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Renewable Energy Financial Management in the EU's Enlargement Strategy and Environmental Crises

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Abstract

The European Union's enlargement process has entered a new phase. The completion of the accession negotiations with Croatia opened the way to membership in mid-2013. In addition, for Turkey, accession process remains the most effective framework for promoting EU-related reforms, developing dialogue on foreign policy issues, strengthening economic competitiveness and diversifying supply of energy sources. Similarly, improved energy cooperation with the enlargement countries directly benefits European citizens and businesses.

Energy interconnection is a key element in the EU's cooperation with all neighboring countries aimed at promoting sustainable economic growth, trade and cultural exchange, employment, as well as at improving living conditions.

All enlargement countries have now embarked upon a path of recovery, though at varying paces. For instance, Turkey has emerged from the crisis with a bigger economy and its growth continues to be impressive, but there are increasing signs of overheating. The Western Balkan economies are also beginning to recover, though it will take some time for them to reach pre-crisis levels.

Meanwhile, climate developments will affect financial positions through their direct impact on tax bases and spending programs, and more importantly, through the policies needed to mitigate climate change and adapt behaviors and production to the new environment. The present study aims to investigate the relationship between economic growth, energy intensity, and financial management and CO2 emissions in case of the EU.

*Keywords***:** The EU, Financial Management, Enlargement Strategy, Western Balkans, Turkey.

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1. Introduction

The most desirable task of all the economies perhaps is to strive for environmentally sustainable economic growth. Similarly, a rise in economic growth leads to increase in energy demand, which in return stimulates economic growth. After accession to the EU, candidate countries have been diversifying themselves by developing service-based economy such as the finance, transportation and especially energy sectors. Following the terms of the EU allocation agreement, it is required to analyze whether a candidate country can fulfill the targets set by the EU by preventing the hike in greenhouse gases emissions up to 40 per cent, for the period of 2008-2012 or not. The principal cause of the rise in CO_2 emissions is the rapid use of fossil fuel. The most important challenge for energy policy making authorities is to introduce new measures that can help in reducing energy emissions.

The structure of economy is one of the key factors that affect energy demand. At the same time, energy awareness has undoubtedly made great strides in the EU. Energy markets are still interwoven with major economic and political decisions. In this context, the enlargement of the EU from 15 states to 28 makes for a major shift in the political, regional, and economic balance.

Renewable energy sources often receive necessary boost when prices of fossil fuels start to skyrocket. The exploitation of new energy resources requires major investments in a new infrastructure and should be therefore financially sustained. Investment in the R&D sector is one the most instruments for supporting the renewable energies on a local level. For example, Germany, the Netherlands and Denmark spurred technology development with major research and particularly demonstration projects from the 1980s on.

In this respect, a better use of the EU's financial instruments may improve renewable regional energy policies. A lack of technological absorption capacity poses a barrier to the adoption of the latest and most-advanced productivity-enhancing technologies. Technology parks which can be financed with EU funds would be very important to facilitate technological absorption.

The remainder of the paper is structured as follows: Theoretical background of environmental crises management is presented in section 2. In the next section, we provide a brief overview of the renewable energy finance management in the EU and Western Balkans. Final section is devoted to conclusion and future directions.

2. Determinants of Environmental Problems and Renewables Technology

In general, modern industrial society is polluting the environment. We tend to agree that economic incentives cannot solve the potential climate change problem. We are going to need some significant environmental technological breakthroughs. In this context, there are different kinds of technological optimists. One kind of technological optimist says we'll spontaneously develop technologies that give us renewable energy.

Since the 1990s, growing concerns about depletion of fossil fuels, pollution and climate change have reopened the technological landscape with a search for cleaner low-carbon transport vehicles. Four main solutions were identified: electric vehicles, hybrid vehicles, hydrogen cars, improved highly efficient combustion engines. This technological environment defines the competitive playing field for electric vehicles and the existing or potential scope for substitution (OECD, 2011: 190).

Climate change will magnify many existing climate- and disaster-related risks; it will also create locally unprecedented types of risk and set back development gains in many parts of the developing world, especially for the poor. The most important risks associated with climate change relate to greater climate variability, in particular greater variability and intensity of rainfall, and long term downward pressure on rural livelihoods dependent on natural resources (Kuriakose et al. 2012: 36).