

THE IMPORTANCE OF SUPPORTING INVESTMENT IN RENEWABLE ENERGY

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Abstract

Climate change is a serious concern for the whole world. Based on these concerns, Europe aims to become the first climate-neutral continent by 2050. To achieve this, the European Union has set itself the goal of rapidly transforming the energy sector, so the European Commission has presented the European Green Agreement, which represents an ambitious package of measures for a sustainable ecological transition. In this paper we propose to analyze the importance of supporting investments in renewable energy for job creation in the member countries of the European Union. We will also identify how the European Investment Bank, through the European Investment Fund, has supported Member States in achieving the goal of increasing renewable energy consumption in 2015-2020.

Keywords: *investments, aid schemes, renewable energy*

Classification JEL: *Q2, Q4*

1. INTRODUCTION

An important aspect of the current period, in which energy consumption has increased considerably as a result of the development of countries, the European Union's energy policy aims to promote the development of new and renewable forms of energy, for better alignment and integration of climate change objectives. in the new organization of the market.

The first steps in this direction appeared with the publication in 1997 of the White Paper on Renewable Energy Sources, in which the European Union set itself the objective that, by 2010, a proportion of 12% of energy consumption and 22.1 % of electricity consumption should come from renewable energy sources. This has set a target for each European Union Member State for 2010 [1], but as most countries have failed to meet these targets, a new, more comprehensive legislative framework has been created by Directive 2009/28 / EC of the European Parliament and of the Council. Council.

This directive has been substantially amended several times, so in December 2018, the revised Renewable Energy Directive, which is part of the "Clean Energy for All Europeans" package, entered into force. This legislative act seeks, on the one hand, for the European Union to maintain its position as a world leader in the field of renewable sources, and, on the other hand, to assist the European Union in fulfilling its emissions reduction commitments under the Paris since 2015 on climate change [2].

Following the EU's accession to the Paris Agreement and with the publication of the Energy Union Strategy, the Union has taken on an important role in combating climate change, through its 5 main dimensions: energy security, decarbonare, energetic efficiency, the internal energy market, research, innovation and competitiveness.

To meet this commitment, the European Union has set energy and climate targets for 2030, as follows:

- The target for reducing domestic greenhouse gas emissions by at least 40% by 2030 compared to 1990;
- The target for renewable energy consumption of 32% in 2030;
- The target of improving energy efficiency by 32.5% in 2030;
- The goal of interconnecting the electricity market at a level of 15% by 2030.

2. THE TRANSFORMATIONS ON THE LABOR MARKET BROUGHT BY THE INVESTMENT IN RENEWABLE ENERGY

The use of renewable energy brings a number of benefits on: the environment, health, employment.

The environmental benefits of renewable energy are found in lower carbon emissions and reduced air pollution. On the other hand, wind, solar and hydropower produce less or no air pollution. Other renewable energy technologies, such as biomass and geothermal, emit air pollutants, but at much lower rates than most conventional fuels. Air pollution has become a major problem in many developing countries, where up to 2.9 billion people still rely on wood, coal.

Renewable energy provides a growing number of jobs around the world every year. According to estimates by the International Renewable Energy Agency (IRENA), the renewable energy sector employed a record 10.3 million people worldwide in 2017, driven by growing investment. This has been the result of rapid cost reductions, technological improvements and government policies to support renewables.

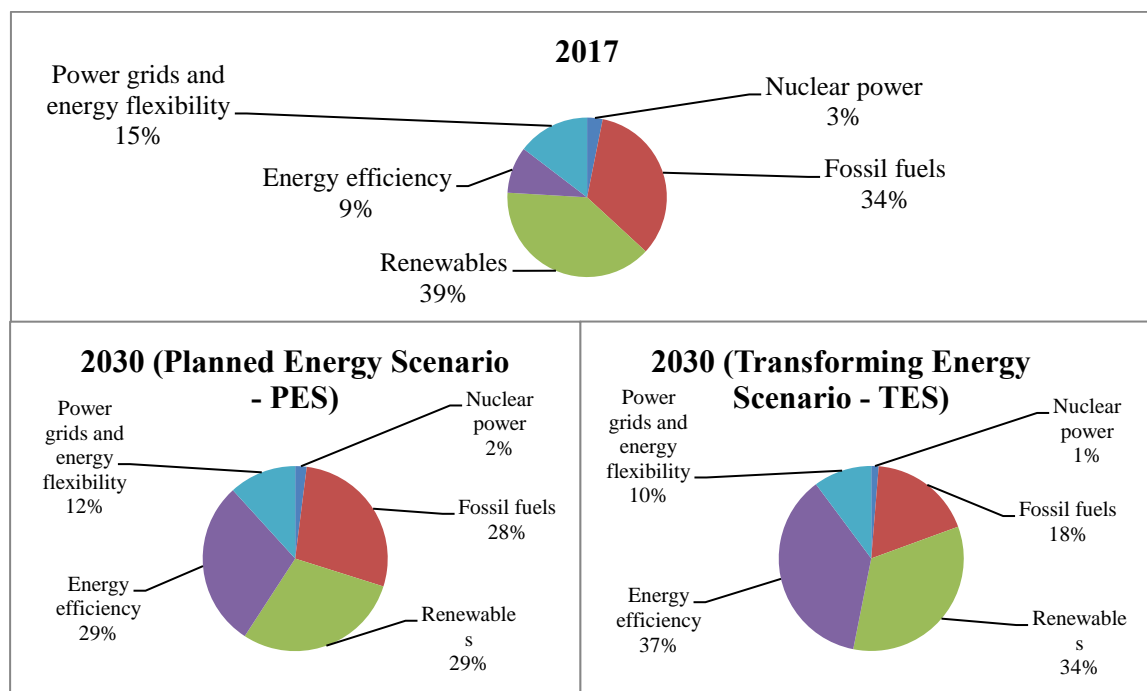


Figure 1. Energy sector jobs (thousands)

Source: International Renewable Energy Agency

According to statistical data, at the level of the European Union, the number of jobs in the field of renewable energy in 2017 was 1290 hundred, which represented 39% of the total number of jobs in the field of energy. The International Renewable Energy Agency has made two forecasts for 2030. The first scenario "Planned Energy Scenario (PES)" - which provides an overview of energy system developments based on current energy plans of governments and other planned targets and policies, including contributions to national level under the Paris Agreement, unless the country has more recent climate and energy goals or plans - forecasts that the number of jobs in the field of renewable energy will be 1730 hundred, which will represent 29% of the number total

energy jobs. According to the second scenario, the Transforming Energy Scenario (TES) - which describes an ambitious but realistic way to transform energy, largely based on renewable energy sources and constantly improving energy efficiency - the number of jobs in the energy sector renewables will reach a number of 2502 hundred people, representing 34% of the total number of jobs.

3. INVESTMENTS IN RENEWABLE ENERGY IN THE PERIOD 2015-2020

Achieving the objectives set at European Union level requires long-term investments, most of which come from the private sector. In this direction, the European Investment Bank's energy lending policy through the European Investment Fund sets out how the bank can help support the EU in addressing this challenge. It focuses the institution's activities on those areas in which it can provide a high degree of added value by: overcoming persistent investment gaps, which remain despite existing policies; focusing on the necessary long-term infrastructure, including the important dimension of innovation and the expansion of low-carbon technologies; supporting new market-based investments in the energy sector, especially for relatively new types of infrastructure [3].

The European Investment Bank, through its energy lending policy, sets a benchmark in the fight against climate change. Thus, it was decided to gradually eliminate the financing of unestablished energy projects, including natural gas, until the end of 2021, and the financing of projects aimed at energy from renewable sources. Through the European Fund for Strategic Investments (EFSI), which is the basis of the Investment Plan for Europe, it has been possible to support investments in energy infrastructure, energy efficiency and energy from renewable sources. A low-carbon economy and increasing energy efficiency are the key coordinates of the Energy Union strategy.

The energy union is seen as an essential element in a complex gear of flagship initiatives in the direction of modernizing the economy [4].

Different mechanisms have been defined that Member States can apply to achieve their objectives as well as sustainability criteria for biofuels. According to the Directives, Member States should take further measures in the event that the share of energy from renewable sources at Union level does not follow the Union's path towards the target of a share of energy from renewable sources of at least 32%.

Global national targets have been set for the share of renewable energy in final gross energy consumption for each Member State of the European Union.

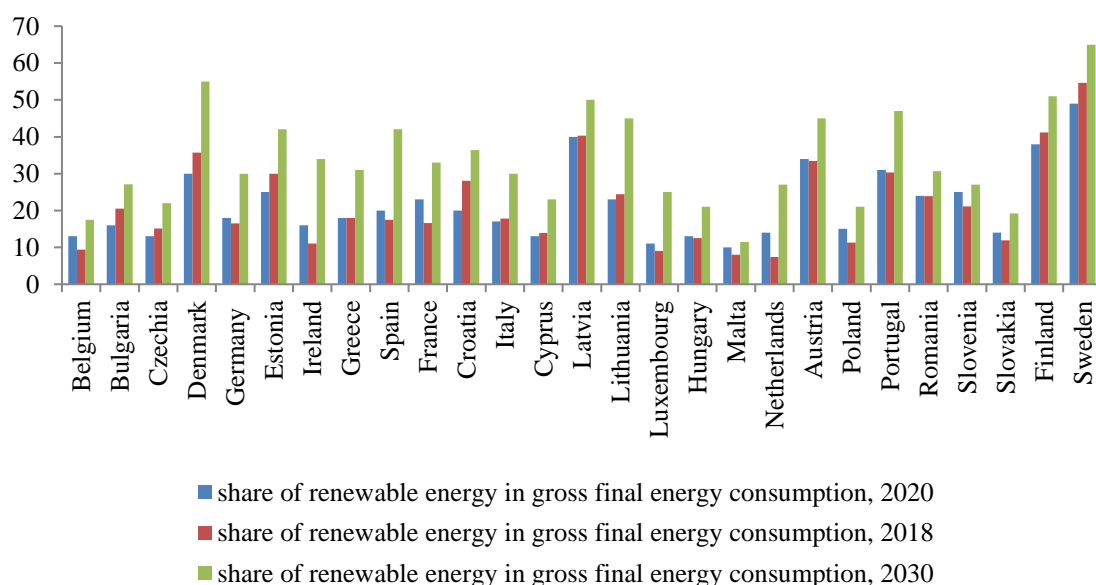


Figure 2. Share of renewable energy in gross final energy consumption

Source: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_ind_ren&lang=en si https://ec.europa.eu/energy/topics/energy-strategy/national-energy-climate-plans_en?redir=1

In support of the Member States for the realization of this project of the European Union, a financial framework has been established to facilitate investments in projects on energy from renewable sources.

Support schemes for electricity from renewable sources or "renewable energy" have proven to be an effective way to encourage the use of electricity from renewable sources.

The European Investment Bank helps to encourage the necessary investments to achieve these objectives, through the funds made available to member countries.

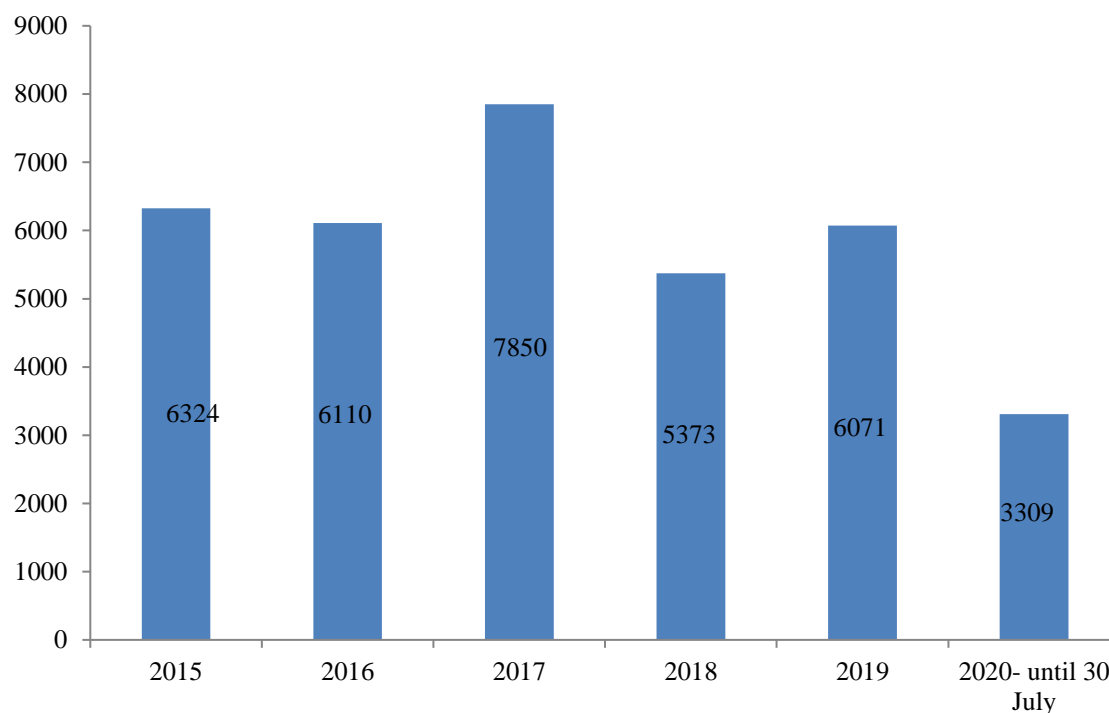


Figure 3. Funds allocated by the EIB in the field of energy in the period 01.01.2015- 30.07.2020 (million euros)

Source: <https://www.eib.org/en/projects/sectors/energy/index.htm>

From the previous figure it can be seen that in the period 2015-2020, the European Investment Bank signed projects through which it allocated funds in the energy sector amounting to a total of 35037 million euros. Of this value, over 30% represent funds for projects that support renewable energy. This percentage registered an increase over 50% in 2018, and in the period 01.07.2020-30.07.2020 the percentage was over 66%.

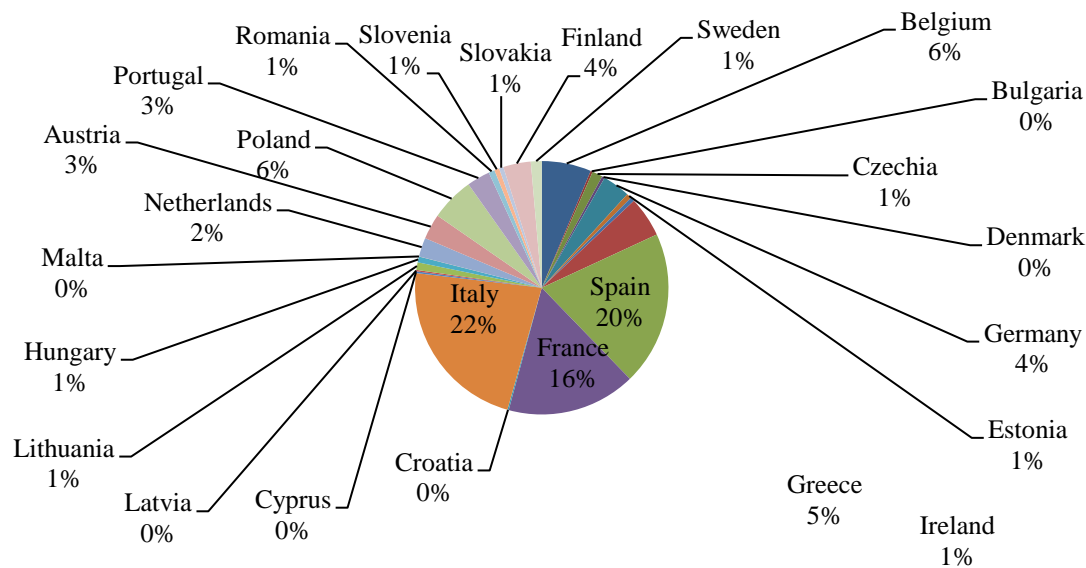


Figure 4. Funds allocated by the EIB in the field of energy to EU member states in the period 01.01.2015- 30.07.2020 (million euros)

Source: <https://www.eib.org/en/projects/sectors/energy/index.htm>

The countries that benefited from the most funds in the field of energy in the period 2015-30.07.2020 were Italy with a percentage of over 22% representing over 7583 million euros, followed by Spain with a percentage of over 20% (over 6633 million euros) and France with a percentage of over 16% (over 5547 million euros). Of the total funds received in the energy field, the countries that invested the most in renewable energy were: Portugal with over 77% (of the contracting funds), France with over 70%, Austria and Belgium with over 69%. If we analyze from the total funds allocated for the European Union in the predominant field of renewable energy, France is over 11% (over 3922 million euros) and Spain with over 8% (over 2825 million euros).

4. CONCLUSIONS

The transition to renewable energy affects different sectors and supply chains of the economy, induces technological change and changes in investment - all with significant effects on employment and therefore on people's livelihoods. The most obvious changes will take place in the energy sector, with more jobs in renewable energy sources, energy efficiency and energy flexibility and fewer jobs in fossil fuels.

It must be possible for electricity from renewable sources to be used at the lowest possible cost for consumers and taxpayers. When designing support schemes and allocating support, Member States should aim to minimize the overall cost to the system of use along the decarbonisation path in order to achieve the goal of a low carbon economy for the year. 2050.

More than a billion people do not have access to electricity, while another billion have an insecure supply. Improved reliability, rapidly declining technology costs and supporting policies have made stand-alone and mini-grid renewable electricity solutions viable for 80% of those without access in rural areas or small developing island states. One of the most convincing arguments for off-grid solutions is that they are decentralized and, as project development activities take place locally, job creation is also localized [8].

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