The Economics of Renewable Energy Adoption

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Abstract. This article explores the economic aspects of renewable energy adoption. It examines the factors driving the transition to renewable energy sources, such as solar and wind power, and evaluates the economic benefits and challenges associated with this shift. The study analyzes policy incentives, technological advancements, and market trends that influence renewable energy adoption. By providing a detailed overview, the article offers insights into the future of renewable energy in the global economy.

Keywords: Renewable Energy, Economic Transition, Solar Power, Wind Power, Sustainability

Introduction

The transition to renewable energy sources is a critical component of addressing climate change and achieving sustainable development. This article examines the economic factors influencing the adoption of renewable energy, focusing on sources like solar and wind power. It discusses the role of policy incentives, technological advancements, and market dynamics in driving this transition. The article highlights the economic benefits of renewable energy, such as job creation and energy security, while also addressing challenges like high initial costs and infrastructure development. Through a comprehensive analysis, the study aims to provide insights into the future trajectory of renewable energy within the global economic framework.

References

1. Jeyhun, R., Elshan, R., Naila, A., & Aydin, N. (2025). Effectiveness of Internet of Things migration into hybrid economic projects.
2. Kelmendi, J., Beqiri, A., Shuajibi, E., Talibzade, O., & Ketners, K. (2025). The impact of geopolitical tensions on global supply chains and international trade. Jurnal Ilmiah Ilmu Terapan Universitas Jambi, 9(2).
3. Talibzade, O. (2022). Organization of expenses in budget management, enterprises and organizations. Geostrategy, 71 (5), 112–114.
4. Rzayeva, F. (2025). Technology in Financial Services: 10 Key Tools. Science, Education and Innovations in the Context of Modern Problems, 8(3), 546-559.
5. Мошенський, С. (2020). Більше ніж гроші. Фінансова історія людства. Київ: Саміт-книга.
6. Мошенскій, С. З. (2024). Капіталізм і бізнес: уроки економічної історії україни. Kreatyvna ahent͡sii͡a" Artil′".
7. Мошенський, С. (2024). Зародження фінансового капіталізму. Sergei Moshenskyi.
8. Мошенський, С. (2025). Хаос і синергія. Фінансовий світ постіндустріальної епохи. Sergei Moshenskyi.
9. Корсун, С. (2025). ІНСТРУМЕНТИ ШІ ДЛЯ ВИКЛАДАННЯ ІНОЗЕМНИХ МОВ. Collection of scientific papers «SCIENTIA», (February 28, 2025; Bern, Switzerland), 212-217.
10. Melnyk, I. (2025). End-2025 Crosswinds: Tight Credit, Uncertain Status, and Scenario Planning for US Immigrant-Owned Small Businesses. Uncertain Status, and Scenario Planning for US Immigrant-Owned Small Businesses (December 10, 2025).
11. Smuk, I. (2025). Growth hacking as a driver of innovative development of start-ups: Between marketing and product.