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Editor-in-Chief Prof., Dr. Karitseva Oleksandra, Head of the Department of Economics, Entrepreneurship and Business Administration, Sumy State University

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For scientists, scientists, students, graduate students, representatives of business and public organizations and higher education institutions and a wide range of readers.

ASSESSMENT OF COMPLEX EFFECTS OF GREEN ENERGY BUSINESS PROJECTS

*Iryna Sotnyk, Dr. Sc. (Econ.), Prof.,
Artem Martymianov, student
Mariana Maslii, student,
Sumy State University, Ukraine*

Renewable energy (RE) projects have a complex impact on economic entities and regional and national economies. It is expressed in improving the territories' economic, social, environmental, and political performance. However, due to the complexity of the green energy impact on local development, sometimes it is challenging to identify specific effects associated with the RE impact. Therefore, studying and classifying the various impacts of implementing green energy business projects is expedient. It helps strengthen the validity of introducing RE projects.

Table 1 presents the systematization of such effects (Perevozova et al., 2019; Prospects, 2018).

Table 1 – Systematization of complex effects emerging during the implementation of green energy business projects (developed by the authors based on (Ababa, 2014; Perevozova et al., 2019; Prospects, 2018; The impact, 2021))

| Qualitative indicators | Economic measurement of quality indicators |
|--|---|
| 1 | 2 |
| Creation of additional jobs for constructing and further operating RE plants. Growth of employment in other sectors related to RE development (R&D, construction, machine building, transport, etc.) | Reduction in the level and duration of unemployment due to creating new jobs. As a result, state savings in paying unemployment benefits |
| Tax revenues to the budgets of different levels and deductions for social needs from the operation of RE facilities and related industries | Growth in tax revenues and deductions for social needs to the budgets of various management levels and special state non-budgetary funds |
| Development of human resources potential through the strengthening of cooperation with specialized educational institutions, creating laboratories, and demonstration sites for RE facilities | Increase in the share of qualified personnel in the structure of enterprises' personnel, growth in labor productivity, reduction in labor intensity of energy generation and production of equipment for RE, which leads to rising profits of economic entities |
| Improvement in the population's well-being leading to increased effective demand | Increasing per capita income |
| Independence of settlements developing RE facilities from centralized energy grids and increasing level of reliability of energy supply | No costs for connection to the centralized power grid |
| Growth of the competitiveness of various economic entities that involve local fuel and energy resources in production activities | Increase in enterprises' profits due to reducing production cost |

Continuation of Table 1

| 1 | 2 |
|--|--|
| International cooperation on RE development programs that positively affect the investment climate and the image of the region | The inflow of foreign and domestic investments in the region |
| Improving environment quality, reducing the morbidity of the population | Reduction in the environmental protection cost, the cost of the population treatment |

Under the crisis conditions and the deficit of its energy sources, Ukraine's economic development largely depends on the provision of cheap and affordable energy. Russia's war in Ukraine in 2022 has clearly shown how critical the country's dependence on energy imports can be. Focus on RE will increase Ukraine's energy security, promote its economic development, and improve the population's living conditions. The impact of green energy deployment presented in Table 1 directly or indirectly affects the state and trends in RE use at the national and regional levels. However, it needs clarification regarding the municipal sphere. The state and political factors should be identified to determine the priorities of RE advancement at the municipal level (Timoshenko & Dementieva, 2016).

The environmental effects of implementing RE are the rational use of non-renewable natural resources (oil, gas, coal) and conservation of their reserves, reduction of specific emissions and discharges of pollutants per unit of energy, and a decline in the number of wastes. RE does not generate environmental externalities associated with extracting, processing, and transporting fossil fuels. In most cases, this type of effect is calculated in natural units. However, while implementing the principles of a green economy and introducing RE for energy saving, in our opinion, the emphasis should be placed not only on economic and environmental indicators.

The resulting social effect of green energy use can be a significant stimulus for promoting and intensifying energy efficiency policy (Perevozova et al., 2019; The impact, 2021). It can include increasing workers' comfort in the workplace and living conditions in the housing sector, reducing the number of unemployed who got new jobs through their creation in the RE industry, reducing morbidity due to stabilizing the environment quality and reducing pollution, and increasing life satisfaction, etc[6-23].

The mentioned effects at different management levels are essential to consider when determining the economic competitiveness of green energy business projects. Using the effects, it is possible to objectively assess RE's advantages over traditional energy technologies and make a substantiated decision in favor of green energy development.

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