

Contents lists available at ScienceDirect

Renewable and Sustainable Energy Reviews

journal homepage: www.elsevier.com/locate/rser



Review of financial support from EU Structural Funds to sustainable energy in Baltic States



Dalia Štreimikienė

Lithuanian Sports University, Institute of Sport Science and Innovations, Sporto str. 6, Kaunas, Lithuania

ARTICLE INFO

Article history: Received 21 March 2015 Received in revised form 22 December 2015 Accepted 27 December 2015

Keywords: Renewable energy Energy efficiency Structural Funds Baltic States

ABSTRACT

The paper focuses on financial support from EU Structural Funds to sustainable energy development in Baltic States. The paper aims to compare the use of Structural Funds support for sustainable energy development in Baltic States in two financing periods: 2007-2013 and 2014-2020 and to assess the impact of EU structural support in helping Baltic States to implement energy efficiency and renewable energy development targets set in EU energy policy documents. The paper analyses EU sustainable energy policy priorities and energy efficiency and renewable energy targets set for Baltic States and compares progress achieved in implementing energy efficiency and renewable energy targets in Baltic States after EU accession. The paper found that the EU Structural Funds have positively influenced the sustainable energy development in Baltic States. The major impact was related with increase in energy productivity because of energy savings achieved in refurbishment of residential buildings. Lithuania has achieved the biggest progress in energy productivity development since 2004 among Baltic States. Estonia was the only country from Baltic States which has allocated structural aid for promotion of wind energy and achieved the best results in increase of the share of renewables (mainly wind) in electricity generation. Latvia has the highest share of renewable in electricity generation structure and final energy consumption and did not provide support for renewable in 2007-2014 however support for biomass is foreseen in 2014-2020 financing period.

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1. Introduction

European Structural Funds provide EU Member States and regions with assistance to overcome structural deficiencies and

to enable them to strengthen competitiveness and increase employment.

In 2004–2006 the EU structural support was used according to the Single Programming Document (SPD). The Single Programming Document is a general document for planning investments allotted by the EU to a country. The document prescribes an appropriate development strategy, it presents description of

E-mail address: dalia@mail.lei.lt

priorities and tasks and a preliminary financial plan. It was planned that with the help of this Programming Document the structural fund investments will help improving the economic-social state of the new EU member states joined EU in 2004 by developing the necessary structural reforms. The next support programmes covered a seven year period with the 2007–2013. These Programmes have already come to an end. The new Programmes for 2014–2020 period were prepared. More than one third of the EU's total budget is spent on so-called Cohesion Policy via the Structural Funds. Its main purpose is to promote the overall harmonious development of the EU, to reduce disparities between the levels of development, and to strengthen its economic and social cohesion which is the most relevant to new EU member states. There are several studies conducted to assess the impact of EU Structural Funds on cohesion and the results of studies are contradictory [1–3]. The study conducted in 2012 [4] found that ERDF funding has proved minimal in investing in renewable energy infrastructure in the sense of this study; rather its support lies more in renewable energy production and energy efficiency measures. Findings have shown that renewable energy infrastructure is especially difficult to fund, as there are few incentives for private investors, and administrational logic in many Member States involves various levels and branches of government in energy policy, leading to enormous frictional losses of the funding strategies and resulting in unnecessarily high transaction costs for the beneficiary of the funds.

The CENTRAL EUROPE Programme is financed by the European Regional Development Fund (ERDF), which aims to strengthen economic and social cohesion in the EU by correcting imbalances between regions. The current CENTRAL EUROPE Programme runs from 2007-2013 with a budget of EUR 231million for funding projects. As the 2007-2013 programming period has come to an end, the CENTRAL EUROPE Programme evaluated programme achievements in relation to current and future EU policy frameworks. This thematic study [5] capitalised on the achievements (including both outputs and results) of the projects funded by the CENTRAL EUROPE Programme on the topic of Energy Efficiency and Renewable Energies, in line with the programme's stated objectives. The support from ERDF had made substantial progress in assisting central European regions to adapt their regional policies and take advantage of the benefits of renewable energy and energy efficiency results [5].

The Energy Efficiency Financial Institution Group ("EEFIG") was established to determine how to overcome the well documented challenges to obtaining long-term financing for energy efficiency. The study [6] conducted by EEFIG identified the main drivers of energy efficiency investments, for buildings, industry and SMEs and evaluated that there are insufficient public and private investments in energy efficiency in buildings, industry and in SMEs. If this trend continues then EU Member States are at risk of missing their 2020 and longer-term energy efficiency targets and their economies will be deprived from the boost energy efficiency investment can provide.

There are several important studies reviewing the effectiveness and efficiency of various promotion strategies for sustainable energy [7–13]. However these studies does not put too much emphasis on the support from EU Structural Funds. Just some studies indicated that support from Structural Funds and other investment support measures for renewable energy technologies (RET) not only reduce the RET financing costs, but also the project development costs and market gap [14,15]. There are other authors found that critical success factors of supporting renewable include implementing effective and efficient policies that attract sufficient investments from Structural Funds and other sources, reducing administrative and grid related barriers, especially in

currently less advanced countries, upgrading the power grid infrastructure [16].

This paper focuses on support from EU Structural Funds for promotion of sustainable energy as this is very important issue of economic development of new EU member states. The main targets or EU energy policy is to ensure sustainable energy development, i.e. to increase use of renewable energy sources and to implement energy efficiency improvement in energy production and consumption. These priority issues are being dealt by support from EU Structural Funds as well [17].

The aim of the paper to analyse and compare the use of Structural Funds support for sustainable energy development in Baltic States in two financing periods: 2007–2013 and 2014–2020 and to assess the impact of EU structural support in helping Baltic States to implement energy efficiency and renewable energy development targets set in EU energy policy documents. The main tasks to achieve the aim of the paper are the following:

- To analyse EU sustainable energy policy priorities and energy efficiency and renewable energy targets set for Baltic States;
- To analyse and compare progress achieved in implementing energy efficiency and renewable energy targets in Baltic States after EU accession;
- To analyse and compare EU Structural Funds allocated for sustainable energy projects in Baltic States in 2007–2013;
- To analyse and compare EU Structural Funds allocated for sustainable energy projects in Baltic States in 2014–2020;
- To draw conclusions based on analysis conducted.

The first chapter of the paper deals with EU energy policy priorities and energy efficiency and renewable energy targets set for Baltic States. The second chapter assesses the progress achieved in Baltic States in implementing energy efficiency and renewable energy targets set by EU energy policy documents. The following chapters present analysis of allocation of EU Structural Funds for sustainable energy projects in Baltic States during two financing periods and finally conclusions summarise the main findings and policy implications of conducted analysis.

2. EU energy policy priorities and energy efficiency and renewable energy targets for Baltic States

Since the publication of the Renewable Energy Directive (2009/28/EC) the following are the European mandatory targets: 20% for all energy to come from renewable energy sources (RES) by 2020 (12% by 2010). Different targets are given to each member state in order to achieve this overall target for Europe and 10% of all transport energy to come from renewable sources by 2020. EU had RES targets for 2010 as well: an increase in the contribution of renewables to 12% of Europe's total energy by 2010. By 2010, the target share of renewable energy in gross electrical consumption of the EU was 22.1% from all EU 15 countries (21% for the EU (27)). The member states had to ensure that the minimum share of biofuels sold on their markets is 5.75% by December 2010 [18].

The Renewable Energy Directive (2009/28/EC) presents Member States with a huge implementation challenge that cannot simply be met by an extension of existing promotional policies for renewables. The Directive required each Member States submit a National Renewable Energy Action Plan (NREAP) by 30 June 2010, setting out how it plans to achieve its 2020 target. The European Commission issued a strict template for this plan which Member States must adhere to, setting out in detail how they plan to reach their overall RES target through development in the several RES energy sectors – electricity, heating and cooling and transport. It is also notable that because the target is based on a percentage of

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