

## PV Module as a Design Element of Barriers for Protection against Noise

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**Abstract :** The aim of this research paper is to consider possibilities for improving the street lighting on the E75 highway, which passes through Serbia, using renewable sources of energy. In this paper, we analyzed the possibilities for installing sound barriers along the highway and integrating photovoltaic (PV) modules, which would generate electrical energy to power the lighting on the section of the highway running through Belgrade. The main aim of this paper is to analyze, show and promote innovative, hybrid, multi-functional solar technology using PV modules as an element of sound barriers in urban areas. The paper seeks to show the hybridity of using sustainable technologies in solving environmental issues. This structure solves the problem of noise in populated areas and provides the electricity from renewable source.

**Keywords :** noise, PV modules, solar energy, sound barriers

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