Title of STSM: Comparative analysis of wind farm planning process in Poland and Hungary

STSM Ref. No.: COST-STSM-TU1401-201015-061766

Name of grantee: Dr. Malgorzata Kowalczyk

Home institution: Institute of Spatial Management and Housing, Poland

Host institution: Corvinus University of Budapest, Department of Landscape Protection and Reclamation, Hungary

Duration of STSM: October 20th, 2015 – November 20th, 2015

Resume:

The specific objective of the Short-Term Scientific Mission (STSM) was to investigate the relationship between renewable energy production and landscape quality through a comparative analysis of wind farm planning process in Poland and Hungary. The analysis focused on legal procedures and environmental impact assessments' content, including landscape characteristics taken into consideration in the planning process in both countries. This specific objective is linked to the research agenda of Working Group 1 (WG1) of RELY. The plan is for the research findings to be published in an academic paper. In line with the spirit of STSM, the broader objective of the mission was to foster trans-national collaboration between the researchers.

The research activities completed during the STSM focused on:

i) Collecting and analysing information on key institutions and legal acts related to the spatial planning process in Hungary and Poland, as well as reviewing the most important future development plans and programmes in both countries, particularly those related to the development of wind farms. Based on this work we have compared the formal frameworks of planning systems in both countries. One of the most important differences in wind farm planning between Hungary and Poland is related to the level of the decision making body. In Hungary in 2012 a new law transferred authorizing powers from the local to the central Government. In contrast, in Poland the decision making process for wind farm development is on the local level, with key decisions taken mostly by the local authorities (fig.1.).

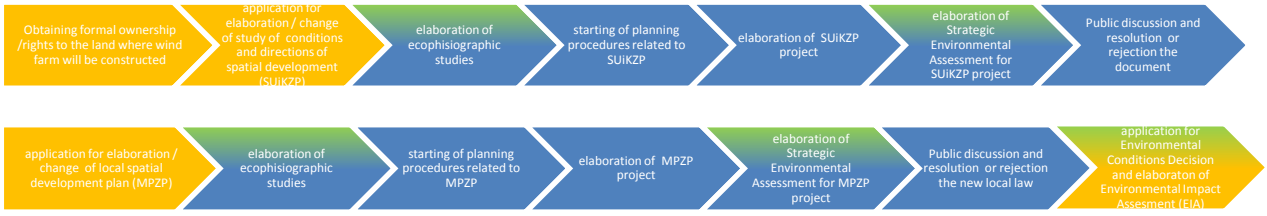

Fig. 1. Local spatial planning in wind farm planning proces (Poland)

However, in Hungary local authorities have direct responsibility only for facilities of less than 50 kW (0,05 MW), while in Poland ‚micro-installations', defined as having capacity of 40 kW (0,04 MW) or lower, are excluded from the spatial planning procedure. Is it worth to mention that even for very small wind energy installations ('micro-installations') a building permission is required.

ii) Discussion and sharing knowledge with Dr. Robert Kabai (host institution) and Dr. Csaba Centeri (Szent István University, Gödöllő, Hungary) on landscape characteristics and qualities, which are taken into consideration in the wind farm planning process. As expected, the most important landscape characteristic included in the planning process is wind speed, however, our research has identified a range of other factors important for selecting a wind farm location (fig.2.)

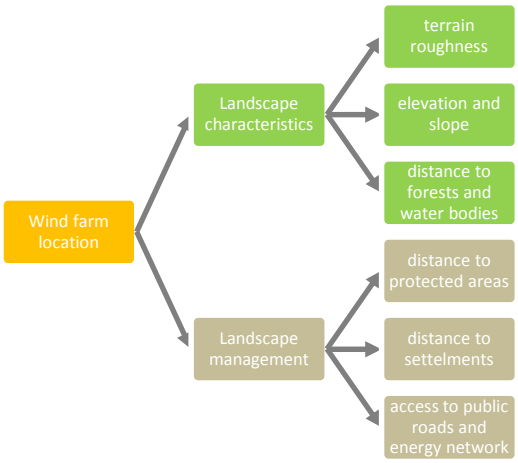

Fig.2. Wind farm location factors

iii) Comparing content of Strategic Environmental Assessments for land use development plans related to wind farms. In general, formal procedures of Strategic Environmental Assessment (SEA) are similar in Hungary and Poland. However, the differences in institutional competences result in quite different steps related to environmental assessment in wind farm planning. Depending on the size (capacity) of the wind farm project there could be various types of environmental impact procedures.

The findings form all activities completed during the STSM and on-going research on the topic will be published in an academic paper describing similarities and differences between the wind farm planning system in Hungary and Poland.