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The Role of Strategic Environmental Assessment in Preventive Protection of the Environment for Wind Farm Development Projects

Boško Josimović^a1, Božidar Manić^b, Saša Milijić^c, Ljubiša Bezbradica^d

a, b, c, d Institute of Architecture and Urban & Spatial Planning of Serbia, 73 Bulevar Kralja Aleksandra Blvd, Belgrade, Serbia

Abstract

In addition to undeniably positive effects of wind farms on lessening the environmental impact and carbon footprint of the energy sector, wind farms can also implicate certain negative effects in space. Major negative effects refer to biodiversity, noise pollution, the shadow flicker effect, visual impact or accidental impact. All the said effects come as a consequence of improper spatial determination of wind turbines microlocations. This is why it is of utmost importance to apply the principle of preventive environmental protection in the earliest phase of a wind farm project development and by properly disposing wind turbines in space to eliminate or reduce to acceptable levels all the negative implications. The paper points out the significance of the Strategic Environmental Assessment (SEA) process in wind farms planning as a globally adopted instrument in applying the principle of precautionary environmental protection. The focus is on the role of the SEA process in the selection of optimum solutions for preventing potential conflicts in space, at the same time reducing risks for investors during project development, thus creating conditions for reaching sustainable solutions in the wind energy sector.

Keywords: Strategic Environmental Assessment; wind farms; preventive protection.

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* Corresponding author. Tel.: +381641273113; fax: +381113370203.
E-mail address: bosko@iaus.ac.rs