

# ***UNLICENSED RENEWABLE ENERGY GENERATION: A REVIEW OF REGULATION AND APPLICATIONS IN THE CONTEXT OF TURKEY***

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Turkey has targeted that renewable energy sources (RES) will have at least 30% share in electricity generation by 2023. To reach this target, a renewable promotion law (Law No. 5346) was enacted in 2005 and later amended in 2011. By Law No. 5346, Turkey has launched a feed-in tariff (FIT) for RES based electricity with additional premium for the use of local equipment. The FIT is guaranteed for 10 years from the date of operation and valid only for power plants commissioned between the 18th May, 2005 and the 31st of December 2020. In addition, up to 1 MW of RES power plants is exempted from licensing and establishing companies. There is an increasing demand to install unlicensed generators, mostly solar power plants, all over the country. At least one consumption unit must be associated with the unlicensed power plant. Excess generation from unlicensed RES power plants is automatically priced at the FIT for 10 years. Except for the FIT, unlicensed generators have no options to sell excess electricity in the electricity market. The main purpose of this paper to introduce unlicensed electricity generation and related regulations in Turkey, discuss its differences from licensed generation and particularly from distributed generation, and explain the applications and challenges about unlicensed generation.

This paper is organized as follows. Following the introduction section, the second section explains the methodology of the paper. The third section summarizes the basic features of Turkish electricity market. The fourth section introduces the regulations regarding unlicensed renewable energy generation. The fifth section makes an analysis of the regulations and applications about unlicensed electricity generation. In addition, it makes suggestions to improve and expand the application of unlicensed generation in Turkey. The sixth and final section summarizes what has been covered and concludes the paper.