

MEASURES AND POLICIES TO STRENGTHEN THE EUROPEAN ECONOMY: A ROADMAP FOR ROMANIA

Daniela Staicu, Ph.D.

Bucharest University of Economic Studies, Faculty of Business Administration in Foreign Languages,

Department UNESCO

E-mail: daniela.staicu@fabiz.ase.ro

Abstract

This research aimed to analyze European priorities reflected in key strategies essential for Romania's policy development to support the European economy. It focused on two main aspects: responses to the pandemic and the impact of the war in Ukraine on European supply chains. These crises have accelerated the shift in economic and industrial policies in both Europe and the U.S., reinforcing trends like reshoring and friendshoring. The pace of knowledge research related to European Development strategies is rapidly increasing, yet it remains fragmented and spans multiple disciplines. Consequently, the literature review method is more crucial than ever for navigating and understanding the evolving landscape of European policies and programs to strengthen European resilience. While this study explores European economic strategies, it does not cover specific regulations or alliances formed in recent years, such as those related to raw materials, semiconductors, batteries, hydrogen, and zero-emission aviation.

Keywords: *European Green Deal, European Priorities, EU alliances, Romania roadmap to resilience, simultaneous crises*

JEL Classification: M20, M21, O14, O38, O44

Introduction

The European economy has proven resilient to the shocks it has experienced over the past five years, debuting with the COVID pandemic shock. In 2022, the European GDP increased by 3.5% after, in 2021 had increased by 5.3% [1]. Multiple measures were taken in response:

a) to the pandemic crisis: the Next Generation EU program, a transformative, temporary recovery tool aimed at supporting Europe's economic recovery from the coronavirus pandemic while promoting a greener, more digital, and more resilient future. Based on funding requests from Member States under the Recovery and Resilience Facility (RRF) and the financial needs of other EU programs backed by NextGenerationEU, the EU anticipates raising up to €712 billion by 2026 (European Commission, 2024). A map provides examples of reforms and investments supported by the Recovery and Resilience Facility in Romania (figure 1).

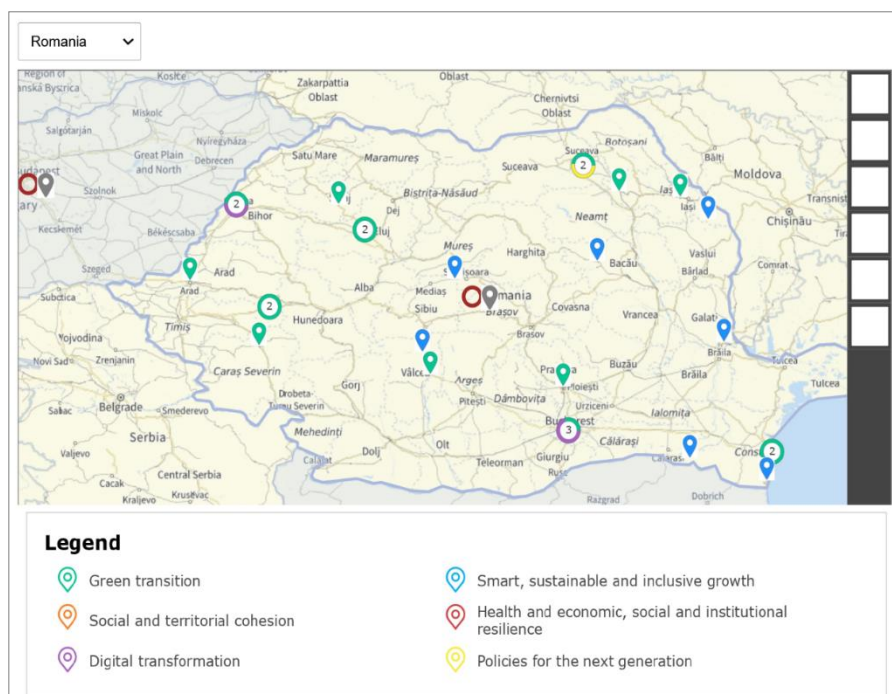


Figure 1. Projects implemented under the Recovery and Resilience Facility
Source: European Commission, 2024b.

b) to the energy crisis, such as RePowerEU. In response to the global energy market disruption triggered by Russia's invasion of Ukraine, the EC is executing since 2018 the REPowerEU Plan to gradually eliminate Russian fossil fuel imports through focus on: conserving energy, diversifying energy sources, producing clean energy. At the end of the winter heating season this year, gas storage levels reached 59% of total capacity, providing a strong starting point for refilling ahead of next year (figure 1).

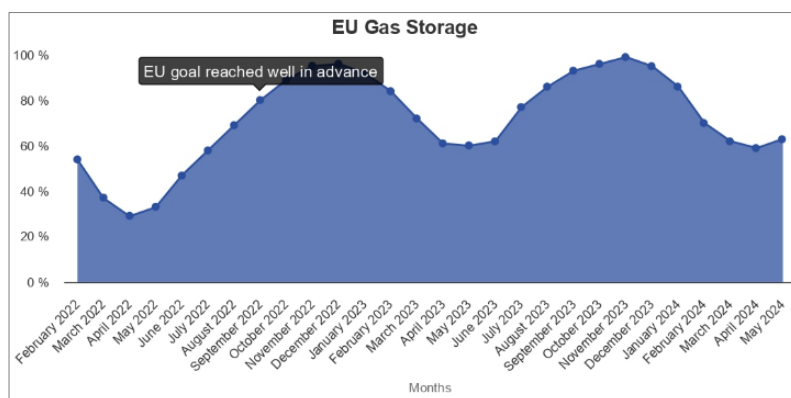


Figure 2. Gas storage levels Feb. 2022 to April 2024
Source: European Commission (2024c)

Europe has been proactive in addressing climate change and reducing human-caused, committing to becoming the world's first climate-neutral continent by 2050, with this goal expressed in various EU documents, strategies, and sectoral policies. Consequently, Romania is part of a European plan that leads globally in ambition for “greening” and “decarbonization” of the economy.

1.1. The energy transition

Today, despite significant “greening” efforts, the global economy remains heavily reliant on hydrocarbons, accounting for over 80% of its energy consumption. Complex, and extremely expensive as a projected cost is about \$5.8 trillion annually, 2023 to 2030 for 48 developing economies studied or 19% of their GDP, as stated in a study by IEA [2], this transition involves fundamentally transforming the way modern society functions, given that the economy has been built on the exploitation and use of hydrocarbons. This process essentially entails reducing the use of oil, gas, and coal while widely adopting cleaner, less polluting or green energy sources. This can be accomplished through the electrification of mobility and heating, along with the adoption of renewable energy sources across all sectors of the economy, from industry to buildings, and transport. Therefore, we are also dealing with new energy geopolitics (figure 3).

KEY FACTORS ACCELERATING THE DE-CARBONIZED ENERGY TRANSITION

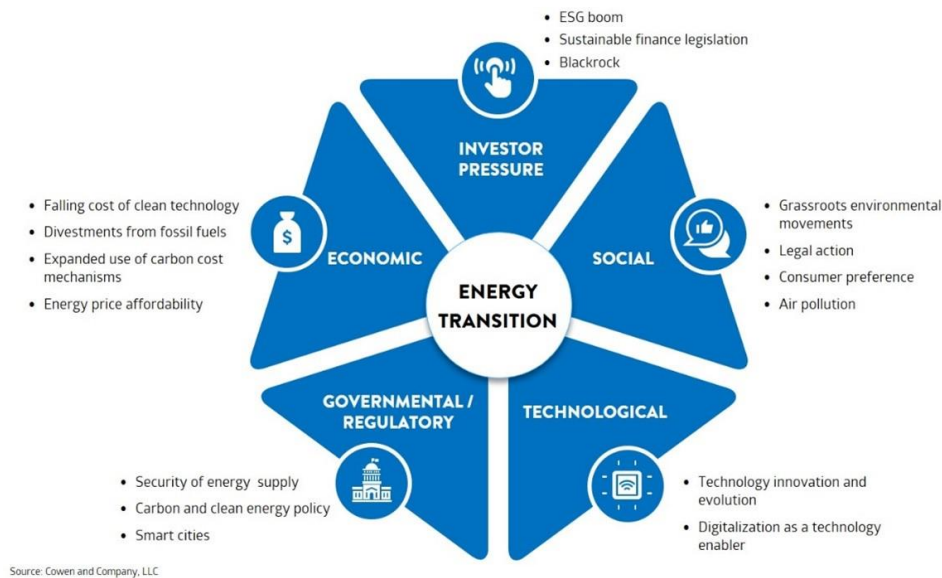


Figure 3. Key factors accelerating the decarbonized energy transition

Source: Cowen and Company (2021).

1.2. Simultaneous, overlapping transitions

The last 20 years have witnessed many disruptive events and developments that have had a significant impact on the European Union: 2022 – the Russian war of aggression on Ukraine in 2022; 2020 - the coronavirus pandemic; 2016 – Brexit [3 – 4]; 2008 – the global financial crisis [5]. Today, Europe is striving to balance openness with security, and in this context, Europe is going through multiple transitions simultaneously (table 1).

Table 1. Simultaneous and overlapping transitions

No	Title	Area of impact
1	Economic policy transition	The economic and monetary policy of the EU has oscillated between promoting an open market economy and creating a social market economy, although the direction towards a free market has always weighed more heavily (Konzelmann, 2014). Focused on debates about EU economic governance.
2	The geopolitical transition	Influenced by the discourse on open strategic autonomy and Russia's aggressive war against Ukraine, which has long-term implications for energy, food, the economy, security, defense, and geopolitics, this situation challenges Europe's reliance on inexpensive raw materials and products. It is closely linked to the EU's commitment to free trade, maintaining the advantages of an open economy, and modern multilateralism. Crucial to this are European supply chains that can uphold the EU's independence.
3	The green transition	Asks for a "transformation" in how Europe produces and consumes goods and services, while also addressing how the costs of this change will be managed. Measures to alleviate high energy prices, such as subsidies and price controls, could potentially slow down the adoption of green fuels. We are currently facing a labor crisis, often referred to as a cost of living crisis, which is being temporarily alleviated by the influx of workers from Asia and Africa.
4	The digital transition	It will primarily be driven by private, profit-oriented initiatives, in contrast to the green transition, which will necessitate substantial public and private investment.

Source: author's own processing based on Gusilov and Staicu (2023).

2. Problem statement

The European Commission has proposed a European Green Deal, a European growth strategy fit for a healthy planet. This strategy addresses environmental issues such as biodiversity, pollution and climate change, through

transforming food systems, agriculture, energy, industry, buildings and mobility. This is such a complex program, touching many policy areas, with nonetheless more than 100+ acts, directives, laws and strategies partnerships currently in place [6]. The targets are ambitious and connected to strategies for transforming systems supplying energy, food and mobility [6]. The EU has adopted a net zero emission target for 2050 for greenhouse gas emissions, and the reduction target for 2030 was increased from 40% to 55%.

Variou proposals made by the European Commission contain a set of measures to ensure that funding is not environmentally harmful and supports the transition to a low-carbon, green and circular economy, while making Europe resilient after the coronavirus pandemic (figure 4).

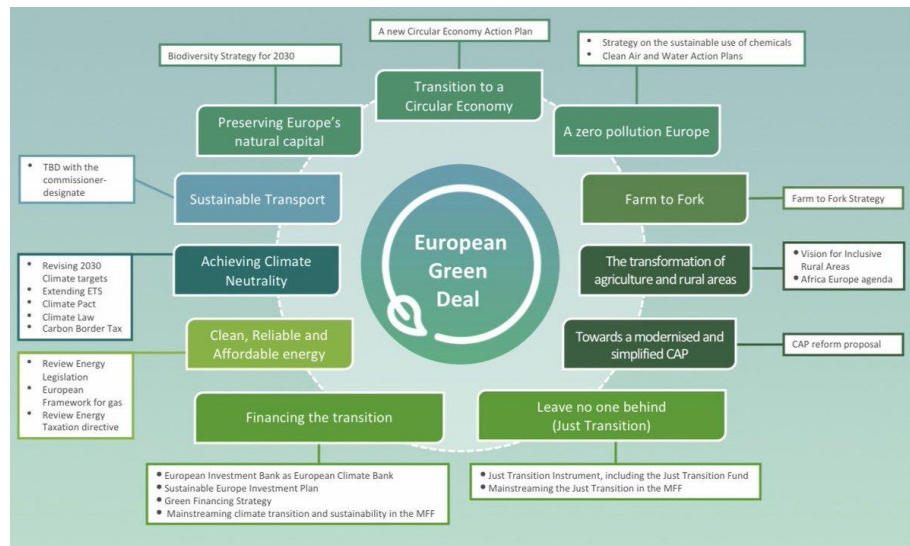


Figure 4. The European Green Deal agenda

Source: Suseet.eu (2020).

Member States will all need to play a role in the transition, though its effects will vary by territory, and notably three primary processes will be mandatory: innovation (emergence), widespread adoption of sustainable solutions (diffusion), and system reconfiguration (while ensuring a just transition) as stated in EC [7] report “Supporting sustainability transitions under the European Green Deal with cohesion policy”. Therefore, it is crucial to understand the European strategies that influence Member States' economies, foreign direct investments (FDI) requirements from local authorities, and the change in business models required by local entrepreneurs to align with the EU's ambitious goals.

3. Research question

The aim of this research is to understand the European priorities as reflected in strategies that are of utmost importance to the Romanian government in its efforts to develop policies and programs to support the European economy. Therefore, the research question is: “What European strategies are guiding the direction in which Romania should develop its policies and programs?”

4. Research methods

The pace of knowledge research related to European Development strategies is rapidly increasing, yet it remains fragmented and spans multiple disciplines. The rapid advancement, driven by five years of intense strategy formulation at European level, actions, directives, and laws, makes it difficult to keep up with the latest research. Consequently, the literature review method (Snyder, 2019) is more crucial than ever for navigating and understanding the evolving landscape of European policies and programs to strengthen European resilience.

A literature review can be broadly defined as a systematic approach to gathering and synthesizing existing research [8]. When executed effectively, it provides a solid foundation for advancing knowledge and supporting theory development [9]. By employing a systematic review (Moher et al., 2009), the author located all empirical evidence that meets pre-defined inclusion criteria such as “European economic programs launched between 2020 and 2024” to address the specific question in sub-chapter 3.

The literature reviewed was in connection with three European programs: The European Green Deal, REPowerEU program and the Circular Economy Action Plan. Nonetheless, it was considered relevant also to the National Strategy for Research, Innovation and Smart Specialization 2022-2027 which translates some of the European priorities into actions for the local administration, investors, and researchers. The time analyzed in this study is 2020-2024. In this sense, the research focused on the most recent bibliographic sources and available data online, on official websites of the European Commission, always consulting and citing the latest version of the official documents.

5. Findings

The EU's response to the COVID crisis was formulated on an internal and external level:

Internally within the EU through the Recovery and Resilience Facility: Designed as a time-limited, valid only until 2026, intended to mitigate the economic impact of the 2020-2021 pandemic. Later, the RRF evolved into an accelerator of green and digital transitions. Created in 2020, when interest rates were low and the cost of accessing capital was reduced, the RRF now operates with high interest rates due to monetary policies aimed at combating inflation. This makes repaying loans taken out through the RRF more costly.

Second, other key documents concerned the Industrial Policy for Net-Zero (Net-Zero Industry Act), part of the Green Deal Industrial Plan; the Regulation on Critical Raw Materials (Critical Raw Materials Act); and the Regulation for Strengthening the European Semiconductor Ecosystem (Chips Act).

Externally, actions were taken to diversify international partnerships: Reducing European dependence on imports from supplier countries with a "quasi-monopoly" and the economic strategy of minimizing risks involve developing new free trade agreements (with New Zealand, Australia, India, ASEAN countries) and modernizing existing agreements (with Mexico and Chile).

When it comes to industrial alliances, these can be divided into two categories:

- a) existing: the Battery Alliance since 2017 [10], the Critical Raw Materials Alliance since 2020 [11],
- b) in development: the Industrial Alliance on Processors and Semiconductor Technologies, The European Alliance for Industrial Data, Edge and Cloud, the European Zero-Emission Aviation Alliance [12], The European Clean Hydrogen Alliance [10].

These alliances are key to Europe's larger efforts to boost industrial capabilities, drive innovation, and meet strategic objectives across different sectors.

1.5.1 The Circular Economy Action Plan

Transitioning to a circular economy will ease the strain on natural resources, foster sustainable growth, and generate jobs. In March 2020, the European Commission introduced the new Circular Economy Action Plan (CEAP), a key component of the European Green Deal, which outlines Europe's agenda for sustainable growth. Additionally, it is essential for meeting the EU's 2050 climate neutrality goal and reversing biodiversity loss.

The policy areas concerned by CEAP are chemicals, circular economy, circular economy at the global level, industry, plastics, sustainable development, and waste and recycling. These policies are accompanied by strategies (figure 5).

In 2023, the Commission updated the circular economy monitoring framework, which was initially established in 2018. The revision introduces new indicators for: material footprint and resource productivity, to track material efficiency, and consumption footprint, to assess whether EU consumption remains within planetary limits.



Figure 5. Policies and strategies related to The Circular Economy Action Plan

Source: author's own processing based on European Commission (2020d).

5.2 The Strategy for Industry and the Green Industry Plan (part of the European Green Deal)

In 2021, May, because of the COVID crisis, the EU updated its Industrial Strategy, which had just been published one day before the World Health Organization declared the pandemic.

As a result of the lessons learned from the pandemic, the EU introduced a single market monitoring mechanism consisting of an annual review of 14 industrial ecosystems (figure 6).



Figure 6. EU's 14 industrial ecosystems

Source: European Commission (2023d).

In January 2023 [13] the EU announced the Green Industry Plan, centered on the Net-Zero Industry Act (NZIA) aiming to strengthen the capacity to manufacture net-zero technologies in Europe, not to replace hydrocarbons dependence on Russia with dependence on green transition technologies on China. Currently, the EU depends on imports for many net-zero technologies (figure 7).

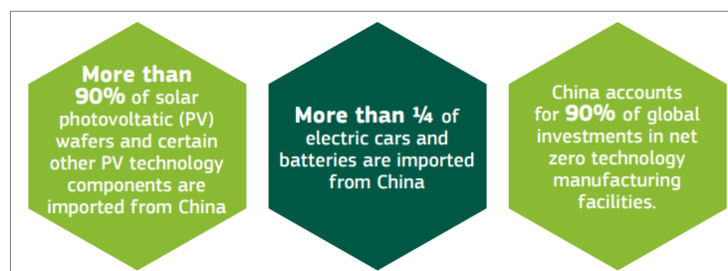


Figure 7. EU dependencies for net-zero technologies

Source: European Commission (2023a).

The NZIA distinguishes between "net-zero technologies" and "strategic net-zero technologies," with additional benefits. These strategic technologies can be designated as "strategic net-zero projects," and prioritized (figure 8).



Figure 8. NZIA actions to stimulate investment in net-zero technologies

Source: European Commission (2023a).

The NZIA establishes the creation of Academies for net-zero technologies, for each industrial technology, and each academy will train in the first three years approximately 100,000 people. Moreover, a net-zero industrial platform is established for the EU and member countries which will facilitate the formation of industrial partnerships for net-zero technologies. The NZIA offers a roadmap to reduce dependence on imports and sole suppliers of net-zero technologies.

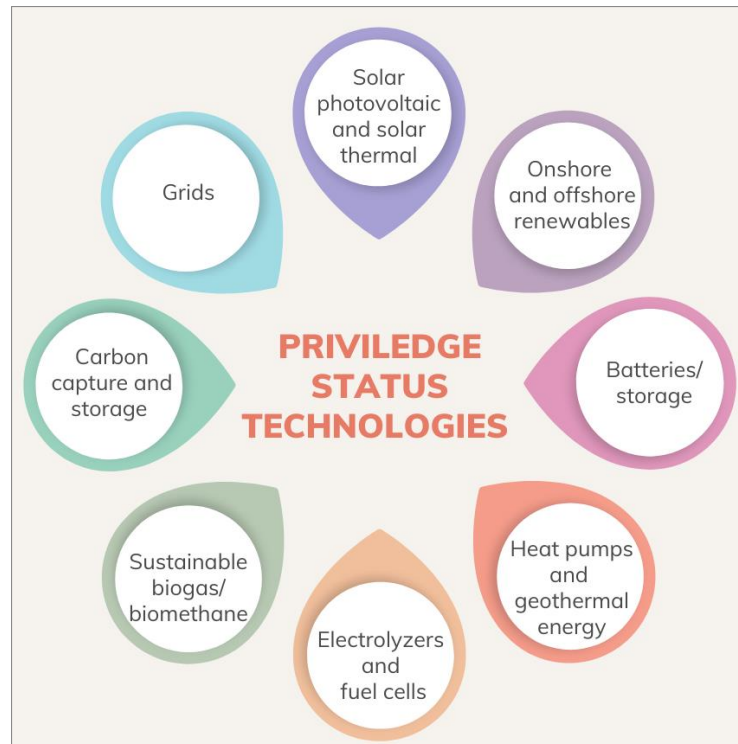


Figure 9. Privileged status technologies

Source: author's adaptation based on European Commission (2023a)

To further promote the adoption of renewable hydrogen (figure 10) within the EU and facilitate imports from international partners, the EC is presenting its concepts for the design and functions of the European Hydrogen Bank, a financing instrument to accelerate the establishment of a full hydrogen value chain (figure 11) in Europe [14].

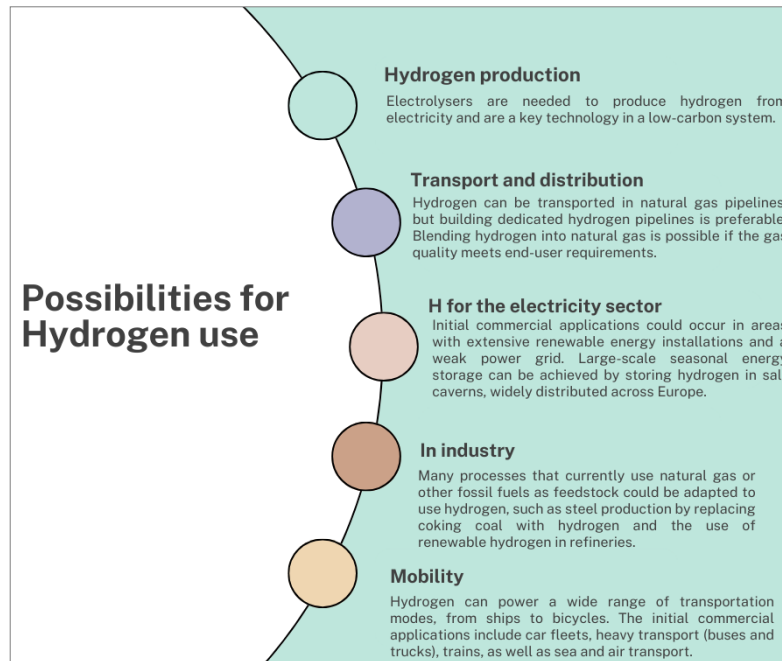


Figure 10. Possibilities for hydrogen use

Source: the author adapted the content based on the Strategic Forum for ICPEI, Strengthening Strategic Value Chains for a future-ready EU Industry (2019).

The bank is based on four pillars displayed in table 2.

Table 2. The European Hydrogen Bank pillars of action

Pillar	Actions
Domestic	Aims to accelerate the growth of the hydrogen production market within the European Economic Area and link renewable hydrogen supply with demand. Funding is provided as a fixed premium in €/kg for verified and certified renewable fuel of non-biological origin hydrogen produced.
Hydrogen Bank auctions	The first EU-wide auction granted nearly €720 million to seven renewable hydrogen projects across Europe through the Innovation Fund, in April 2024. The successful bidders aim to produce 1.58 million tons of renewable hydrogen over the next ten years, which will prevent more than 10 million tons of CO2 emissions. The Commission intends to launch a second auction through the European Hydrogen Bank by the end of 2024.

International	The Commission is working on the concept of joint European auctions, aiming to pool the financial resources of EU countries and utilize H2Global as a platform for international auctions.
Transparency and coordination	The Commission will launch a pilot hydrogen mechanism to foster market development for hydrogen. This will gather, process, and provide information on demand and supply for renewable and low-carbon hydrogen, as submitted by market participants.

Source: author's own processing based on European Commission (2023b).

5.3. The Solar Energy Strategy (part of the REPowerEU)

Adopted as part of REPowerEU in May 2022, the EU Solar Strategy aims to increase the potential of solar energy to become a central component of the mainstream energy system, supplying power and heat to both households and industry. Solar energy is seen as one of the key tools for reducing Russia's dependence on fossil fuels. The strategy sets ambitious targets of over 320 GW of newly installed solar photovoltaic capacity by 2025 and nearly 600 GW by 2030. At the end of 2020, the EU had an installed solar capacity of 136 GW, producing approx. 5% of the total electricity generated. The 2025 target means more than a doubling of capacity, and a new solar capacity installation rate of 46 GW/year. Photovoltaic panel costs have decreased by 82% over the past decade, significantly enhancing their competitiveness. Within this European strategy for solar energy, 3 initiatives were launched (table 3).

Table 3. Initiatives within the European strategy for solar energy

Initiatives within the European strategy for solar energy	Actions
European Solar Rooftops Initiative	Aims to accelerate the exploitation of the unused potential of roofs to produce green energy. According to the strategy, approx. 25% of the EU's electricity consumption could be met by rooftop solar panels electricity generated, compared to just 5% now. The strategy mentions the obligation to install solar panels on different types of buildings); the Directive on Energy Efficiency in Buildings will also be updated.
EU large-scale skills partnership	It aims to close the existing skills gap by developing a workforce with renewable energy skills. Given the need for specialists in the green industry and an estimated increase, solar is included in the Pact for Skills aiming to reskill professionals in support of onshore renewable energy.

EU Alliance for the Solar Photovoltaic Industry	Launched in December 2022, the Alliance brings together industry companies, research institutes, associations. Its aim is to support the domestic industrial chain, diversify existing supply chains, develop the industry through innovation and provide input for supply risk reduction policies for Europe. In this sense, the Alliance aims to reach 30 GW of manufacturing capacity across the EU value chain by 2025, €60 billion added to Europe's GDP/year and 400,000 new jobs.
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Source: author's own processing based on European Commission (2022a).

1.5.4 The Strategy for Sustainable Transport (part of the European Green Deal)

At the level of policies and strategies related to transport, we have two key European Commission documents: the Strategy for Sustainable Mobility [15] and, the Action Plan for Sustainable Mobility [16], through which the Commission aims to reduce GHGs generated by transport by 90% by 2050, at European level. To achieve the objective, the Commission is working towards a series of intermediary targets (table 4). Ten key areas are articulated by the Sustainable Mobility Strategy as seen in figure 11 where the Sustainability related ones are presented.

Table 4. Intermediary targets to reduce GHGs generated by transport by 90% by 2050

Deadline	Target
2030	minimum 30 million cars with zero emissions; minimum 80,000 zero-emission trucks; doubling of high-speed rail traffic; 50% increase in freight traffic by rail; 25% increase in transport on inland waterways and short sea routes; zero-emission marine craft ready for sale.
2035	zero-emission airplanes ready for sale.
2050	all new cars, vans, buses and heavy tonnage vehicles to be zero-emissions; the doubling of freight traffic by rail; 50% increase in inland waterways and short sea shipping.

Source: author's own processing based on the European Commission, 2020c

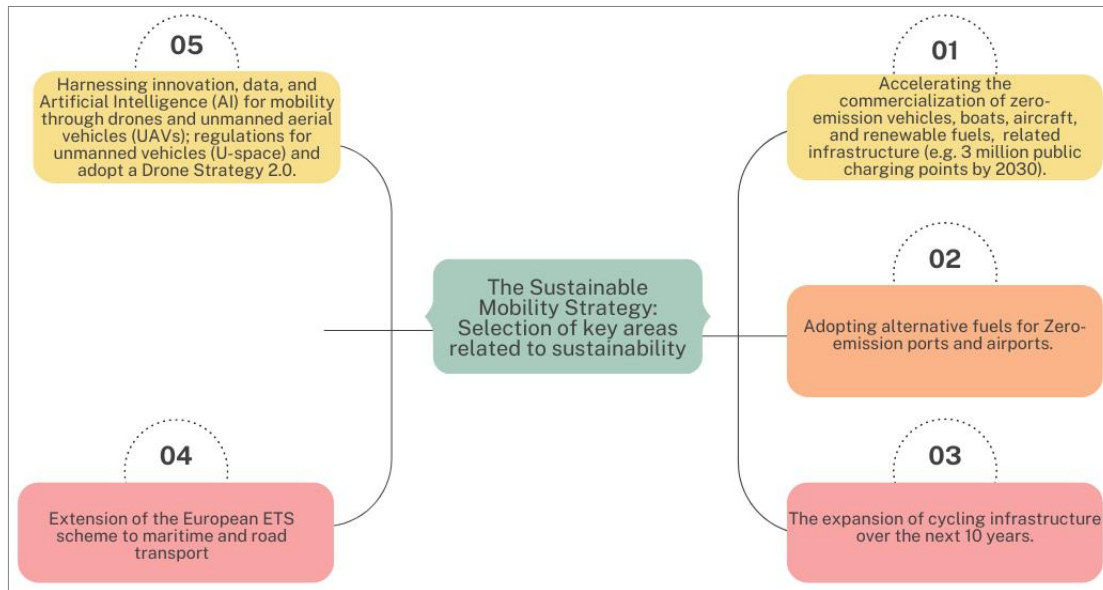


Figure 11. Sustainability key areas of the Sustainable Mobility Strategy
Source: author's own processing based on the European Commission (2020c).

Romanian Commissioner for Transport Adina Vălean declared: "We have no time to lose in getting it fit for the future. Digital technologies have the potential to revolutionize the way we move, making our mobility smarter, more efficient, and greener. We need to provide businesses a clear pathway for the green investments they will need to make over the coming decades [17].

5.5. The Strategy for Economic Security

Presented in June 2023, this EU's first attempt to align economic policy with geopolitics. Until now, the EU was the only major economic power that did not link its economy with security aspects, unlike other major powers like the USA, China, Russia, and India. The recent shocks prompted the EU to reconsider its economic approach leading it to reassess its previously liberal economic philosophy.

The strategy recognizes that the pandemic highlighted the risks associated with highly concentrated supply chains for European citizens and European businesses. Additionally, war has illustrated the consequences of "overdependence on a single country" for essential resources like petrol and gas, especially when there are differing patterns, values, and interests. It seeks to evaluate economic security risks across four key areas: the resilience of supply chains; critical infrastructure; technological security and the prevention of unauthorized technological transfers; and the use of economic dependencies as tools of coercion and weaponization. While the strategy does not explicitly identify a strategic competitor or geopolitical adversary, it emphasizes "diversifying economic ties to mitigate harmful dependencies" and "boosting local production," and outlines key priorities (table 5).

Table 5. The Strategy for Economic Security - key priorities

Key priority	Actions
Promoting competitiveness by strengthening industrial capacity and supply chains	diversification of supply sources and export markets, development of research and industry in areas: advanced semiconductors, quantum computing, biotechnology, net-zero industries, clean energy, critical raw materials).
Protection against risks to economic security	existing defense tools on foreign subsidies, 5G/6G security, the FDI screening mechanism, export control mechanism.
Partnerships with a broad spectrum of countries that share our economic security interests	It aims to strengthen multilateral institutions and the rules-based economic order (e.g. "friendshoring"/"allyshoring").

Source: author's own processing based on European Commission (2023c).

The foundation of this strategy is the principle of de-risking rather than de-coupling, which includes ideas such as collaborating with our allies and partners" or ally-shoring, and addressing concerns related to new technologies that straddle the line between civilian and military applications.

5.6. The National Strategy for Research, Innovation and Smart Specialization 2022-2027

This strategy is enabling condition for the Cohesion Policy Framework 2021-2027 in Romania and is structured on four general objectives: Development of the research, development and innovation system; Supporting innovation ecosystems associated with smart specializations; Mobilization towards innovation; Increasing European and international collaboration (table 6).

Table 6. Romania's smart specialization areas

Country level	Regional level
Bioeconomy (technologies for blue economy; improvement of seeds and breeds; technologies for eco-agriculture, agroecology, and forestry; agriculture 4.0; safe and sustainable food for healthy diet) Digital economy and space technologies (microelectronic devices and systems for smart products; networks of the future, communications, and IoT; technologies for spatial economy; XR technologies; AI systems; cybersecurity; traceability technologies; robots and cognitive agents) Energy and mobility (green mobility; modern technologies for low/zero emission energy generation; digitalization of energy; energy storage) Advanced manufacturing (manufacturing technologies for aeronautics; digitalization and robotization of manufacturing; advanced manufacturing technologies) Advanced (functional) materials (optoelectronics; smart composite materials; recyclable materials and technologies for materials recycling; materials for electronic, electric, photonic, magnetic, and sensoristic applications; biocompatible materials; materials for energy) Environment and eco-technologies (technologies for environmental monitoring and management, and pollution control) Health – prevention, diagnosis, and advanced treatment (precision surgery; new generation nuclear technologies for diagnosis and treatment; longevity medicine; early diagnosis; technologies for the autonomous life; e-health; personalized and genomic medicine; technologies for wearables)	Nord-Vest: Food; Cosmetics and food supplements; Health; New materials; Advanced production technologies; ICT Centru: Automotive and mechatronics industry; Aeronautical industry; Agri - food sector; Forestry, wood processing and furniture industry; Light industry; IT sector and creative industries; Health; Sustainable built environment; Tourism Nord-Est: Agri-food & wood industry; Energy; Environment; Textile; ICT; Health; Tourism Sud-Est: Engineering and shipping; Clothing industry; Agri-food and biotechnology; Aquaculture and fishing; Tourism; Information and communication technology Bucuresti-Ilfav: Information and communication technology (ICT); Cultural and creative industries; Intelligent systems and components (electronics, optoelectronics, mechatronics, microelectronics, etc.); Advanced materials; New foods and food safety; Health Sud-Vest Oltenia: Transport systems; Industrial and materials engineering; Agri-food; Health and wellness; ICT and digitalization; Creative industries Vest: Agriculture and food industry; Energy efficiency and sustainable buildings; Manufacturing and manufacturing industry; Cultural and creative industries; ICT and automotive; Health and quality of life

Source: The National strategy for research, innovation and smart specialization 2022-2027 (2023).

The focus is on science, innovation and innovation entrepreneurship which will constitute successful models for the sustainable development of Romania in a local, national and international context. Two of the seven thematic priority areas identified in this strategy are directly related to low carbon, energy efficiency and climate change adaptation objectives:

(1) Energy and mobility through:

1. Green Mobility: Includes electric and hybrid vehicles, including hydrogen-based, for all types of transport and components of their propulsion and auxiliary systems; energy storage and management systems; sharing and integrating these vehicles into smart cities; interoperability and intermodality solutions in transport.

1. Modern energy generation technologies with reduced or zero emissions through: technologies and energy conversion systems from renewable energy sources (hydraulic, wind, solar, biomass, geothermal), energy recovery of hydrogen, use of nuclear energy, energy with low emissions utilization of coal and natural gas.
2. Digitization in energy: digital solutions for monitoring and controlling energy systems, integrated between production, transport, distribution. Their use will facilitate increasing energy efficiency,

increasing system flexibility, prioritizing energy consumption and optimizing user consumption. Digitization allows the implementation of Smart Grids functions at the level of electricity transport and distribution, but also at the level of users.

3. Energy storage: Energy storage is the main means by which the share of renewable energy sources increase, where several elements are driving the development of energy storage technologies: decarbonisation of economic sectors, digitization and decentralization –end consumers become “pro-consumers”.

(2) Environment and eco-technologies through:

1. Technologies for environmental management, monitoring and remediation includes technologies for environmental monitoring (including through sensor networks and satellite data), as well as those designed to improve the quality of air, water, soil and complex biological systems and to allows quick and efficient management of contamination situations.
2. 2. Technologies for the circular economy includes technologies for waste management (such as those for optimized collection and selection, water filtration, biological reprocessing, waste-to-energy, pyrolysis, etc.) and a set of solutions for waste reduction and growth the degree of recycling in the value chains associated with electronic products, batteries, packaging, plastics, textiles, construction, food.

This strategy also serves as a blueprint for local administrations, foreign direct investments, Romanian entrepreneurs, and researchers.

6. Conclusions and recommendations

The aim of this research was to understand the European priorities as reflected in strategies that are of utmost importance to the Romanian government in its efforts to develop policies and programs to support the European economy.

The study explored two directions: strategies elaborated as a response to the pandemic and strategies resulted from the shocks the war in Ukraine gave to the European supply chains. These two shocks pushed the rethinking of the economic and industrial policy in Europe and the United States over the past five years.

Although the beginning of deglobalization can be traced back to 2018, with the onset of the US-China trade war, the subsequent events have only accelerated this process. Bringing production back home to the West (reshoring/onshoring [18] or to geopolitically allied countries (friendshoring/ally-shoring) has become a priority. This realignment of global economic relations and flows not only presents challenges but also creates opportunities. The developments in industrial policy over the last four years, numerous alliances formation (section 5), more than 100 acts, directives, laws under the umbrella of the Green Deal, reflect the start of European supply chains security. Recent crises have acted as a catalyst for implementing a necessary and appropriate public policy response to rebalance the scales in favor of the West.

However, this research covers European strategies for economic development, but does not extend knowledge about regulations such as the Regulation on Critical Raw Materials, and the Regulation for Strengthening the European Semiconductor Ecosystem (Chips Act), nor about various alliances created in the past five years (the Battery Alliance since 2017, the Critical Raw Materials Alliance since 2020, the Industrial Alliance on Processors and Semiconductor Technologies, The European Alliance for Industrial Data, Edge and Cloud, the European Zero-Emission Aviation Alliance, The European Clean Hydrogen Alliance.

References

1. Eurostat, 2023. GDP stable and employment up by 0.3% in the euro area, Eurostat website [online]. Available at: <https://ec.europa.eu/eurostat/documents/2995521/16249744/2-08032023-AP-EN.pdf/> [Accessed October 2023].
2. IEA, 2020. Energy is at the heart of the solution to the climate challenge. Blog IPCC [online]. Available at: <https://www.ipcc.ch/2020/07/31/energy-climatechallenge/> [Accessed August 2023].
3. European Commission, 2024d. Data protection. European Commission website [online]. Available at: https://commission.europa.eu/law/law-topic/data-protection/international-dimension-data-protection/brexit_en [Accessed June 2024].
4. British Council, 2023. Research Impact EU Referendum [online]. Available at: <https://www.britishcouncil.org/education/he-science/knowledge-centre/national-policies/research-impact-eu-referendum> [Accessed October 2023].
5. Szczepanski, M., 2019. A decade on from the crisis. Main responses and remaining challenges. European Parliamentary Research Service website [online]. Available at: https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/642253/EPRS_BRI%282019%29642253_EN.pdf [Accessed October 2023].
6. European Commission, 2024e. European Green Deal. European Commission website [online]. Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en [Accessed June 2024].
7. European Commission, 2020b. (EC) Communication COM(2020) 789 final on Sustainable and Smart Mobility Strategy – putting European transport on track for the Future, <https://eur-lex.europa.eu> website [online]. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:5e601657-3b06-11eb-b27b-01aa75ed71a1.0001.02/DOC_1&format=PDF [Accessed June 2022].
8. Tranfield, D., Denyer, D., & Smart, P., 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, 14(3), 207-222. <https://doi.org/10.1111/1467-8551.00375> [Accessed June 2021].
9. Webster, J., & Watson, R. T., 2002. Analyzing the past to prepare for the future: Writing a literature review. *MIS quarterly*, xiii-xxiii. Available at: <https://www.jstor.org/stable/4132319> [Accessed July 2022].
10. European Commission - Internal Market, Industry, Entrepreneurship and SMEs, 2017. European Battery Alliance. Single Market Economy website [online]. Available at: https://single-market-economy.ec.europa.eu/industry/industrial-alliances/european-battery-alliance_en [Accessed June 2022].
11. Critical Raw Materials Alliance, 2020. CRM Alliance website [online]. Available at: <https://www.crmalliance.eu/> [Accessed June 2022].
12. European Commission - Defence Industry and Space, 2022b. Alliance for Zero Emission Aviation. Defence Industry and Space website [online]. Available at: https://defence-industry-space.ec.europa.eu/eu-aeronautics-industry/alliance-zero-emission-aviation_en [Accessed April 2023].
13. European Commission, 2023a. European Green Deal. European Commission website [online]. at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/net-zero-industry-act_en [Accessed November 2023].

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14. European Commission, 2023b. The European Hydrogen Bank. Energy Europa website [online]. Available at: https://energy.ec.europa.eu/topics/energy-systems-integration/hydrogen/european-hydrogen-bank_en [Accessed November 2023].
 15. European Commission, 2020b. (EC) Communication COM(2020) 789 final on Sustainable and Smart Mobility Strategy – putting European transport on track for the Future, <https://eur-lex.europa.eu> website [online]. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:5e601657-3b06-11eb-b27b-01aa75ed71a1.0001.02/DOC_1&format=PDF [Accessed June 2022].
 16. European Commission - Internal Market, Industry, Entrepreneurship and SMEs, 2020c. European Clean Hydrogen Alliance. EC Europe website [online] Available at: https://single-market-economy.ec.europa.eu/industry/industrial-alliances/european-clean-hydrogen-alliance_en
 17. European Commission, Mobility and Transport, 2020b. Mobility strategy [online]. Available at: https://transport.ec.europa.eu/transport-themes/mobility-strategy_en [Accessed June 2022].
 18. Gusilov E., Staicu, D., 2024. Interconectivitatea în Uniunea Europeană – provocări pentru viitorul politicilor de transport în 2030. Available at: http://ier.gov.ro/wp-content/uploads/2023/01/Studiul-2_SPOS-2022_Interconectivitatea_Final.pdf. Accessed August 2024.