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CHALLENGES FACING ENERGY AND TRANSPORT ENTERPRISES IN THE ERA OF ZERO EMISSIONS

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Purpose: The aim of the research is to identify ways and directions of development of enterprises from the energy and transport sectors, aiming to achieve net zero emissions by 2050. Additionally, the research aims to examine the connections, dependencies and mutual impacts between these sectors.
Design/methodology/approach: The research method used was based on the secondary research method (desk research), which included a detailed analysis of issues published in scientific papers, reports of energy and transport companies and international organizations.
Findings: The use of innovative technical and technological solutions, as well as alternative fuels in the energy and transport sectors, contributes significantly to reducing greenhouse gas emissions. The use of e-fuels and electric batteries can reduce emissions in the transport sector by over 80%. The use of renewable energy sources significantly lowers carbon dioxide emissions, and the use of clean hydrogen is projected to account for over 20% of global electricity production by 2050.
Research limitations/implications: While source research provides valuable insights based on available information, it may not capture the nuance and contextual detail (which is a limitation) that can be gained through direct interaction with industry professionals. Conducting interviews or surveys with senior executives (CEOs) would enable a more complete understanding of the decision-making processes, organizational dynamics and barriers that energy and transport companies face in their pursuit of zero emissions. The next stage of research will be carried out based on the primary research referred to above.
Practical implications: The research results can be used by people managing enterprises in the energy and transport sectors and by politicians responsible for creating economic development policies at the national and local levels.
Social implications: Reducing the emission intensity of the energy and transport sectors will help achieve climate goals, improve air quality, and enable more efficient use of energy, which will translate into benefits not only for the economy but also for local communities and individuals.
Originality/value: The novelty of the research is a comprehensive approach to the two sectors that have the greatest impact on the environment, showing connections and common actions that can be taken to achieve a zero-emission economy.
Keywords: energy, transport, enterprises, zero emission, RES, innovations.
Category of the paper: research paper.

1. Introduction

The growing challenges associated with the environment and climate change are driving various initiatives by enterprises in the energy and transportation sectors. These sectors constitute a crucial part of the global economy but are also major emitters of greenhouse gases, contributing to climate change. Therefore, enterprises operating in these sectors are under pressure to reduce their negative impact on the natural environment. Examples presented in the article illustrate various strategies and solutions that enterprises use to achieve goals related to reducing greenhouse gas emissions. In 2023, total emissions from fossil fuels decreased by 8% in the European Union, with over half of this reduction (56%) coming from the energy sector due to the production of energy from renewable sources. Furthermore, measures such as the modernization of existing infrastructure, improvement of energy efficiency, and the introduction of innovative technologies such as energy storage and network management are being implemented to reduce emissions. In the transportation sector, solutions may include promoting electric vehicles, developing infrastructure for electric vehicle charging, supporting public transportation, and promoting alternative fuel sources such as hydrogen or biofuels. Overall, emissions from transportation decreased by 1.5 gigatons of CO_2 in 2020. In the case of the transport sector, CO_2 emissions decreased by 19.4% in 2020 compared to the level in 2019, with emissions decreasing by 56.4% in international aviation, 31.9% in domestic aviation, 24.8% in international shipping, and 14.6% in land transportation: road and rail (Slocat, 2021). In striving to achieve climate neutrality by 2050, further investments in renewable energy sources, including their infrastructure and the development of new technologies, will play a crucial role. These examples not only demonstrate that there are real opportunities to reduce greenhouse gas emissions but also prove that enterprises can play a significant role in combating climate change by investing in sustainable innovative solutions. The energy sector and the transportation sector are inherently linked to the modern functioning of society and the economy. Both sectors play key roles in ensuring the functioning of other sectors of the economy and in carrying out the daily activities of individuals. However, along with these benefits, both sectors also generate significant negative effects on the natural environment, particularly through the emission of greenhouse gases. The task facing managers is to implement solutions related to enterprise management as well as the implementation of innovative technical and technological solutions that will impact emission reduction and enable efficient operation of enterprises and sectors. The energy sector is the main source of greenhouse gas emissions, primarily carbon dioxide (CO_2), which is a byproduct of fossil fuel combustion, such as coal, natural gas, and oil. In 1900, global CO_2 emissions were around 3 trillion tons, in 1960 9 trillion tons, and in 2014 they amounted to 35 trillion tons (Conlen, 2021). Coal-fired power plants, gas-fired power plants, and other industrial installations produce huge amounts of CO_2 during electricity and heat production. Additionally, processes

related to fossil fuel extraction, transportation, and processing also contribute to greenhouse gas emissions. As a result, the energy sector is a major participant in the process of global warming and climate change. To mitigate the effects of climate change, carbon dioxide emissions associated with the energy sector must be reduced. Significant reductions can be achieved by applying appropriate technologies and policies (Papadis, Tsatsaronis, 2020). Similarly, the transportation sector is also a significant source of greenhouse gas emissions, mainly through the combustion of fossil fuels in vehicle engines. Passenger cars, trucks, ships, and airplanes emit large amounts of CO_2, nitrogen oxides (NOx), and other pollutants into the atmosphere. Road transport is particularly problematic due to its large share in greenhouse gas emissions and local effects of smog and air pollution. Universal electrification proves to be a very slow process of implementing gradual changes and is likely to be too slow to significantly contribute to achieving ambitious climate mitigation goals. The greatest potential lies in combining three main innovations: universal electrification, shared mobility, and automation. In addition to technology and innovation to create a new sustainable transportation system, regulations will also be necessary (Brand et al., 2020). In both cases, there is an urgent need to change current practices to reduce the impact of these sectors on climate change and environmental degradation. In the energy sector, accelerating the transition towards clean and renewable energy sources, such as solar energy, wind energy, hydropower, and nuclear energy, is necessary. The introduction of more efficient energy technologies and the promotion of energy savings can also contribute to reducing CO_2 emissions. By 2050, not only should greenhouse gas emissions be eliminated in all sectors of energy, heating, transport, and industry, but also a close connection between these sectors is necessary to ensure maximum synergy and efficiency (Bogdanov et al., 2021). In the transportation sector, it is necessary to increase the share of electric and hybrid vehicles that emit less CO_2 or no CO_2 at all during use. Promoting public transportation, bicycles, and electric vehicles can also reduce dependence on combustion vehicles and limit emissions associated with road transport. Additionally, investments in transportation infrastructure, such as high-speed rail networks, can help reduce greenhouse gas emissions associated with aviation and road transport. Both the energy sector and the transportation sector must take immediate and coordinated action to reduce greenhouse gas emissions and mitigate the effects of climate change. Investments in clean technologies, infrastructure development, and promotion of conscious energy and transportation use are crucial to achieve this goal. Only in this way will it be possible to create a more sustainable and environmentally friendly future. The conducted research not only fills an existing gap in the analysis but also provides a better understanding of the complex context in which both sectors operate. Therefore, the research results can serve as a basis for developing more effective environmental management strategies and decision-making in the future. As a result, the research contributed to expanding knowledge about the impact of human activity on the environment, which can translate into more conscious and effective actions for nature conservation. The initiation and implementation of the research aimed to supplement

a significant gap in existing analysis, focusing on the impact of two sectors commonly recognized as primarily responsible for adverse environmental effects. Through the conducted research, an innovative perspective on this issue was obtained, allowing the identification of key areas of interaction between them and determining the necessary actions required to achieve goals related to reducing greenhouse gas emissions and striving for sustainable development. In this way, these studies contributed to a better understanding of the complex context in which these sectors operate, potentially serving as a basis for more effective environmental management strategies and decision-making in the future. The mutual interaction of these sectors and their intricate connections with emissions require careful examination. The transportation sector, characterized by diverse mobility patterns, and the energy sector, a significant.

2. Structure of the paper

The article is divided into separate chapters, each serving a specific purpose. The structure is described as follows:

Introduction - The first chapter serves as an introduction, providing a comprehensive overview of the background, objectives, and significance of the study.

Materials and Methods - The second chapter discusses the methodology used to conduct the research presented in the article. This section describes specific approaches, tools, and techniques used for data collection and analysis.

Literature Review - The third chapter is dedicated to a comprehensive review of existing literature relevant to the research topic. This involves a critical analysis of scientific works, theories, and empirical studies related to environmentally friendly actions in the transportation and energy sectors, with particular emphasis on environmental protection.

Results and Discussion - The fourth chapter is crucial for presenting the main research findings and initiating an in-depth discussion. It synthesizes empirical conclusions resulting from the analysis of environmentally friendly actions carried out in the transportation and energy sectors, with particular attention to emission and environmental protection aspects. This chapter serves to interpret the results in light of existing literature, outlining connections between theory and empirical observations. Additionally, it encourages discussion on the implications of the findings, their broader significance, and potential directions for future research.

The organized structure of the article enhances the clarity and coherence of the research presentation.

3. Methods

The method of the conducted research primarily relied on the use of secondary research, also known as desk research. This research approach involves analyzing data and information collected by other researchers, institutions, reports, scientific articles, and other publicly available sources. Secondary research allows for a deeper understanding of existing knowledge on a given issue, identification of trends, statistical analysis, and evaluation of the results of previous research. In this study, scientific articles published in journals with Impact Factor (IF) and recognized by the scientific community, as reflected in the high number of citations of the article, were used. Additionally, reports from energy companies, reports from transportation sector companies including land transport, road transport, and railways were also relied upon. The reports used in the study were also reports from international organizations dealing with issues in the energy and transportation sectors. The use of secondary research has many advantages, including saving time and costs, quick access to data, and the ability to analyze long-term trends. Furthermore, it allows for comparing different sources of information and verifying the credibility of data. However, there are also limitations associated with the secondary research method. This may include outdated data, limited availability of some information, and the risk of relying on unreliable or biased sources. Additionally, secondary research may be more general and imprecise than primary research, which may necessitate additional research or interviews to obtain more detailed data. To mitigate the risk of using low-value data, the focus was mainly on scientific papers published in reputable scientific journals, and official websites of institutions and companies were utilized. The choice of these sources was based on the assumption that scientific articles published in recognized journals have undergone a peer review process by experts, ensuring a certain level of credibility and data quality. Moreover, official websites of institutions and companies often provide up-to-date information, reports, and statistical data that are reliable and publicly available. Using reputable scientific journals allows access to the latest research and scientific achievements in a given field. Articles published in these journals are often evaluated for their originality, research methodology, and scientific value by independent reviewers, increasing confidence in their quality and reliability. Additionally, using official websites of institutions and companies allows access to first-hand data, which may be particularly important for information regarding the actions, strategies, and research results conducted by these institutions. As a result, researchers can be confident that they are using current and reliable data, which in turn affects the quality and reliability of the conducted research and analysis. Despite the mentioned limitations associated with desk research, secondary research remains an important tool in the research process, especially in the literature analysis phase before embarking on primary research. Properly conducted secondary research can provide significant information and guidance for further research activities and help in understanding the context and scope of the research problem.

4. Literature Review

Issues relating to the operations of enterprises in the energy and transport sectors constitute a deeply complex research area that engages both scientists and practitioners. This topic is widely discussed and analyzed in scientific literature, sector reports and public debates. Modern society faces significant challenges related to the need to ensure sustainable development, reduce greenhouse gas emissions, protect the natural environment, ensure energy security, increase economic efficiency and meet the growing demand for energy and mobility. These issues require a comprehensive approach and innovative solutions that can contribute to building a more sustainable and effective future. Selected scientific articles covering issues related to emission reduction and actions taken to reduce the harmful impact on the environment in the energy and transport sectors are presented in Table 1.

Table 1.
Selected scientific papers concerning the energy and transport issue

Title of the paper	The main thoughts and ideas contained in the paper
Transport sector	
Impacts of intelligent transportation systems on energy conservation and emission reduction of transport systems: A comprehensive review.	Intelligent traffic management systems can be used to reduce emissions from the transport sector. These innovative solutions have the potential to positively influence traffic flow and reduce the negative impact of transport on the environment (Lv, Shang, 2022).
A review of cleaner alternative fuels for maritime transportation.	Demand for alternative fuels will continue to grow as the transport sector moves towards integrating cleaner fuels to comply with increasing environmental regulations (Al-Enazi et al., 2021).
Review of advanced low-emission technologies for sustainable aviation.	Discussion of the main technological advances used in low-emission aircraft propulsion. Innovative technological solutions such as improved combustion and thermofluids, improved gearbox technology, use of lightweight materials and intelligent engine health management systems. Significant technological advances will be required in the near future to improve fuel efficiency and mitigate the environmental impact of air transport in the future (Ranasinghe, 2019).
Pathways to net-zero emissions from aviation.	Emissions from air transport will continue to be present, so it is important to find ways to reduce them. Taking into account the ever-increasing demand of the industry for liquid fuels with high energy density, competitive substitutes are increasingly sought. Pathways to net-zero aviation can be achieved through ambitious reductions in the demand for air transport and improving the energy efficiency of aircraft (Bergero et al., 2023).
Assessment of railway infrastructure improvements: valuation of costs, energy consumption and emissions.	In rail transport, one of the elements is freight transport. Its efficiency has a significant impact on climate change compared to other modes of transport. Rapid expansion of infrastructure can be seen in many islands as railroads continue to struggle to capture a larger share of the growing total transport volume (Isler et al., 2022).
Factors affecting the emission of pollutants in different types of transportation: A literature review.	Among the various means of transport, it is indicated that rail transport is ecological and causes less environmental pollution compared to other means of transport. As a result of many studies, it is assumed that rail transport is the best means of transport in terms of the environment. In terms of tonne-kilometres transported per unit of energy consumed, rail transport is a more efficient means of transport than road transport (Aminzadegan et al., 2022).

Cont. table 1.

Alternative fuels to reduce greenhouse gas emissions from marine transport and promote UN sustainable development goals	Different prospective pathways and technologies were analyzed and assessed to help the shipping industry to decarbonise its operations. Substantial reductions in carbon emissions require new financial incentives and policies at regional, national and global levels for maritime transport (Rony et al., 2023).
Energy sector	
Digitalisation of Enterprises in the Energy Sector: Drivers—Business Models—Prospective Directions of Changes.	The main factors influencing the digitization of energy companies have been identified within the broader phenomena of Industry 4.0 and Industry 5.0 (Siuta-Tokarska et al., 2022).
Digitization, digital twins, blockchain, and industry 4.0 as elements of management process in enterprises in the energy sector.	Industry 4.0 technologies applied in the energy sector enable increased energy efficiency through enhanced digitization, thus making the energy sector more environmentally friendly (Borowski, 2021).
Getting to zero carbon emissions in the electric power sector.	The energy sector should implement two fundamental actions: reducing greenhouse gas emissions essentially to zero by adopting renewable energy sources and increasing electrification while transitioning away from fossil fuels (Jenkins et al., 2018).
The dynamic impact of carbon reduction and renewable support policies on the electricity sector.	Policies aimed at reducing CO_2 emissions and promoting renewable energy production contribute to enhancing the stability of the energy sector while ensuring energy supply security. Both policies influence operational and investment decisions concerning renewable and conventional generation in the electricity market (Fagiani et al., 2014).
Technologies for carbon dioxide capture: A review applied to energy sectors.	The development of technologies for capturing and utilizing this gas is of great importance for mitigating greenhouse gas emissions (GHG) and limiting their adverse environmental impacts (Vaz Jr et al., 2022).
Policy, regulation effectiveness, and sustainability in the energy sector: A worldwide interval-based composite indicator.	In order to accelerate the transition of the economy to renewable energy, national laws and regulations should be developed and implemented that encourage companies to be responsible for sustainable development. Research shows that energy policy and regulation are critical to deploying renewable energy and managing natural resources (Drago, Gatto, 2022).
Towards the reduction of CO_2 emissions. Paths of pro-ecological transformation of energy mixes in European countries with an above-average share of coal in energy consumption.	Decarbonization of the economy is the most significant challenge for countries where coal has been the primary source of energy production. Therefore, the most effective approach is a rapid and consistent phasing out of coal and its replacement with solar, wind, hydro, or nuclear energy (Jonek-Kowalska, 2022).
Innovation Solution in Photovoltaic Sector	The modern world is moving towards a zero-emission economy; therefore, various actions are being taken to reduce the share of fossil fuels in energy production. Renewable sources also require investment in energy storage. Much attention is paid to the analysis of the economic efficiency of installations and the potential of energy storage in the context of photovoltaic farms is discussed. The development of photovoltaics also requires investment in energy storage. All issues discussed fall within the scope of the development of photovoltaic farms and the optimal use of energy resources (Czepło, Borowski, 2024).
Development of Energy Companies Based on Renewable Energy Sources	There is a very extensive analysis of activities undertaken by enterprises aimed at implementing renewable energy sources (RES) in order to achieve a zero-emission economy. Numerous initiatives are being undertaken to develop the renewable energy sector, thanks to which the impact of companies on global efforts to reduce greenhouse gas emissions is clearly visible (Borowski, Czepło, 2023).

A literature review provides an invaluable tool to facilitate the synthesis and analysis of existing research, theories, and practices in a given field. In the context of reducing emissions in the transport and energy sectors, the literature review allows for an in-depth analysis of actions taken at global, national and local levels. This allows for the identification of trends, the effectiveness of individual strategies, as well as potential areas requiring further research and action.

The completed literature review of emissions reduction efforts in the transportation and energy sectors provides key insights that can serve as a basis for policies, strategies and initiatives in these areas. Electrification of transport, the development of renewable energy sources, improved energy efficiency and the need for cooperation between the public and private sectors prove to be key elements of effective emission reduction. Supporting innovation and engaging society are becoming essential elements in achieving our climate and environmental goals. Thus, the literature review serves not only as an analysis of past achievements, but also as a roadmap towards a sustainable future.

In the field of literature related to the transport sector, great emphasis is placed on reducing emissions through the implementation of various innovative solutions. A review of the literature on emissions reductions in the transport sector highlights key findings on the role of new technologies and innovations. Electrification of transport, the development of low-emission vehicles and the growing importance of public transport are strategies often highlighted by researchers and experts. Examples of successful vehicle-sharing programs and the expansion of electric vehicle infrastructure confirm the effectiveness of these approaches. However, the literature review also highlights the need for coordinated efforts by the public and private sectors to motivate users and develop the necessary infrastructure.

In the literature on energy companies, the main emphasis is on renewable energy sources and increasing energy efficiency. In the energy sector, the literature review extracts key lessons regarding energy transition and energy efficiency improvement. Research points to the growing share of renewable energy, such as solar, wind and hybrid energy, as a key path to reducing emissions. The integration of energy storage technologies and smart energy grids is an additional critical aspect. However, the literature review also highlights the need to convert energy systems and engage society in moving towards a sustainable and low-carbon future.

5. Results and Discussion

5.1. Actions taken by the energy sector

An important element contributing to the development of energy enterprises is a joint initiative based on cooperation and partnership. Energy companies are increasingly working

with governments, non-governmental organizations and other stakeholders to jointly combat climate change. They work with research institutions and universities to support innovation and develop sustainable solutions. Collaboration enables knowledge sharing, joint investments, and coordinated efforts to drive systemic change and accelerate the energy transition (De La Peña et al., 2022).

The transformation of the energy sector can be described as the concept of combining different sectors - sector coupling. Introducing renewable energy into energy-intensive areas such as heating, transport and industry, rather than using fossil fuels, will require many new technologies and regulations. This idea, known as "sector coupling", reflects the need to integrate different sectors of the economy for a sustainable transition to greener and more efficient energy sources. One application of sector coupling is the direct electrification of different processes. For example, renewable electricity can be used in district heating networks, also known as power-to-heat, with technologies such as heat pumps and electric boilers. Electricity can also be used to produce hydrogen or other synthetic gas.

The European Commission reported that in 2021, there were more than 7700 Energy Communities across the European Union. This community involved at least 2 million people and had an installed renewable capacity of 6.3 GW (Maruf, 2023).

Another action taken is to engage in advocacy and political initiatives. Recognizing the importance of supportive policies, utilities actively engage in policy advocacy. They lobby for the implementation of strong climate legislation, renewable energy incentives and carbon pricing mechanisms. By promoting favorable policies, these companies strive to create an enabling environment that encourages the adoption of clean energy technologies and facilitates the transition to a low-carbon economy.

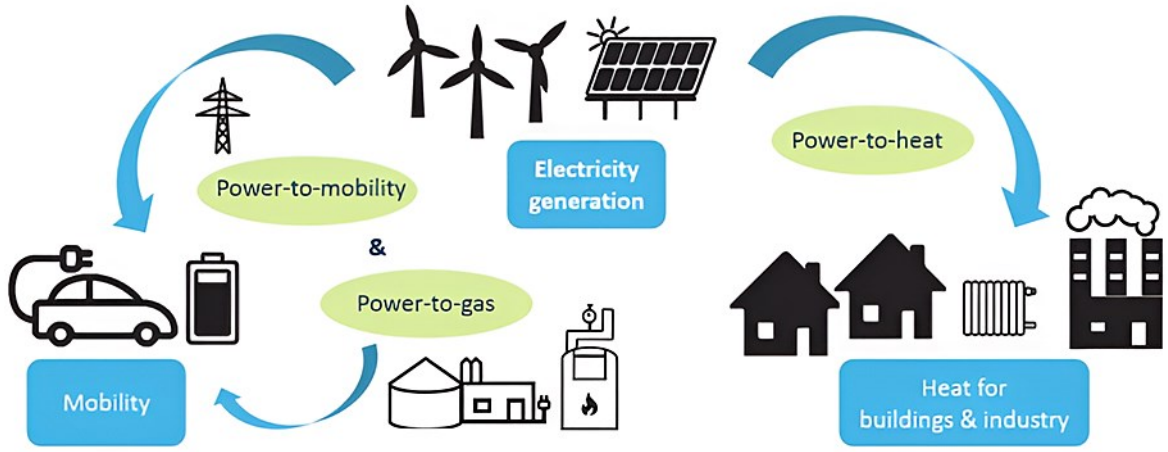

Figure 1. Integrated energy system - the idea of interconnecting (integrating) the energy consuming sectors.

Source: Appunn, 2018.

Another important element mentioned in the literature is transparency of reporting and accountability. To demonstrate their commitment to climate neutrality, energy companies are prioritizing transparent reporting and accountability. They disclose their greenhouse gas emissions, set emissions reduction targets, and report regularly on progress. Transparent reporting increases stakeholder trust, enables benchmarking and facilitates the assessment of companies' sustainability efforts.

5.2. Action taken by transport sector

The transport sector is undertaking a range of initiatives to reduce emissions and achieve zero emissions. A key element is the development of electromobility, including the production of electric vehicles by key automotive manufacturers and the expansion of charging infrastructure. The introduction of alternative fuels, such as biofuels (biodiesel, bioethanol) and hydrogen, also plays a significant role.

Public transport is being modernized and electrified, which includes the introduction of electric buses and trams, as well as investments in high-speed rail, reducing the need for domestic flights. Optimization of logistics and transport management, including fleet management systems and the promotion of intermodality, helps reduce fuel consumption and emissions (Borowski, Karlikowska, 2023).

The use of supportive technologies, such as autonomous vehicles and intelligent transport systems (ITS), contributes to increased driving efficiency and emission reduction. The introduction of stringent emission standards, like Euro standards (Directive 2016/646), obliges manufacturers to create more environmentally friendly engines. Governments also offer subsidies and tax incentives for those investing in eco-friendly vehicles and technologies.

Additionally, educational campaigns increase environmental awareness and promote the use of more sustainable modes of transport, such as bicycles and public transport.

Through these comprehensive actions, the transport sector aims to significantly reduce emissions, with the hope of achieving zero emissions in the future.

5.3. Nexus between energy and transport sectors

A novelty in the activities is the joining of forces of both sectors to reduce greenhouse gas emissions. It is necessary to demonstrate the possibilities of using alternative fuels in transport, as well as to encourage the use of new materials for the production of aircraft and ships and to implement many technical and technological solutions related to traffic management. Combining the forces of the energy and transport sectors to reduce greenhouse gas emissions is presented in Figure 2.

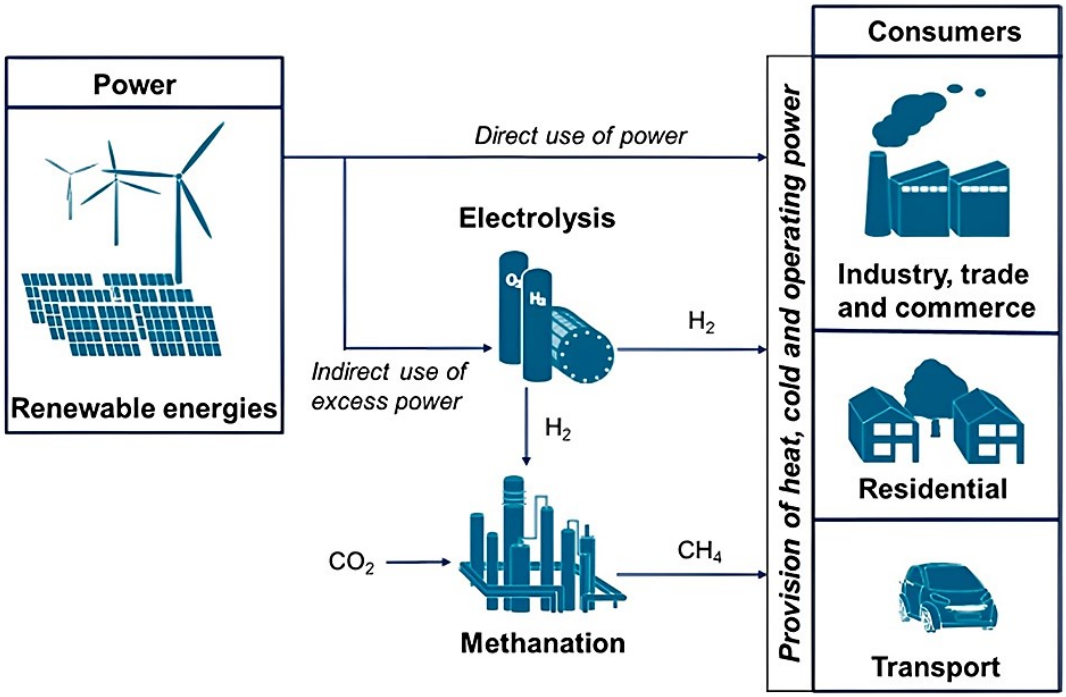

Figure 2. Combining the forces of both sectors to reduce greenhouse gas emissions.
Source: Robinius et al., 2017.

By discovering these synergies, the study provides a roadmap for more integrated and holistic emissions reduction strategies. Stresses the importance of coordinated efforts by the energy and transport sectors to maximize impact and accelerate progress towards climate goals.

Essentially, these studies are extremely important because they serve as a catalyst for cooperation and innovation, highlighting the potential for mutually reinforcing actions between the energy and transport sectors to significantly reduce emissions. They enable better coordination of actions between these sectors, which is crucial for the effective integration of renewable energy sources with transport systems. This creates synergies that lead to more efficient resource use and accelerate the energy transition.

Moreover, these studies stimulate the development of new technologies that can bring revolutionary changes in energy and transport management. Examples include electric vehicles, intelligent transport management systems, and efficient energy storage methods. The results of these studies provide essential data and analyses that support the creation of eco-friendly policies and regulations. Policymakers can rely on solid scientific evidence to implement effective emission reduction strategies.

Industry leaders and stakeholders gain a better understanding of future trends and challenges related to low-emission transport, enabling them to plan investments and develop projects that align with long-term sustainable development goals. The studies identify key areas where emissions can be significantly reduced through technical innovations and changes in the behavior of transport users. The ultimate goal is to achieve a substantial reduction in CO_2 and other greenhouse gas emissions.

6. Conclusion

Joint actions taken by the energy and transport sectors to reduce greenhouse gas emissions have great potential to increase the effectiveness of actions in the fight against climate change. These two sectors are the main sources of CO_2 and other greenhouse gas emissions, so their coordination in efforts to reduce these emissions is crucial to achieving global climate goals.

The shift in both the energy and transport sectors away from traditional fossil fuels such as coal, oil and gas towards renewable energy sources and innovative green fuels is a key element in the fight against climate change. Deploying renewable energy sources such as solar, wind and hydropower in the energy sector can significantly reduce emissions associated with electricity production. However, in the transport sector, the development of electric and hybrid vehicles and the use of alternative fuel sources, such as hydrogen or biofuels, can significantly reduce transport-related emissions.

Coordination of the activities of both sectors allows for synergistic effects, because changes in one sector may affect the other. For example, increasing the share of electric vehicles in transport requires more electricity, which in turn requires more renewable energy production. In this way, actions taken in both sectors can support each other and accelerate the achievement of climate goals.

Achieving the emission target by 2050 requires decisive action and cooperation between the energy and transport sectors. Investments in renewable energy infrastructure, development of green fuel technologies and promotion of effective transport solutions are key to reducing greenhouse gas emissions and ensuring sustainable development. Joint actions of both sectors can bring positive effects not only for the environment, but also for the economy, by creating new jobs, increasing innovation and competitiveness on international markets.

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