

# Romania

## Policy Review

### Romania's Recovery and Resilience Plan

Romania's National Recovery and Resilience Plan (NRRP): Currently Romania is undergoing an unprecedented number of reforms and investments aimed at bolstering infrastructure and mitigating the socio-economic effects of the Covid-19 crisis. The total cost of the plan amounts to €29.2 billion or 13.1% of the country's GDP. The plan runs from 2021-2026 and 52% of the funds are aimed to facilitate the country's green and digital transition.<sup>557</sup>

### Institutional Strategic Plan 2021-2024 for the Ministry of Transport and Infrastructure

The plan aims to achieve three strategic objectives: A national transport system with high economic efficiency and environmentally sustainable, which supports the competitiveness of the national economy; A national transport system integrated into the Single European Transport Area; A high level of performance of the Ministry of Transport and Infrastructure to provide better services to the public.<sup>558</sup>

The transport sector currently faces several significant challenges. Firstly, there is a pressing need to mitigate the impact of transportation on climate change by prioritizing sustainable and environmentally friendly modes of transport. Additionally, efforts are underway to enhance the economic efficiency of the national transport system while reducing the overall cost burden on the national economy. Another key challenge involves the restructuring and strengthening of major national networks, including roads, railways, and waterways, to ensure their resilience and effectiveness. Furthermore, there is a focus on reorganizing transport services to better align with the needs of both citizens and businesses. Ensuring the development of a safe and secure transport system, including accessible public transportation for all, remains a priority. Lastly, there is an emphasis on improving the organizational capacity of the Ministry and the corporate governance of State-owned Enterprises to enhance service delivery to the public.<sup>559</sup>

### EV Tax Benefits and Subsidies

The Romanian Government has an extensive program of subsidies named *Rabla Clasic* and *Rabla Plus* to encourage owners of old cars/motorcycles to scrap their vehicles and buy new cars/motorcycles. The programs include ICE, hybrids and EVs. *Rabla Plus* subsidy

applies to EVs not more expensive than €70,000 and for the vehicle to qualify for scrapping 6 or more years need to pass from first registration. Although in 2023 the subsidy amounted to €10,000 for EVs and €5200 for hybrid vehicles, in 2024 it was halved to €5200 for EVs and €2600 for hybrid vehicles.<sup>560</sup>

## Technological Advancements

Dacia produces the Dacia Spring, the only pure EV in its line-up, with a claimed range of 220km. It enjoys wide popularity in Europe, in 2023 it was the 5th most sold EV with 140,000 units sold since its launch in 2022. In contrast to its competitors, it starts at around €20,000, while the average price for an EV in Europe is around €50,000. In February 2024, Dacia announced a facelift for Dacia Spring that will align with the brand's new design language.<sup>561</sup>

## Infrastructure Development

### EV Charging Infrastructure

The number of charging locations in Romania continues to increase by approx. 300 units each year, totalling approx. 1350. However, only 25% have more than one station. Through government-funded programs, it is expected that by 2026 the number will climb to 6500 stations.

### Motorways

Romania as the 8th biggest EU country by size is one of the EU countries with the least developed motorway network. From 2017 (763 km) to 2023 (1002 km) it has built less than 350 km of motorways. Although there is a major development campaign at the moment to add another 715km by 2027, the network will remain underdeveloped compared to neighbouring countries and Romania's own needs.<sup>562</sup> The lack of adequate infrastructure has also been linked to a high mortality rate in car accidents. Out of the 27 EU countries, Romania has the highest number of fatalities per million inhabitants. In 2021, the average was 93 deaths per million inhabitants. Compared to the rest of the EU, this rate has decreased at a significantly slower pace since 2001.<sup>563</sup>

### Rail network

On average, rail passengers in Romania travel 200km (2021)<sup>6</sup>. Despite inheriting an expansive rail network, the Romanian government did not take the appropriate steps to adequately maintain and modernize the infrastructure. Currently, Romania has the lowest percentage of electrified railways in the EU – 20.06%. The average speed of passenger trains is currently

<sup>557</sup> [Romania's recovery and resilience plan - European Commission \(europa.eu\)](#)

<sup>558</sup> Institutional Strategic Plan 2021-2024 for the Ministry of Transport and Infrastructure ([gov.ro](#))

<sup>559</sup> Institutional Strategic Plan 2021-2024 for the Ministry of Transport and Infrastructure ([gov.ro](#))

<sup>560</sup> [ADMINISTRATIA FONDULUI PENTRU MEDIU - VEHICULE ELECTRICE \(afm.ro\)](#)

<sup>561</sup> [Sales results: Dacia grew by 16.7% over the first 9 months of 2023 - Site media global de Dacia](#)

<sup>562</sup> [Calendarul finalizarii proiectelor de autostrazi in Romania \(130km.ro\)](#)

<sup>563</sup> European Commission, Romania Road Safety Profile ([europa.eu](#))

68.86km/h, while for freight trains in 2019 was 44km/h.<sup>564</sup>

Funds from Romania's Recovery and Resilience plan are expected to significantly boost the state of the railway infrastructure. Numerous tenders have been awarded or are in the preparation phase to electrify, upgrade and repair railway infrastructure across Romania.<sup>565</sup> Investments are also focused on renewing the rolling stock. CFR Passenger began the initial phase of modernizing locomotives and wagons under the National Recovery and Resilience Plan with the release of the first five tenders in May 2023. In total, the project entails launching 11 tenders aimed at enhancing the rail infrastructure, including the modernization of 55 electric locomotives for passenger train operations, the conversion of 20 hydraulic diesel shunting locomotives into battery electric locomotives, and the modernization of 139 passenger wagons.<sup>566</sup>

### Market Trends and Consumer behavior

Romania is the 6<sup>th</sup> biggest passenger car producer in the EU. In 2022, it produced 507,269 vehicles. This represents a 20% increase compared to 2021.<sup>567</sup> In 2022, in Romania were sold 129328 cars, 13583 vans, 6870 trucks and 860 buses. Totalling 150641 vehicles. As a result of generous government subsidies, the years between 2018-2022 registered a large increase in the share of EV registrations. In 2018 only 604 EVs were registered by 2022 that number increased to 11638 EVs.<sup>568</sup>

Looking at engine size: Petrol- Romanians prefer small petrol engines ( $\leq 1399 \text{ cm}^3$ ) the most, with 29.4% of cars; medium-sized 16.7% ( $1400 \text{ cm}^3 - 1999 \text{ cm}^3$ ); and large-sized 1.1% ( $\geq 2000 \text{ cm}^3$ ). Diesel - small diesel engines 1.7% ( $\leq 1399 \text{ cm}^3$ ), medium sized 41.3% ( $1400 \text{ cm}^3 - 1999 \text{ cm}^3$ ); and large sized 7.2% ( $\geq 2000 \text{ cm}^3$ ).<sup>569</sup> Using passenger cars as a transportation method is most popular among Romanians, 80% do so. Followed by coaches, buses and trolleybuses at 15% and trains at 5%. (2020). Based on ton-kilometers Romania is responsible for 3.5% of the share of EU road freight transport. (2021)<sup>570</sup>

### Public Transportation Systems

In 2022 there were 54713 buses on Romania's roads. The average age of a bus is 17.1 years old. Second oldest population after Greece (18.8 years) and significantly above the European Union average (12.5 years). By power source, they are distributed by Diesel (98.2%), Battery Electric (0.8%), Hybrid Electric (0.6%) and Petrol (0.2%).

Urban public transport in Romania is increasingly structured around two key strategic elements:

Sustainable Urban Mobility Plans (SUMP) and Contractual Service Plans (CSP). SUMP have been adopted by all major cities since 2015, serving as vital strategic tools guiding investment decisions in both public and individual transportation sectors. These documents, legally binding, typically outline plans up to 2030 and include comprehensive investment master plans. CSPs, on the other hand, are a newer instrument that is still in the implementation phase in some Romanian cities. While these plans generally cover periods of 5 to 6 years, certain municipalities and inter-community development associations (IDAs), such as Bucharest, Cluj Napoca, and Timisoara, are extending their planning horizons to 10 to 15 years. However, it's notable that Romanian cities have yet to fully develop expertise in risk sharing between public authorities and selected public transport operators within these CSPs.<sup>571</sup>

In inter-urban transport, a significant imbalance persists, characterized by the overwhelming dominance of road transport, particularly minibuses, which command nearly 80% of the modal share. This stands in stark contrast to the growing European trend favouring rail transport, where the modal share in intercity public transport on inland routes is steadily approaching or exceeding 50%. A key factor contributing to this modal imbalance is the prolonged underinvestment in new rolling stock. This has resulted in a drastic reduction of the national operator's rolling stock, plummeting from approximately 11,000 passenger wagons/cars in 1990 to a mere 2,290 wagons by 2016, with only about 1,500 still operational. Consequently, this severe depletion severely limits transport capacity and the availability of public transport services. Moreover, with CFR-Călători operating around 1,300 trains daily with the existing fleet, the dwindling wagon fleet has led to significant financial inefficiencies in operating costs for passenger trains.<sup>572</sup>

### Environmental Impact and Emissions

The fastest growing sector is transport with a 17% share in 2016, having increased emissions by 35% since 1990. The ageing fleet of vehicles on Romania's roads has a direct impact on pollution levels and in turn on human health. In 2021 a study measuring NO2 levels has put 4 Romanian cities in the top 10 most polluted. The average age of a Romanian car is 14.9 years. By power source, the fleet is divided as follows: Petrol – 54.9%; Diesel – 42.2%; Hybrid electric – 0.8%; Battery electric – 0.3%; Plug-in Hybrid – 0.1%. Romania also has the 2nd highest share of passenger cars older than 20 years (after Estonia), namely 31%. The average age of a Romanian van is 15.8 years. Second oldest van population after Greece.<sup>573</sup>

<sup>564</sup> [Key figures on European transport – 2022 edition - Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=ts0000011&plugin=1)

<sup>565</sup> [CFR Infrastructura Archives - Pagina 2 din 10 - Mobilitate.eu](#)

<sup>566</sup> [Sumar - CFR Călători a lansat primele 5 licitații din cele 11 pentru proiectele de modernizare prin PNRR - Mobilitate.eu](#)

<sup>567</sup> [Economic-and-Market-Report\\_Full-year-2022.pdf \(acea.auto\)](#)

<sup>568</sup> [Romanian E-Mobility Index: Demand surges thanks to generous incentives | Roland Berger](#)

<sup>569</sup> [Key figures on European transport – 2022 edition - Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=ts0000011&plugin=1)

<sup>570</sup> [Key figures on European transport – 2022 edition - Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=ts0000011&plugin=1)

<sup>571</sup> Asociația Pentru Mobilitate Urbană, Studiu privind analiza situației existente a transportului public local și metropolitan la nivelul a 20 de poli de dezvoltare urbană (2019). ([fzmaur.ro](http://fzmaur.ro))

<sup>572</sup> Institutional Strategic Plan 2021-2024 for the Ministry of Transport and Infrastructure ([gov.ro](http://gov.ro))

<sup>573</sup> [Key figures on European transport – 2022 edition - Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&code=ts0000011&plugin=1)

In light of the old car population, Romania has also missed the deadline to submit a National Alternative fuel strategy, putting them three years behind most other European nations. This will have an additional negative impact on Romania's capacity to lower transport sector emissions in accordance with EU set deadlines. Romania's ageing vehicle fleet significantly contributes to poor air quality in its cities. Bucharest, for instance, ranks 57th among European cities for the average number of days exceeding the EU limit for particulate concentration, with 69 days surpassing the threshold. Additionally, it holds the second position among the most congested cities in Europe (and fifth globally), resulting in an average loss of 218 hours per year due to traffic congestion.<sup>574</sup>

### Economic and Social Implications

The automotive industry in Romania is valued at €27 billion or 12% GDP. The industry is also responsible for 30% of Romania's exports, which also represents the highest share of all exports. Over 90% of the cars produced in Romania are exported, the overwhelming majority to Europe. Dacia (51% Owned by the Renault Group) is currently the largest company in Romania.<sup>575</sup> The transaction value of the automotive industry in 2022 amounted to 7% (€6.9 billion) of the total mergers and acquisitions in Romania. This makes it the third most valuable industry in Romania. Approximately, 15.2% (163,988 jobs) of jobs in Romanian manufacturing are in the automotive industry. This represents the 2<sup>nd</sup> highest share of workers in the EU.<sup>576</sup>

In 2022, Romania had 413 cars per 1000 inhabitants, whereas the European average stood at 574. Additionally, vans, trucks, and buses per 1000 inhabitants in Romania were 69, compared to the European average of 85.<sup>577</sup> The majority of Romanians spend between 1-29 minutes (65%) and 30-59 minutes (30%) to commute to work (2019).<sup>578</sup>

### Best Practices and Case Studies

Romania has an extensive railway travel subsidy program for students and retirees. Retirees and students benefit from substantive discounts on train tickets, additionally, students benefit from free travel to/from their educational institution to/from home.<sup>579</sup>

### Future Perspectives and Emerging Trends

Romanian trends correspond broadly to general European trends. EVs enjoy a similar share of the newly registered cars in Romania as in other Member States. However, there are also potential limitations. Namely, the lack of motorways and limited charging infrastructure will confine the use of EVs to short trips in cities and close by towns. This could prove a serious limitation for wide adoption in the country.

On average, Romanian infrastructure significantly trails behind the European average. Despite the sizeable

influx of investments, large infrastructure projects take time. Assuming that projects will be finished and delivered under the current timeline, significant improvements should be observed in 2027-2030. Through its already strong automotive industry, Romania has demonstrated that it can successfully absorb large investments and has an attractive and skilled workforce for employers.

### International Comparisons and Collaborations

Romania participated in the signature of three grant agreements under the Connecting Europe Facility for Transport worth almost €45 million to improve transport connections between Moldova and Romania along the trans-European transport network (TEN-T). The projects will modernize transport infrastructure at the road border crossing points Ungheni, Albița-Leușeni, and Reni-Giurgiulești-Galați. These investments will strengthen the EU-Ukraine Solidarity Lanes – the routes used since Russia's blockade of Ukraine's Black Sea ports to transport Ukraine's and Moldova's exports and imports.<sup>580</sup>

European Institute of Innovation and Technology (EIT) Urban Mobility and Romania's Regional Development Agency of Centru (Centre) Region have signed a Memorandum of Understanding (MoU). The memorandum marks a significant milestone in collaborative efforts and establishes strategic cooperation to promote innovation in transportation and mobility in Romanian cities. The document defines the overall common objectives, areas of collaboration and the establishment of a monitoring committee to oversee the partnership. This partnership will strengthen the innovation ecosystem in areas relevant to mobility, in line with the priorities of the Smart Specialisation Strategy of the Centru Region.

Belgium-based Avesta Battery and Energy Engineering (ABEE) announced it will build a €1.4 billion electric car battery cell factory in Galați, Romania to supply batteries mainly for the automotive industry – Renault-Dacia and Ford – and for the stationary storage market. ABEE intends to complete the project's first phase in 2026. In addition, ABEE plans to invest €200 million by the end of the decade in a recycling facility for electric equipment and batteries. ABEE has also signed an agreement to invest in the production of battery management systems in North Macedonia.

<sup>574</sup> EUKI Project, [Emission reduction strategies for the transport sector in Romania \(transportenvironment.org\)](https://transportenvironment.org)

<sup>575</sup> [Romania : an emerging automotive hub in Europe \(blue-europe.eu\)](https://blue-europe.eu)

<sup>576</sup> [ACEA-Pocket-Guide-2023-2024.pdf](https://acea.eu)

<sup>577</sup> [ACEA-Report-Vehicles-on-European-roads-.pdf](https://acea.eu)

<sup>578</sup> [Key figures on European transport – 2022 edition - Eurostat \(europa.eu\)](https://europa.eu)

<sup>579</sup> [Elevii vor călători gratuit cu trenul în România, din data de 3 septembrie \(wall-street.ro\)](https://wall-street.ro)

<sup>580</sup> [EU signs grant agreements for transport infrastructure to better connect Moldova with EU - European Commission \(europa.eu\)](https://europa.eu)