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ENERGY AUDIT AND ENERGY MANAGEMENT SYSTEMS: REVIEW OF INTERNATIONAL ENERGY AUDITING PRACTICE

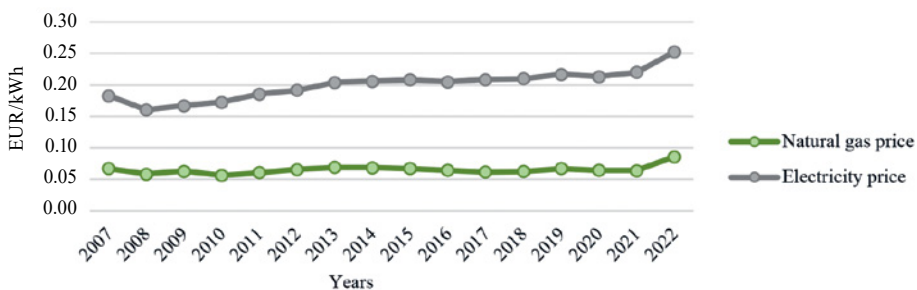
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Abstract – This research combines the analysis of international knowledge in energy audit practices with the information on the nature of energy audit and its involved parties on the path to fulfilling the goals set by the European Union policy and Latvian national policy. The article also analyses the publicly available information about the energy sector in Latvia, industry statistics, and legislative acts that have a direct impact on the implementation of energy audits. Although the European Union aims to reduce the EU emissions by at least 55 % by 2030 and to reduce gas demand by 15 % by May 2023, sustainable energy use requires not only increased renewable energy production, but also an efficient and competent use of this energy. The article first assesses the institutional basis, by EU regulations, to promote energy audits in the country. International energy audit and energy efficiency practices are also reviewed, focusing on government policy, energy audit standards, tools and methods. As each member state of the European Union has independently interpreted and adapted the EU requirements related to energy efficiency, the exchange of information between member states on their knowledge and experience should be considered an essential aspect of the policy, so that in the future countries together could achieve European energy security, independence, competitiveness and sustainability by adopting the best examples. The result achieved in the research is a summary of the energy audit experience of the EU and other countries, a description of energy consumption and their prices in Europe, as well as an extract of the most important regulatory acts.

Keywords – Emission reduction; energy consumption; resource efficiency; sustainability



Natural gas and electricity prices for household consumers, average in the EU, years 2007–2022, EUR per kWh.

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