Summary

The dissertation attempts to verify a hypothesis that assumes that the identified financial instruments in the market of renewable energy sources, which provide support for producing this energy, constitute a coherent system. The system allows shaping the RES sector in compliance with the objectives of the economic and climate policy. It is the policy which strengthens the country's energy security and the one which the European Union requires.

The increase in the share of renewable energy sources in the energy balance, combined with technological progress, has contributed to a need to consider the conditions for sustainable development of the country in terms of energy security, development of competition, economic efficiency, given environmental protection requirements and the balancing of the interests of energy companies, and fuel and energy consumers. As a result, energy producers face a need to introduce an ambitious energy policy that primarily refers to a wide range of renewable energy sources. The implementation of the European Union's policy on environmental and climate protection and the improvement of energy security, mainly because of the war in Ukraine conducted by Russia, serves not only an increase in the rationality of the use of energy resources but also promotion of energy from renewable sources. To this end, the dissertation deals with some conceptual and methodological problems. It also takes advantage of several research methods and the achievements of the science of law and other scientific disciplines.

The structure of the thesis consists of five chapters. The first chapter presents a historical outline, basic concepts, and types of renewable sources. The second chapter considers factors that affect the development of the market for energy from renewable sources, such as energy security, the principle of sustainable development, economic efficiency and energy efficiency and aspects of the market in renewable energy sources. The third chapter contains an analysis of legal solutions concerning energy renewable sources. The next chapter examines the types of financial instruments. The fifth chapter is devoted to state aid as a support instrument for the renewable energy market.

Based on the research conducted, the dissertation presents the following final conclusions:

1. The International Energy Agency defines renewable energy sources as energy originating from natural processes, where this energy is replenished faster than consumed. Poland's lawmaker defines renewable energy sources as renewable, non-fossil energy sources such as solar radiation, geothermal energy, hydrothermal energy, wave and tidal energy, and energy obtained from biomass, biogas, and agricultural biogas and bioliquids. The EU legislator did not specify a preference or priority for the

renewable energy sources listed in the dissertation. That suggests that Member States use individual sources according to their preferences.

2. The RES market is very diverse. Various types of renewable energy can be complementary to other sources and increasingly substitutable for conventional energy sources. The differences among countries in the extent of using such energy come from local geographical conditions and RES development capacities. A characteristic feature of the RES market are barriers to market entry. Not only does it result from the high costs of construction and maintenance of the technical infrastructure necessary for this activity, but also from the costs associated with complying with environmental regulations. The market consequence of legal regulations is ensuring energy security by intensifying energy from renewable sources, which should be treated as a premise and a significant element of energy policy.
3. The lever for the development of renewable energy in Poland has been wind farms and photovoltaics, which are the fastest-growing type of renewable energy sources. Apart from onshore wind energy, offshore wind energy is currently one of the technologies which are being developed, with electricity production costs comparable to those of nuclear power stations in operation. It should be stressed that the Baltic Sea offers some of the most favourable wind conditions in the world, and Polish ports will become the base for planned investments. Offshore energy is a strong impulse for the development of the Polish economy.
4. In the Polish legal system, ensuring energy security is one of the fundamental objectives of the present-day regulation of the energy sector in terms of network infrastructure. A mutual feature of infrastructure sectors is the necessity of access to specific technical infrastructure to undertake and conduct economic activity. It is the State that is the main subject in energy security; its function in this respect has not changed despite the progress in privatising the energy sector. The State's essential function results from its empire and ability to create relevant legal instruments, but also from its authority over resources, which puts the State in the function of a guarantor and guardian of broadly understood energy security. Liberalisation of energy markets also affects the subject-matter approach, thereby it increases participation of economically independent energy enterprises and individual consumers. That sets new factors and conditions for consolidating the energy sector and the preference for energy from renewable sources.
5. Renewable energy in sustainable development aims to balance and integrate economic, social, and environmental policies without clearly answering the question which policy

is dominant and which should be subordinate. Through promoting energy from renewable sources, planning energy and fuel supply, openness and transparency of the regulator's activities and ensuring third-party access to the network, the Polish legislator has subordinated the management of renewable energy sources to the principle of sustainable development. Not only does careful selection of instruments to support RES production serve the RES market development but does also ensure the pursuit of energy security objectives and sustainable development of the country. Given legal solutions in the field of renewable energy sources as an economically efficient regulation, the Polish legislator also recognises non-legal values related to social, environmental, or innovative issues, accepting that they do not limit economic efficiency.

6. The identified financial instruments on the RES market do not constitute a system but only its elements. These instruments do not sufficiently inspire investment in renewable energy sources or do not fully ensure the achievement of economic and social objectives and energy security and environmental protection. In this way, they do not contribute to the dynamic and holistic development of the market for renewable sources. Achieving zero net greenhouse gas emissions in 2050, in which economic growth is decoupled from the use of natural resources, requires the application of a system of financial instruments.
7. State aid is in line with the objectives of Polish energy policy, being an essential support instrument in the renewable energy sources market. Without this instrument of support from the state or state resources, RES energy will not be able to reach the required production level. Public support is also necessary to achieve the EU targets for expanding the utilisation of energy produced from renewable sources as long as energy prices on the internal market do not reflect the total environmental and social costs and benefits of using these energy sources.
8. EU funds being financial support instruments should be evaluated positively, as they contribute to the construction and expansion of the renewable energy sources sector and the energy transformation of the Polish economy. Planned actions to support the production of energy from renewable sources should include the construction and development of these energy sources, together with storage facilities, the development of prosumer energy, i.e., dispersed installations of small capacity, the levelling of the instability of energy production from RES through hybrid installations. These actions will contribute to the energy transformation towards the development of renewable

energy, and its increase in final consumption. It cannot be ignored that through the use of energy from renewable sources, there will be not only a reduction in greenhouse gas emissions but also an increase in the energy efficiency of the economy.

9. The national targets resulting from both the National Energy and Climate Recovery Plan 2021-2030 and the Energy Policy of Poland until 2040 are a contribution to the implementation of the EU climate commitments under the Paris Agreement and towards climate neutrality.