



Sustainable development of renewable energies – an approach to a spatially compatible site planning in Germany's rural areas

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The German government sets itself two ambitious targets of increasing the percentage of energy obtained from renewable energies to 45% by 2025 and to 60% by 2035. This in turn will lead to an even greater spatial strain on Germany's rural areas as it has been the case so far. Generally, siting conflicts in shaping progress with sustainable energy transitions, especially the effects on the expansion of renewable energy in rural areas is of great scientific significance and practical relevance. So far, a huge amount of studies is based on the conflicts of renewable energies and nature protection. Our approach tries to open the site discussion on further aspects such as social acceptance, participation, authorization procedures, landscape aesthetics, land use conflicts, life cycle assessments, etc.

Two study regions (planning region Augsburg 4.066 km², 885.000 inhabitants, S-Germany and planning region Lausitz-Spreewald, 7200 km², 600.000 inhabitants E-Germany) have been chosen to first analyze the attitudes of renewable energy operators towards the whole planning process for energy developments based on results from 135 questionnaires. First results show a strong coherence between different siting factors and technology factors, demanded by the specific energy source. It can be shown that civic participation is a crucial factor in avoiding siting conflicts.