

# Chapter 9

## The Role of Banks in Renewable Energy Finance: An Analysis of Turkey

**Meryem Filiz Baştürk**  
*Uludag University, Turkey*

### **ABSTRACT**

*In today's world, global warming and environmental problems resulting from fossil waste have directed economies' attention to renewable energy. Renewable energy has become quite important to developing countries, in particular those that depend on foreign energy sources and confront continuously increasing energy demand since they need renewable energy to be able to achieve their goal of sustainable growth and do this without destructing the environment and by reducing their foreign dependency. Higher costs of renewable energy investment when compared to traditional energy investment affect the investment made in this field, though. The fundamental problem in renewable energy investment is how to finance it as it is not economically rational to invest in sectors with high costs. This chapter explores the role of banks in financing renewable energy by focusing on Turkey.*

### **INTRODUCTION**

Global climate change is a common concern today, and the policies on sustainability focus mainly on environmental destruction caused by solid/fossil waste. Although such concerns are global, the problem has another aspect regarding sustainability for developing countries. These countries are generally dependent on foreign energy sources, and this is seen as a big obstacle to realizing the objectives of sustainability.

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Renewable energy is a way of reducing the foreign dependency of these countries. In addition to helping countries become less dependent, renewable energy stands out as an environmentally-friendly energy type. In this regard, making investment in renewable energy is becoming more and more important especially for the countries that have continuously-increasing energy consumption and that heavily rely on foreign energy sources. This hence leads them to making more investment in renewable energy sources (Buchner, 2018). Besides increasing investment in renewable energy, how to finance this investment is a significant issue since the national renewable energy market of every country has unique features. It is necessary to take these features into consideration while determining the policies. In fact, it is not possible to implement the same finance policy in every country because of the unique features of countries (Brown, et. al., 2012: 21; Hamilton, 2010: 5). In addition to these features, the size and variety of renewable energy sources, the technological infrastructure that they require, and the marketing process also differ. This requires the implementation of an economical finance management that improves economic efficiency both at different stages of a renewable energy policy and for every renewable energy project (Lindlein & Mostert, 2005: 9; IDFC, 2014: 17). This obviously shows that one fundamental problem relating to renewable energy is how to finance it.

Banks are one of the institutions that provide finance for renewable energy. In the financial system, they act as financial intermediaries between the economic units with funding gaps and the ones with fund surplus. This is very common particularly in developing countries in which banking system has a huge share since financial markets in these economies do not have a sufficient depth when compared to developed countries. The loans that the banks provide in developing countries have an important impact on economic growth. Banks inevitably become a main actor in financing renewable energy in an economy where banking system has a decisive role in its financial system. However, it is important not to restrict the banks to commercial banks since national and bilateral/multilateral development banks play an important role in financing renewable energy projects. It is also essential not to ignore the loans provided by the international financial institutions.

The studies on renewable energy draw more attention as there is now more awareness of renewable energy; renewable energy investment is increasing both in Turkey and all around the world, and this investment is likely to increase in the future. The limited number of the studies discussing this issue by focusing on Turkey is the main motivation for writing this paper. In this regard, this study is believed to contribute to the literature. Revealing how renewable energy has been financed in Turkey so far will give a chance to make comparison with the practices in similar countries. Carrying out more studies on the practices in developing countries will help find optimal methods for renewable energy finance in the long term by considering the specific features of every country.

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