The Effects of Feed-In Tariff Structure on Renewable Energy Development in Turkey

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Abstract

Today, supporting renewable energy production and the promotion of it through special government regulations especially in the initial years has become a general practice and commonly accepted approach by many Governments. Turkey also attaches great importance to the electricity produced from the renewable energy resources. In this context, this importance has further emphasized with the Law No. 6094 "the Amendment Made in the Law on Utilization of Renewable Energy Sources for the Purpose of Generating Electrical Energy" that has been implemented in 2011. Accordingly, the aim of this paper is the examination of the Law No. 6094 and changes to this Law and the evaluation of the effects of so-called FITs (feed-in tariffs) in the development of the renewable energy sources in Turkish Energy Market.

Currently, the promotion of renewable energy sources (RES), especially in the initial years of the renewable energy production through special government regulations is a general view. Utilization of RES for generating electrical energy has supported by almost all countries. The main reason behind this policy is that the production of electricity derived from RES still does not compete with fossil fuels. In this regard, a variety of methods and policies have been developed in order to promote RES. Feed-in tariff, auction system, renewable portfolio standard, capacity auction, renewables obligations can be counted among these methods and policies (Gözen, 2014: 278).

In the last decade, Turkey, which is an emerging economy and a rapidly growing energy market with almost 6-7% increase in energy demand, has attached great importance to the development of RES and in 2011, the concrete amendments to the Law No. 6094 emphasized their importance. The Law No. 5346 on the Utilization of Renewable Energy Sources) for the Purpose of Generating Electrical Energy which was the first Law for the incentive of RES has entered into force in 2005. The Law No. 6094 on Amendments on the Law on Utilization of Renewable Energy Sources (RES) for the Purpose of Generating Electrical Energy came into force in 2011 amended Law No. 5346. With the Law No. 6094, incentive mechanism has amended and a new support program has integrated into day-ahead market. Besides, with the Regulation on the Certification and Promotion of Renewable Energy Sources which was published in 2013, it is identified the principles and procedures relating to establishment and process of YEKDEM and Renewable Energy Source Certificate. After all, of these changes into Laws and regulation, it has been an observable increase in applications to YEKDEM. While number of application was only 20, after the Law No. 6094 enacted in 2011, the number of application has reached 556 as of 2016. Between 2011 and 2016, it has seen that the greatest increase in the number of application is in hydroelectric power plants.

Despite these developments, there are those who argue that renewable energy should grow even faster. A large number of investors who want to invest in RES faced with constraints. The main reason is that investment-demand is subjected to competition, in other words, the amount of investment is restricted to an upper limit at geographical, regional and national level (especially for solar and wind resources) and it is intended to spread over time. There are two basic reasons for such a tacit policy: one is that electrical network and transmission lines have not yet attained the flexibility and capability of the ability to manage more renewable capacity (system reliability and intermittency problem). The

other one is that the fee for the competition has asked for. These adversely affect the feasibility of the projects in general.

Despite the restrictive developments and economic hardships, the current situation could have evaluated as successful. However, the system of competition and evaluation and related administrative procedures and bureaucratic formalities need to improve to be more efficient.

Keywords : Renewable Energy Resources, Feed-in Tariffs, the Law No. 6094,

Policy Effects.

JEL Classification Codes: K32, Q28, Q42, Q48.

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