

Combining Choice Experiments with Psychometric Scales to assess the social acceptability of wind energy development projects¹

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Abstract

A choice experiment approach is combined with the use of psychometric scales in order 1) to identify factors that explain support/opposition toward a wind energy development project; and 2) to assess (monetary) trade-offs between attributes of the project. A Latent Class estimator is fitted to the data, and different utility parameters are estimated, conditional on class allocation. It is found that the probability of class membership depends substantially on specific psychometric variables. Visual impacts on valued sites are an important factor of opposition toward a project, and this effect is magnified when identity values are attached to the specific site, so much that no trade-off would be acceptable for a class of individuals characterized by strong place attachment. Conversely, other classes of individuals are willing to accept compensations, in form of private (especially a class that we define as "Consumerists") and/or public benefits. The distribution of benefits in the territory, and preservation of the option value related to the possible development of an archeological site, are important for a latent class composed by individuals concerned with the sustainability of the local economy. Finally, it is found that attitudes towards renewable energy, or more specifically toward wind energy, do not explain in a significant way the heterogeneity of preferences on wind farm developments.

Keywords: Wind Farms, Social Acceptability, Choice Experiments, Latent Class Analysis

JEL: Q42, Q51, C35

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