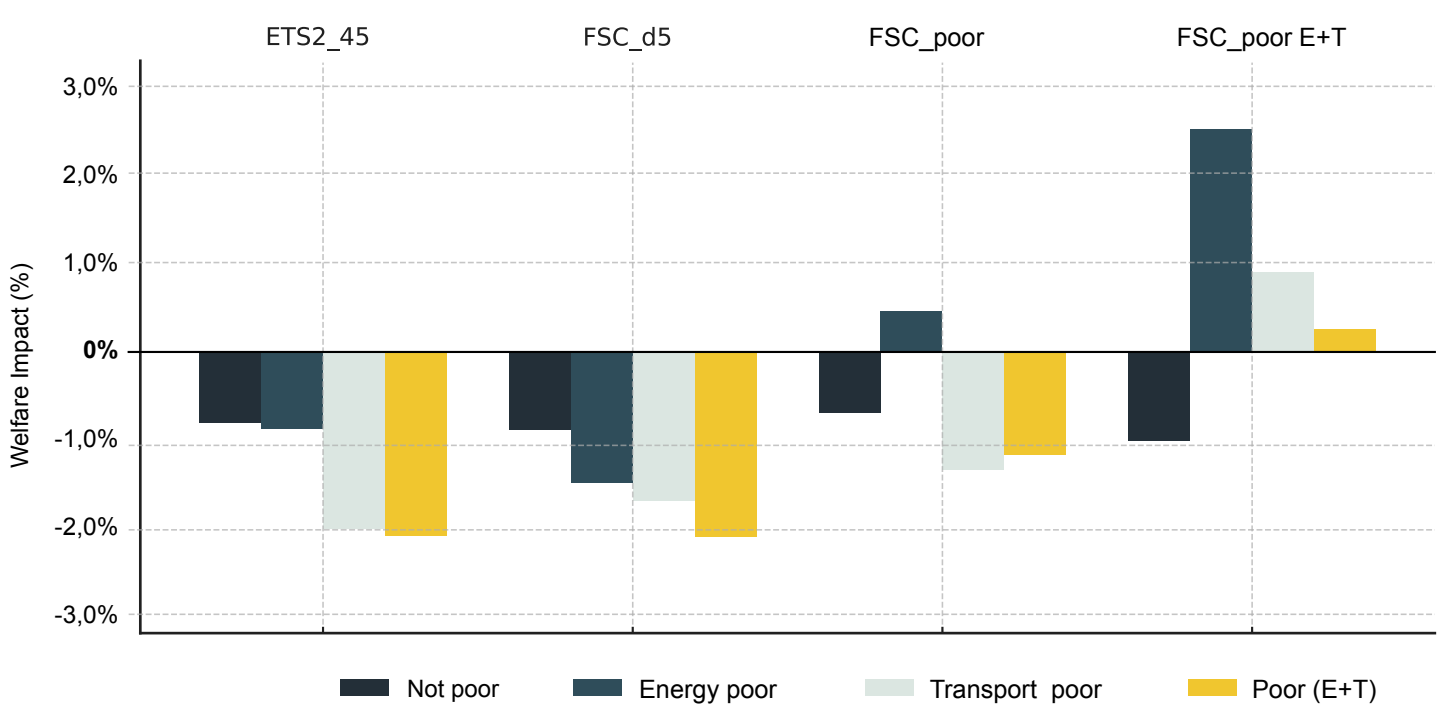
Source: Own elaboration

5. *T&E (2024), The drive to 2025: Carmakers´ progress towards their EU CO2 target in H1 2024. Available at: https://www.transportenvironment.org/articles/the-drive-to-2025-why-eus-2025-car-co2-target-is-reachable-and-feasible. (accessed 18 February 2025)*
6. *See T&E (2021), Potential options and technology pathways for delivering zero-carbon freight in Spain, prepared by Cambridge Econometrics for Transport and Environment.*

Thus, fuel suppliers are expected to pass on some or all of their new costs to consumers following the implementation of ETS2. Distributional analysis of the impacts of ETS2 in Spain shows that the reform will have a greater impact on middle-income households (see Figure 9) regardless of the carbon price (€45/tonne CO_2 or €35/tonne CO_2). To mitigate these negative effects, the European Commission has proposed the creation of the Social Climate Fund (SCF). The proceeds from the sale of emission allowances will be deposited in the SCF, and Member States will be able to use the allocated resources to support the groups most affected through either: (i) measures and investments to improve building efficiency and renovation, decarbonise heating and cooling in buildings, and promote zero or low-emission mobility and transport; or (ii) temporary and limited direct income support. The Commission has identified vulnerable households, vulnerable transport users, and vulnerable micro-enterprises as priority beneficiaries. The total budget of the SCF will be €65 billion for 2026–2032, with a minimum national co-financing rate of 25%. For Spain, the maximum allocation will be €6.838 billion, supplemented by a minimum Spanish government contribution of €2.279 billion, which amounts to an approximate budget of €9.117 billion to offset the negative impacts of ETS2.

Figure 10 illustrates the potential of the SCF to mitigate welfare losses in different vulnerable households, including those affected by energy poverty and transport poverty. It also shows how targeted measures (see SCF poor or SCF poor E+T scenarios) have greater potential to cushion impacts on the most vulnerable groups, and in some cases even increase their welfare.

Figure 10. Impact of ETS2 + SCF on the welfare of vulnerable households in Spain



Source: Own elaboration

In summary, the assessment of the current state of transport in Spain highlights a series of structural, economic, and social challenges that must be addressed for the country to advance towards sustainable mobility and achieve its climate objectives. A combination of economic incentives, the development of an adequate and accessible charging infrastructure, the reduction in the cost of electric vehicles (through the use of more affordable and efficient batteries, improvements in production processes, and the availability of smaller models), and the promotion of changes in consumer behavior will be essential to overcoming current barriers and moving towards an electrified transport system.

3. Key challenges identified during the consultation process

Below are the main barriers to transport electrification identified by the working group:

- **High cost of electric vehicles:** The high upfront cost of electric vehicles is a significant barrier for many consumers. Although aid programmes exist, they are insufficient and involve bureaucratic hurdles. Consumers often have to pay the full amount in advance and wait for reimbursement, which discourages purchases. In addition, fast charging is more expensive than fossil fuels, creating an added economic disincentive. The absence of a second-hand market for electric vehicles also limits access for lower-income households.

- **Insufficient charging infrastructure:** The limited network of charging points and the lack of detailed information on their availability beyond simple location data create uncertainty among users. Planning a network that adapts to electric vehicle charging patterns, rather than replicating conventional vehicle usage patterns, is key to building user confidence and supporting uptake.

- **High administrative complexity and lack of institutional coordination:** The administrative processes for installing charging points are lengthy and complex, slowing down infrastructure rollout. In addition, limited coordination between different levels of government (national, regional, and local) hinders the implementation of coherent, effective policies to promote electrification.

- **Challenges in changing consumer behaviour:** The shift to electric mobility requires changes in how citizens perceive transport. Options such as carsharing or on-demand mobility can help, but adoption remains limited, particularly outside major cities. Leasing programmes could improve access, but their rollout is still incipient and lacks promotion, especially for low-income households.

- **Impact on employment and the automotive industry:** The transition to electric mobility entails structural changes in the automotive sector that could affect employment. Areas linked to combustion vehicle maintenance may face declining demand, making it essential to implement training and reskilling policies to ensure a just transition and minimise social and economic impacts.

These barriers require a comprehensive approach, combining incentive policies for individuals, low-income households, and businesses with infrastructure development and the promotion of electric alternatives to support behavioural change.

4. Recommendations for action

This section presents ten measures aimed at addressing the key challenges identified.

Some measures are specific to the barriers detected, while others are more crosscutting in nature. Together, they are intended not only to accelerate vehicle electrification among the general population but also to improve access for lower-income households. We have considered the pivotal role that companies can play in this process, particularly those in passenger transport.

The proposals set out here should be seen as a coherent package of measures which, when implemented together, can significantly accelerate the transition to electric mobility for all citizens. The case of Portugal, analysed during the working group discussions, illustrates precisely that success stems not from a single measure but from the combined effect of all measures taken together.

4.1 VEHICLE PURCHASE ASSISTANCE PLANS REFORM

DESCRIPTION

- A reform of electric vehicle purchase assistance plans that establishes a redesigned MOVES Plan, therein avoiding the uncertainty created by the lack of continuity in the current aid programme. The aim is to maintain and extend the electric vehicle purchase programmes and the installation of charging infrastructure, while reforming some of their key aspects.

OBJECTIVE

- The objective of the new MOVES Plan should be to promote the transition to more sustainable and environmentally friendly mobility by encouraging electric vehicle usage and expanding charging infrastructure in Spain. Purchase aid schemes for electric vehicles must ensure that:
  - the aid reaches buyers immediately,
  - it is directed exclusively at electric vehicles,
  - processing and management are improved,
  - scrappage aid is increased to encourage fleet renewal

Currently, the MOVES Plan is aimed at the entire population, regardless of the purchaser's income level. Aid could gradually be targeted to groups who most need this support to be able to buy an electric vehicle, for different reasons.

SPECIFIC MEASURES

- **Direct aid applied to the sale price.** The purchase aid should be applied directly to the sale price of the electric vehicle, without requiring consumers to pay the full amount upfront. This would allow immediate access to the discount and eliminate the financial burden for the purchaser.
- **Improve coordination.** Improve coordination between administrations, particularly between Autonomous Communities (CCAAs). Ensure that procedures are consistent and that aid is distributed according to demand across the different CCAAs, with unified criteria for more efficient management. In addition, if there are surplus funds in one CCAA these should be redirected to communities with higher demand
- **Simplify procedures and reduce bureaucracy.** Establish more streamlined processes to apply for and approve aid, thereby eliminating unnecessary requirements to enable rapid access to the grant.
- **Priority for utility electric vehicles.** As in previous programmes, grants should prioritise electric utility vehicles and avoid high-end models. The price cap should be maintained and periodically reviewed to determine eligible vehicles, ensuring that grants reach those who need them most and support the uptake of utility vehicles. Companies should be required to offer affordable models that promote sustainable and accessible mobility for all citizens.
- **Improve communication and promotion of the plan.** Launch national information campaigns to publicise the aid, its benefits, and the process for accessing it, using both traditional and digital media.

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

Ministry of Ecological Transition and Demographic Challenge (MITECO) and Institute for Energy Diversification and Saving (IDEA)

- Law or Royal Decree. The above proposals should be framed within the regulations already established for

previous MOVES Plans.
- State management. One of the main barriers is the diversity of regional regulations. A single state-level management system, or the establishment of a unified and simplified procedure, should therefore be introduced.

Autonomous Communities (CCAAs) and local entities

- Current management by Autonomous Communities. Applications should be unified at state level. If procedures are currently managed by Autonomous Communities, they should be standardised.

Private sector

- Collaboration with the State to implement electric vehicle purchase discount mechanisms that avoid red tape and delays.
- Reduce barriers to vehicle access: Manufacturers should continue to offer more affordable vehicles to promote the purchase of lower-cost electric vehicles, making them affordable for a larger share of low-income households as well as SMEs.
- Collaboration with the administration to consolidate and improve the single digital window for applying for MOVES Plan aid.

POSSIBLE BARRIERS

- Management: To avoid duplication and past management problems, a single state-level management system should be introduced under IDAE.
- Financing. The financing budget for purchase assistance should be maintained to prevent uncertainty in the sector caused by programme extensions.

4.2 COMPREHENSIVE PLAN FOR CHARGING INFRASTRUCTURE

DESCRIPTION

- Developing a comprehensive plan to expand the network of charging points in Spain, while also improving available information and making them easier to use for consumers. These efforts should encourage the uptake of electric vehicles and support the transition towards more sustainable mobility.

OBJECTIVE

- The comprehensive plan for charging infrastructure aims to improve access to information, strategically plan the location and capacity of charging points, reduce the bureaucracy associated with installation, and make fast charging more affordable. The goal is to ensure that charging point access no longer acts as a barrier to electric vehicle uptake in Spain.

SPECIFIC MEASURES REQUIRED WITHIN THE PLAN

Development and planning

- **Study charging patterns:** Conduct an analysis of charging patterns to identify the required locations and capacities, focusing on the specific needs of electric vehicles (longer stops, urban locations, and long-distance routes).
  - Responsible: Establish collaboration mechanisms between the public sector at the level of the General State Administration (AGE), such as IDAE, the Ministry of Transport, and municipalities, together with charging operators, battery and vehicle manufacturers, and the research and academic sectors. The academic sector is already using energy consumption and mobility modelling for this purpose.
  - Means. Structured dialogue with expert entities from the public, private, and social sectors to analyse traffic data and existing charging points usage for improved planning
- **Plan the electricity grid according to demand.** Adapt and reinforce the electricity grid in strategic areas to support the growth of charging demand.
  - Responsible: Red Eléctrica de España, along with distribution and charging operators.
  - Means: Long-term infrastructure planning with investment in critical areas.
- **Establish coverage targets.** Define specific targets for the number of charging points and the maximum distance between them, aligned with the timelines of other sustainability measures.
  - Responsible: At AGE level, the Ministry of Ecological Transition and Demographic Challenge and the Ministry of Transport and Sustainable Mobility. Dialogue and collaboration with autonomous communities and municipalities will also be essential to ensure balanced distribution across the territory. Collaboration with charging operators and energy distributors will be critical to ensure that coverage targets are implemented effectively.
  - Means. Publication of official guidelines and targets, with annual.
- **Identification within urban planning regulations of spaces** that establish the requirement to provide this new service in residential buildings and in public and private parking facilities (General Urban Development Plans – PGOUs, Building Ordinances, Building Regulation Act – LOE, etc.).
  - Responsible entity: Local authorities
  - Means: dialogue with expert entities from the public, private, and social sectors to analyze local regulations in relation to charging points

B) Payment and price of charging

- **Unification and facilitation of payment methods.** Establish a single payment system that allows users to pay by credit card, mobile applications, or with QR code type solutions at any charging point, regardless of the operator.
  - Responsible: Coordination between the Ministry of Ecological Transition and Demographic Challenge, the Ministry of Transport and Sustainable Mobility, and charging operators.
  - Means: Interoperability agreements between operators, following the example of other European countries that have already introduced this system (see the case of Portugal).

- **Set specific targets for increasing fast-charging points:** Plan and identify incentives to make fast charging more affordable, particularly at high-demand locations, to promote that it is no more expensive than fossil fuel use by internal combustion vehicles. Companies should also be considered, as they will be required to develop workplace mobility plans under the regulations. The rollout of these points should therefore be accelerated, and their use by employees facilitated.
  - Responsible: Collaboration between the charging sector, the battery production sector, and vehicle manufacturers is required. The General State Administration (AGE) should act through the Ministry of

Ecological Transition and Demographic Challenge, the Ministry of Transport and Sustainable Mobility, and regional administrations. Increasing the number of fast-charging points at municipal level will require local government involvement, particularly for passenger vehicle fleets and last-mile freight transport.

- Means: Dedicated spaces for dialogue, identification of necessary regulatory changes (if applicable), assessment of financial needs linked to the fast-charging network expansion, and proposals for public–private agreements to improve access to this financing for charging operators and other stakeholders.

- **Regulation of tariffs and access to information:** Establish regulations that promote affordable charging prices, including for fast charging, while promoting competition between operators and introducing differentiated rates according to the time of day to optimise usage.

  - Explore measures to make electricity tariffs more affordable for electric vehicle use, including the possibility of a unified national tariff within the energy sector that is consistent with the current legal framework. Identify best practices in other countries and how they have been applied in this area.

  - Model the impact on electric mobility of extending more affordable charging tariffs, particularly for users reliant on collective charging points, who have fewer opportunities to negotiate with providers than those with home chargers. Assess the economic and social impact of such measures, as they would extend electric vehicle use to a larger share of the population and the business sector

  - Facilitate consumer access to information on electricity tariffs, both from energy providers and at charging points. Ensure the availability of clear data on the costs and characteristics of the network and charging process.
    - Responsible: Involvement of the energy sector and charging point operators is essential as progress is impossible without their commitment Public–private dialogue should also be promoted with the National Commission for Markets and Competition (CNMC), the Ministry for Ecological Transition and Demographic Challenge, the Institute for Energy Diversification and Saving (IDAE), and the Ministry of Transport and Sustainable Mobility. A role is also envisaged for the Ministry of Social Rights, Consumer Affairs and Agenda 2030, which should safeguard consumer inte-rests, in line with the forthcoming Sustainable Consumption Law.
    - Means: Agreements and commitments between the energy and charging sectors; development of pricing regulations and oversight of compliance.

C) User information and communication

- **Consolidation and improvement of a public map of charging points:** maintain and enhance an accessible, up-to-date map that shows, in a way understandable to all users, the location, capacity, charging speed, and real-time availability of each charging point. Steps have recently been taken in this direction, and a public map of charging points is now available. Progress should focus on making the information already collected accessible through applications and other tools commonly used by electric vehicle users, both companies and individuals, for freight and passenger mobility.
  - Responsible: Both public administrations and the private sector (charging operators, software developers, and digital mobility application providers, among others) must be involved to ensure that this initial mapping of charging points is permanently updated and genuinely useful for users.
  - Means: An online platform and mobile application that allow real-time consultation.
- **Road signage:** Implement uniform and visible signage indicating the proximity of charging points, especially on highways and in rest areas, recognising that specific signage for electric vehicles must be designed according to their particular usage characteristics.
  - Responsible: Higher Council for Traffic, Road Safety and Sustainable Mobility, Ministry of the Interior, Ministry of Transport and Sustainable Mobility, Ministry of Industry, regional and local traffic authorities, and the Directorate-General for Traffic (DGT). At municipal level, local councils will be responsible for ensuring proper signage of charging points.
  - Means: Regulations to standardise signage and information campaigns.
- **Facilitate access to information on the capacity to install new charging points.** Develop a map of the power available for new installations: Publish and regularly update a map showing the power available for new installations at each location. This would prevent stakeholders from having to request information on demand and would support decision-making for new projects.
  - Responsible: Red Eléctrica de España in collaboration with distribution operators.
  - Means: Publicly accessible online platform with regular updates.
- **Promote balanced charging across the country:** Ensure equitable access to charging points throughout the territory, including in areas where electric vehicle use is currently low. Public sector instruments such as auctions and tax incentives could be used, alongside appropriate planning and commitments from the private sector to extend charging networks to less-developed areas.
- Public auction mechanisms could also be considered to guarantee balanced installation of charging points nationwide
  - Responsible: Private sector stakeholders (companies, operators, electricity suppliers and distributors), together with the Ministry for Ecological Transition and Demographic Challenge, CNMC, Red Eléctrica de España, and the Ministry of Transport and Sustainable Mobility
  - Means: Public auction procedures, tax incentives, and planning regulations.

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

Ministry of Transport

- Integrate charging infrastructure into transport and mobility planning.
- Ensure compatibility with road development and logistics hubs
- Establish regulations and guidelines to guarantee accessibility and adequate coverage in strategic areas.

Ministry for the Ecological Transition and the Demographic Challenge (MITECO)

- Lead the overall strategy for transport electrification and emissions reduction.
- Define coverage targets for charging points
- Regulate key aspects such as fast-charging prices.
- Promote agreements between operators to facilitate system interoperability.

Autonomous Communities (CCAA)

- Manage policy implementation at the regional level.
- Administer aid and specific grants for charging point rollout.
- Adapt regulations to local needs.
- Coordinate with municipalities and private companies to accelerate electrification.

Directorate-General for Traffic (DGT)

- Define and implement road signage.
- Ensure that the location and visibility of charging points are adequate, especially on highways and in rest areas.
- Develop information campaigns to promote charging network usage.

Institute for Energy Diversification and Saving (IDAE)

- Support the planning and execution of charging infrastructure projects through technical studies and financing.
- Analyse charging patterns and promote measures to improve the efficiency and sustainability of the network.

Red Eléctrica de España

- Ensure the capacity and stability of the electricity system to support growing charging demand.
- Participate in electricity grid planning based on demand.
- Publish information on available capacity for new installations.

National Commission for Markets and Competition (CNMC)

- Regulate and supervise competition in the charging sector, promoting affordable prices and fostering a competitive market that benefits users.
- Ensure compliance with regulations on pricing and network access.

Private Sector

- Collaborate with the administration on joint studies.
- Fund research on electric mobility patterns.
- Work with network operators to anticipate future needs.
- Share estimates of fleet growth and charging demand.
- Participate in sectoral agreements on technological standardisation.
- Apply innovative business models that reduce costs for users.

POSSIBLE BARRIERS

- **Management.** Effective coordination among stakeholders must be ensured, particularly given the complexity of the plan.

4.3 TAX REFORM TO PROMOTE ELECTRIC VEHICLES

DESCRIPTION

- Tax reform and business support measures to promote the use of electric vehicles should both lower costs and simplify acquisition, while also sending clear signals that discourage combustion vehicle usage.

OBJECTIVE

- To accelerate electric vehicle adoption through tax incentives that reduce purchase costs and discourage the use of combustion vehicles via an appropriate tax structure. The reform should not only make electric vehicles more affordable, particularly for the business sector, but they should also send clear signals about the transition to sustainable mobility, aligning taxation with environmental and decarbonisation objectives.

SPECIFIC MEASURES

- **Tax incentives for corporate fleets.** Create tax incentives for companies that replace their fleets with electric vehicles. Introduce corporate income tax deductions or specific tax credits for electric fleets. This measure should be accompanied by private-sector fleet electrification targets.
  - **Promote the development of a second-hand market** as vehicles are replaced.
  - **Reduced VAT for electric utility vehicles.** Apply a reduced VAT rate for the purchase of electric vehicles by lower-income groups. This reduction should be limited to utility and lower-end models.
  - **Advance environmental taxation for the transport sector.** Progressively reduce, with the aim of completely eliminating, existing fossil fuel subsidies. The impact on particularly affected groups should be assessed, and a transition programme established for these cases, but without delaying the objective of achieving environmental taxation across the entire sector. Public–private–social sector dialogue will be necessary.
  - **CO_2 emissions-based taxation.** Registration and circulation taxes, along with other levies, should take vehicle emissions into account and be updated to include factors such as vehicle weight, as proposed in the 2022 White Paper on Taxation.

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

Ministry of Finance

- As the body responsible for designing, regulating, and implementing fiscal measures to encourage the electrification of transport, it plays a central role in all the proposed measures.

Ministry for the Ecological Transition and the Demographic Challenge, IDAE, and Ministry of Transport

- Coordinate with the Ministry of Finance to define and implement fiscal measures that promote electric mobility and the electrification of final demand.

Autonomous Communities (CCAAs) and local authorities

- In line with the proposed measures, Autonomous Communities or the municipalities, according to their responsibility, could establish tax rebates or exemptions for electric vehicles registration, as it already happens in some places with taxes such as IVTM.
- Local authorities could establish rebates for the installation of electric charging points in companies and public spaces.

Private sector

- In line with the proposed tax reform, companies should commit to progressive fleet renewal planning, based on vehicle lifespan, operating costs, and tax opportunities.

This commitment should include clear, measurable objectives and be reported transparently to enable assessment of compliance.

POSSIBLE BARRIERS

- Financing. Public–private financing will be required to achieve the objectives. Specific incentives (such as the proposed tax incentives) should be defined to make this possible.
- Public acceptance. Effective communication is key to ensuring public support for tax reforms. The purpose of tax incentives must be clearly explained, as must the socioeconomic groups to which they apply.

4.4 EMERGENCY PLAN FOR COMPANIES

DESCRIPTION

- The uptake of electric vehicles must extend to companies as well as individual citizens. In fact, companies can drive fleet renewal, since within a few years they will be able to offer electric vehicles on the second-hand market. In addition, signage improvements, charging infrastructure expansion, a bigger regulation of charging prices and the expected vehicle cost reduction resulting from greater corporate uptake would also have positive spillover effects for individual users. For this reason, an emergency plan is needed to accelerate the transformation of corporate fleets and provide stability to existing programmes.

OBJECTIVE

- To promote the adoption of electric vehicles in the business sector, harnessing companies' potential as catalysts for fleet transformation. The plan is designed to accelerate the transition of corporate fleets to electric vehicles, while simultaneously fostering a second-hand market that broadens access for lower-income households. With specific measures to ease this transition, the business sector can make a significant contribution to emissions reduction and sustainable mobility.

SPECIFIC MEASURES

- **Facilitate financing for companies.** Implement programmes that make it easier for companies to renew their entire fleets with electric vehicles through public–private agreements and targeted incentives. Some of these incentives may be structured as direct grants or low-interest credit lines, with particular attention to SMEs. Both the private and the public sector should be involved; the former is already moving in line with green taxonomy regulations, and the latter should be engaged through entities like ICO.
- **Creation of solar carports with charging points.** Promote the development of solar carports with charging points in workplaces, industrial estates, and commercial areas. Encourage the installation of charging points in these areas where there is a high concentration of businesses in order to support sustainable commuting, in line with new regulatory proposals
- **Facilitate fleet renewal in leasing companies.** Establish mechanisms to encourage leasing companies to renew their fleets with electric vehicles. These could include tax deductions, regulatory requirements that promote the shift from combustion to electric vehicles, and penalties for non-compliance
- **Tax incentives for corporate fleets**. Create a package of incentives (e.g. tax deductions or credits) for companies that replace their fleets with electric vehicles. Introduce corporate income tax deductions or specific credits for electric fleets (see previous section). Progress should also be made at the regulatory level to define a clear pathway for business sector commitments to make corporate electrification a reality.
- **Support for the second-hand market.** Encourage the development of a robust second-hand market, with sufficient guarantees, to enable broader access to electric vehicles as they are replaced.

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

Ministry of Finance

- Design and implementation of tax incentives.
- Collaborate with the ICO to establish green financing lines with public guarantees.
- Manage and channel direct aid with uniform criteria in coordination with the Ministry for the Ecological Transition and the Demographic Challenge and with IDAE.
- Ministry for the Ecological Transition and the Demographic Challenge
- Continue the MOVES FLOTAS Plan in coordination with other administrations and the private sector.
- Establish systems to monitor, evaluate and verify the emissions reduction impacts of fleet electrification and vehicle fleet improvements

IDAE

- Manage and channel European and national funds to ensure effective aid allocation to companies
- Design specific financing lines for strategic sectors, in line with the concept of a just transition.

Autonomous Communities (CCAAs) and local authorities

- Incorporate training programmes for SMEs on electric mobility and fleet management into regional policies.
- Provide technical and financial advice on available aid, green taxation, and return on investment.
- Incentivizing the adoption of electric vehicles by companies through requirements included in the tender documents of various public procurement processes for goods or services. For example, subcontracting garden maintenance services by assessing the use of electric vehicles by the company, or in waste collection, etc. This recommendation applies to all Public Administrations.

Private sector

- Make specific commitments to fleet electrification, particularly in companies with intensive vehicle use, such as leasing companies and freight and passenger transport operators, ensuring measurable targets and monitoring.
- Promote electric vehicle usage by installing chargers in the workplace and facilitating their private usage outside working hours.
- Promote and participate in public–private projects on electric mobility and smart cities.
- Provide internal training on electric mobility, energy savings, and environmental benefits.
- The private financing sector (banks and other financial institutions) has a fundamental role in ensuring affordable financing in line with its commitment to green taxonomy, complementing the proposed public financing incentives.

4.5 SOCIAL LEASING

DESCRIPTION

- Drawing on the French example, this measure has demonstrated the potential of social leasing to support groups that face difficulties accessing electric vehicles, particularly those living in dispersed or rural areas. The proposal is to adapt this success story to the Spanish context.

OBJECTIVE

- To promote fleet renewal and facilitate the transition to electric vehicles through social leasing co-financed by public authorities.

SPECIFIC MEASURES

- **Social leasing programme.** Designed as aid scheme to support low and middle-income households, particularly those in remote areas, in accessing 100% electric vehicles. Beneficiaries would make monthly payments to managing entities, which may receive public support to operate the programme. In the French case, public aid is provided through partial coverage of costs for households participating in the scheme. In Spain, public aid could be channelled via the managing entity through grant-supported instalments, while households remain the final beneficiaries. The aid scheme enables participating companies to offer households fixed leasing instalments that cover operating costs, including capital costs. This approach also simplifies the understanding and taxation of public aids for individuals. The French model can serve as a reference for Spain, while adapting to national regulations and jurisdictions and the specific needs of the population.
- **Leasing management entity.** The leasing management entity can be developed through a public-private partnership model. It would be responsible for administering payments to participating companies as well as collecting lease instalments from individuals throughout the term of the contract.
- **Definition of beneficiary groups.** Access to existing social protection programmes could be used as a basis for identifying potential beneficiaries, serving as a filter to prioritise groups in need of support. If extended to companies, measurable eligibility criteria should be defined to determine which types of firms qualify.
- **Eligible vehicles**. Only electric utility vehicles (the most affordable options available on the market) should qualify. A maximum vehicle price should be set to ensure that high-cost vehicles are excluded.
- **Aid levels by household characteristics.** The level of aid and leasing instalment should vary according to household characteristics, with more generous support for low-income households. The duration of vehicle use should also be considered as a criterion for programme eligibility. Alternative forms of vehicle use may also be explored, such as shared or collective use promoted by local authorities.

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

Ministry for the Ecological Transition and the Demographic Challenge (MITECO) in coordination with the Ministry of Finance, the Ministry of Social Rights and Agenda 2030, and the Ministry of Industry and Tourism

- Define and promote the social leasing programme.
- Promote coordinated state-level management with the Autonomous Communities to ensure territorial cohesion.
- Channel available funds to cover social leasing fees.

Autonomous Communities (CCAAs) and local authorities

- Collaborate with the State in programme management
- Define regional processing offices in coordination with IDAE, considering the synergistic role of community transformation offices, which are also supported by IDAE.
- Local authorities may contribute by promoting the programme, identifying potential beneficiaries, and exploring possibilities for collective and shared vehicle use.

NGOs and civil society

- NGOs and other organisations, such as neighbourhood associations or rural entities, should work with local authorities to promote the programme and identify potential beneficiaries in collaboration with the managing entity.

Private entities managing the aid and service providers

- Commit to participating in the programme through the leasing of lower-cost electric vehicles.
- Ensure that monthly leasing fees are affordable for users.
- Guarantee the supply of electric vehicles for the programme.
- Establish a second-hand outlet for vehicles leaving the programme.
- Set up a user support network in coordination with regional and local administrations.

POSSIBLE BARRIERS

- **Financing.** While several of the tax incentives can be funded by increasing other tax revenues, new financing channels such as the Social Climate Fund may also be used for some of these measures, provided they target vulnerable populations. Other mechanisms could also be considered, such as Energy Saving Certificates (CAE) specifically dedicated to the transport sector.
- **Public acceptance and applications for aid.** For the measure to succeed, it is essential to have an effective communication programme that raises visibility. Likewise, the application process and administrative requirements must be simple enough to ensure a high number of applications.

4.6 PROMOTING ELECTRIC CARSHARING AND OTHER FORMS OF SUSTAINABLE SHARED MOBILITY

DESCRIPTION

- Developing initiatives to promote electric carsharing and other sustainable shared mobility options, particularly in low-density areas where there are no alternatives to private transport. Pilot programmes should be co-financed by central government, Autonomous Communities, and local authorities.

OBJECTIVE

- To promote the use of sustainable shared mobility model such as carsharing and on-demand mobility all across the country, focusing on low-population density areas

where public transport is limited, as well as higher-density areas where such services are not yet available.

SPECIFIC MEASURES

- **Promote carsharing.** Develop initiatives to encourage carsharing, especially in low-density areas and places where these services do not yet exist
- **Provide adequate charging systems**. The cost of managing the charging systems often increases the cost of using the vehicles and therefore limits their development. This factor must be considered, as it is critical to the programme's viability.
- **Pilot programmes.** Launch pilot schemes co-financed by the State, local authorities, and the private sector in low-density areas where private transport is the only viable option, or in higher-density areas that currently lack such services. Pilot projects can help refine programme design, financing mechanisms, and user information.
- **On-demand electric mobility.** Foster collaboration between public authorities and on-demand mobility companies, generating benefits for both users and the environment. Public–private partnerships should support the rollout of services such as ride-sharing platforms that complement public transport, especially in rural areas or areas with low coverage. Incentives should be offered to electric vehicles users, such as affordable and convenient tariffs, while also delivering environmental benefits through reduced emissions. Dialogue between local authorities, the private sector, civil society organisations, and citizens is essential. Lessons can be drawn from good practices in existing projects to avoid repeating mistakes and maximise better results.
- **Assess other possibilities that enable the use of shared electric mobility**, such as establishing a social carsharing system in which the vehicle is not associated with a single household, but rather forms part of a pool available to all registered users, subsidized by the public administration according to each household's income level. This model promotes shared use of the vehicle and avoids long idle periods. Another option is carpooling, where private owners share their empty seats with third parties through applications (such as Karos, Hoop, etc.).
- **Evaluate incentives such as Energy Savings Certificates (ESCs) as a tool to promote carsharing and carpooling.** ESC compensation has already been introduced for carpooling, but it only applies to trips longer than 10 km; most local trips (in medium-sized cities) are therefore excluded

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

Ministry of Finance

- Establish co-financing mechanisms with Autonomous Communities and local authorities, allowing staggered contributions based on the size and socio-economic situation of each region.
- Introduce tax incentives for companies offering shared mobility services in rural areas

Ministry for the Ecological Transition and the Demographic Challenge

- Promote the inclusion of carsharing in regional and local climate action plans.
- Link the measure to the ministry's Demographic Challenge objectives, encouraging carsharing as a solution to improve mobility in municipalities with fewer than 5,000 inhabitants.
- Collaborate with the Ministries of Transport and Sustainable Mobility and Finance, as well as the Ministry of Social Rights, Consumer Affairs and Agenda 2030, to integrate this measure into national sustainable mobility and territorial financing policy.

IDAE

- Adapt existing programmes to promote carsharing.

Autonomous Communities (CCAAs) and local authorities

- Include carsharing in regional sustainable transport plans.
- Promote shared mobility services.
- Design pilot projects adapted to local contexts.

Private sector

- Develop carsharing models in coordination with public administrations.
- Design carsharing services through subscription or prepaid schemes.
- Co-develop pilot projects in collaboration with city councils, Autonomous Communities, and the General State Administration.
- Develop carsharing programmes as part of workplace sustainable mobility plans. This may be done in collaboration with other nearby companies and institutions which will also benefit from the programme. To enable this, specific spaces for dialogue should be established within and between companies, and at local level, involving unions, employees, and other private-sector stakeholders in electric mobility, including charging point operators.

POSSIBLE BARRIERS

- **Financing.** Several of the tax incentives can be funded by increasing other tax revenues (see tax reform). In addition, new financing channels such as the Social Climate Fund could be used for some of these measures, provided they target vulnerable populations. As in the previous case, opportunities for action could also be identified within the framework of Energy Saving Certificates (CAEs) for transport
- **Lack of private initiatives**. Measures such as carsharing often require strong private-sector involvement. While this is already happening in large cities, greater public support may be necessary for such initiatives to reach critical mass in medium-sized municipalities.

4.7 PLAN FOR A BETTER INTER-INSTITUTIONAL COORDINATION AND PUBLIC-PRIVATE DIALOGUE

DESCRIPTION

- Achieving the transition in transport and promoting electric vehicles requires effective coordination between public and private entities to improve management processes, provide better information for consumers, and support new investments. It is equally important to establish clear and measurable short and medium-term objectives that send strong signals to all economic and social stakeholders.

OBJECTIVE

- To improve coordination and reduce administrative processes in order to promote electric vehicles. To optimize collaboration between public and private entities. The ultimate goal is to streamline administrative processes, ensure coordinated planning, and encourage the active participation of all stakeholders in the energy transition.

SPECIFIC MEASURES

- **One-stop shop and comprehensive information hub.** Create a centralised space for information on electric vehicles, covering public aid, regulations and standards, procedures for installing charging points, payment systems, and more. This hub could also establish agreements with private entities (manufacturers, dealers, energy companies, charging operators) to support acquisition and use. A simplified, single procedure for obtaining permits at national, regional, and local levels should also be promoted. These one-stop shops could be extended to other areas of the energy transition, such as the Community Transformation Offices promoted by IDAE to support energy communities or the one-stop shops foreseen in the Energy Performance of Buildings Directive (EPBD) to encourage building renovation.
- Fostering regulatory sandboxes or testbeds for innovative solutions and new business models in real-world setting
- **Training of public personnel.** Linked to the above measure, public employees must be trained so they can provide information and process matters related to the energy transition and the rollout of electric vehicles and charging infrastructure.
- **Digital platforms.** Develop centralised digital platforms that bring together all the necessary procedures, potentially integrated into the one-stop shop model.
- **Clear deadlines.** Establish response times for permit approvals to avoid long delays and unnecessary bureaucracy.
- **Dialogue and coordination roundtables.** Set up regular roundtables between national, regional, and local administrations to define and align objectives on electric mobility. These could also cover broader sustainable mobility and energy transition issues.
- **Clear objectives and plans.** Define short and medium-term targets for charging infrastructure, promoting coordinated planning.
- **Monitoring framework.** Develop a framework for monitoring objectives and periodically assessing administrative improvements in line with agreed targets.
- **Sectoral, business, and social dialogue.** Establish forums and roundtables involving mobility companies, associations, trade unions, government, and other stakeholders.
- **Public–private communication.** Build a permanent communication system with the private sector to identify implementation challenges and propose joint solutions. Conduct public consultations to gather ideas and proposals for improving regulation and infrastructure planning.

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

All administrations

- Participate in inter-administrative coordination programmes and promote framework or collaboration agreements that enable the sharing of resources and management models.
- The General State Administration (AGE) should lead the national strategy by defining clear and measurable objectives.
- Coordinate a centralised system to simplify administrative procedures related to electric vehicle deployment.
- The Ministry for the Ecological Transition and the Demographic Challenge should lead multilevel dialogue roundtables in coordination with the Ministries of Transport, Industry, and Finance, together with the Autonomous Communities and associations of municipalities.

Autonomous Communities (CCAAs) and local authorities

- Coordinate the proposed measures at regional and local levels.

Private sector

- Collaborate with public administrations to identify administrative barriers, propose solutions, and contribute to joint planning design.

4.8 JUST TRANSITION IN THE AUTOMOTIVE SECTOR

DESCRIPTION

- Develop a just transition strategy for the automotive sector that provides solutions and supports the transformation of the sector and its entire value chain. Safeguard employment by ensuring the sector remains a high value-added industry that provides quality Jobs. Commit to the circular economy across the value chain, promoting technologies linked to electric vehicles as well as the reuse and management of materials, particularly batteries. This Just Transition strategy should also encompass other parts of the automotive value chain such as repair shops, dealerships, and component manufacturers in order to ensure their inclusion in the transition process. It should also be borne in mind that SMEs account for a significant share of the sector and must therefore be included in the transition process.

OBJECTIVE

- The goal is to guarantee the creation of quality jobs and the transition to sustainable industries, with a firm commitment to the circular economy and to electric vehicle components production. This requires promoting worker training plans, developing just transition agreements, and integrating the entire value chain, ensuring sector transformation that not only preserves employment but also drives innovation and sustainable mobility.

MEASURES FOR A JUST TRANSITION IN THE AUTOMOTIVE SECTOR

- **Reindustrialisation plans**. Develop and implement reindustrialisation plans in regions affected by the transformation of the automotive sector, especially those with a strong industry presence. These plans should focus on new production models linked to the circular economy and the manufacture of electric vehicle components. Regional and local authorities should design strategies to attract new industrial investment that sustains activity and secures quality employment.
- **Company-level Just Transition Plans.** Automotive companies should define their own just transition plans by identifying the necessary changes in suppliers and products and analysing their qualitative and quantitative

employment impacts, therein prioritise retraining needs for redeployment within the sector or in related industries. These plans will be essential to identify collaboration opportunities with other parts of the value chain (technology, energy, component manufacturing, finance) and to strengthen dialogue with SMEs.

- **Social dialogue**. Promote structured social dialogue between the private sector, the public sector, and trade unions to advance specific just transition objectives. Each party should identify its commitments, and mechanisms should be established to monitor progress.
- **Circular economy industry.** Support a more sustainable industry that integrates the circular economy into the electric mobility transition. Encourage the creation of plants dedicated to recycling materials and components from conventional and electric vehicles, especially batteries. Promote policies that foster employment linked to the circular economy, such as battery recycling specialists or engineers in waste management technologies.
- **Training plans.** Develop training programmes to support workers' transition from the conventional vehicle sector to electric mobility. Training should cover aspects of the circular economy to ensure long-term employability, as well as specific modules on electric vehicle technologies, batteries, renewable energies, and waste management. The retail and repair sectors should also be included.
- **Whole value chain approach.** Design policies and plans that go beyond vehicle manufacturing and assembly, addressing the entire automotive value chain, from component production to distribution and repair. Support the transformation of the whole chain from conventional to electric vehicles.

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

Ministry for the Ecological Transition and the Demographic Challenge

- Define specific financing and co-financing lines for reindustrialisation projects.
- Design and coordinate the Just Transition strategy, covering regions affected by the transformation as well as other stakeholders across the automotive sector.
- Develop specific action plans tailored to each territory.
- Promote retraining programmes in key skills for electric vehicles deployment, in collaboration with SEPE, the Ministry of Employment, and the Autonomous Communities.
- Speed up the approval process for courses, postgraduate programs, in-factory training, dual training, etc.

Autonomous Communities (CCAAs) and local authorities

- Design regional plans for a just industrial transition, including specific support measures for the sector.
- Promote municipal circular economy projects.

Private sector

- Develop company-level just transition plans in line with ETS objectives.
- Implement the measures required to carry out just transition plans, including spaces for dialogue with suppliers, workers, and trade unions, as well as reskilling and redeployment programmes for workers affected by the transition, where necessary.
- Promote and participate in circular economy pilot projects in collaboration with public administrations and innovation centres.
- Take an active role in just transition agreements, assuming social and environmental commitments.

4.9 OBSERVATORY AND COMMUNICATION PLAN FOR THE SECTOR'S JUST TRANSITION

DESCRIPTION

Monitor the transition process by identifying barriers and new opportunities for improvement. Develop a comprehensive communication plan that sends clear signals on the need for sustainable mobility, highlighting the key role of electric vehicles. The plan is essential to ensure that the aid and measures outlined above are visible to the public and other stakeholders, and to dispel myths surrounding electric mobility.

OBJECTIVE

Establishing an observatory for the sector's just transition process, in line with the recommendations set out in this document, will provide a better understanding of barriers and opportunities for improvement.
The communication plan aims to reduce the complexity and lack of information that hinder mass adoption of electric mobility. The objective is to create a favourable environment by unifying processes, promoting electric vehicles, and debunking myths

SPECIFIC MEASURES

- Create an observatory for the sector's just transition process to track the implementation of the recommendations in this document, identify new barriers, and explore opportunities for progress.
- Advertising campaigns: Myths about electric vehicles. Launch campaigns in traditional and digital media to dispel myths and misinformation on issues such as vehicle range, maintenance costs, environmental benefits, and charging infrastructure. These campaigns should present electric mobility as a viable and accessible option.
- Improve access to information on aid and support. Facilitate the dissemination and accessibility of information on grants and support measures for electric vehicle purchase, making it easier for consumers and businesses to access incentive programmes and related administrative procedures. This measure is closely linked to the proposed one-stop shop.
- Develop centralised digital platforms. Establish an online portal consolidating all information on electric and sustainable mobility, including grants and measures promoting the energy transition. The portal should also provide a channel for responding to queries. This measure is also linked to the proposed one-stop shop.
- Improve inter-institutional communication. Strengthen coordination among institutions to ensure greater efficiency and consistency in the implementation of measures and aid promoting the transition to electric mobility
- Improve communication with local administrations. Local administrations, through mechanisms such as one-stop shops, should enhance communication with citizens, clarifying questions about the energy transition, sustainable mobility, and access to aid and measures. Their proximity to citizens makes their role decisive.

AGENTS INVOLVED – BUREAUCRATIC ENVIRONMENT – MANAGEMENT

All administrations

5. References

ECODES (2022). Gobernanza y transformación de la movilidad urbana. [Governance and transformation of urban mobility]. Reflections in 10 Spanish cities on mobility and the implementation of LEZs. Recommendations.

MITECO (2024) Greenhouse gas emissions forecast for 2023, Ministry for Ecological Transition and Demographic Challenge, Madrid
https://www.miteco.gob.es/content/dam/miteco/es/calidad-y-evaluacion-ambiental/temas/sistema-espanol-de-inventario-sei-/avance-GEI-2023.pdf

MITMA (2021). Estrategia de Movilidad Segura, Sostenible y Conectada 2030 [Strategy for Safe, Sustainable, and Connected

Mobility 2030]. Available at: *https://cdn.mitma.gob.es/portal-web-drupal/esmovilidad/ejes/211223_es.movilidad_accesibilidad_ALTA_vf.pdf*

OIKOS (2023) Descarbonización del transporte: diagnóstico y propuestas. [Decarbonization of transport: diagnosis and proposals]. Madrid

OMM (2023), El inicio de las Zonas de Bajas Emisiones en España [The start of Low Emission Zones in Spain] Cristina López, Ramón Cuvillo, Carlos López, Allison Fernández, Alberto González, Silvia Hernández, Andrés Monzón. Observatorio de la Movilidad Metropolitana (OMM), Madrid.

Transport & Environment. (2021) Potential options and technology pathways for delivering zero-carbon freight in Spain, prepared by Cambridge Econometrics for Transport and Environment.

Transport & Environment. (2024, April 10). Bridging the gap: Carmakers' progress toward the 2025 car CO2 targets. Transport & Environment. Retrieved from *https://www.transportenvironment.org.*

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