

Renewable energy and social-economic development in the north of the Netherlands: in search of synergies

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In contrast to conventional energy extraction and production based on fossil fuels, RNE production (e.g. wind energy, energy crops) requires vast amounts of space and is highly visible. Its implications for the landscape make RNE a highly contested matter prone to societal resistance (e.g. Struntz 2014). Simultaneously, the opportunities offered by renewable energy (RNE) development to solving area-based social-economic issues, and by extension making vulnerable places more resilient, are increasingly signaled in academic literature (Avelino et al, 2012; De Boer & Zuidema, 2015; Seyfang & Haxeltine, 2012). Literature on integrated energy landscapes suggests that RNE initiatives need to be integrated within their social-spatial contexts and, when doing so, are able to provide social and economic benefits for the areas in which they are integrated (De Boer & Zuidema, 2015).

However, whether such opportunities provided by RNE for solving area-based social-economic issues are also recognized and considered by different levels of government remains unclear. Hence, the objective of this paper is to explore the perceived role of RNE in government policy and planning, in connection to the social-economic and spatial context in the Netherlands. Our area of interest is the North of the Netherlands, particularly the coastal and predominantly rural region of (North-East) Groningen. This area profiles itself as the 'energy portal' of the Netherlands while simultaneously dealing with a complex combination of opportunities and challenges related to both energy and social-economic issues.

Our research mainly relies on the analysis of spatial planning and energy related policy documents at different governmental levels. The selected documents were analyzed focusing on (1) the actual interpretations of responsibilities regarding RNE in

relation to spatial planning and policies at the different government levels, and (2) the extent to which they exhibit willingness and express a vision or strategy in terms of integrating the opportunities from RNE production with socio-economic issues and the (local) spatial context.

The choice for governmental documents is informed by their power in setting the formal agenda for spatial planning, regional development and RNE production. Furthermore, such documents are, specifically in the relatively strongly government led spatial planning context of the Netherlands, also crucial in setting the context for both governmental and often private investments (EC, 1997). Especially in pursuing RNE production, the Dutch rely on a relatively strong dependence on government involvement (e.g. De Boer & Zuidema 2015; Rotmans 2011).

Our analysis shows that the vision of the North of the Netherlands as the 'energy portal' is presented in documents at different governmental levels. However, the explicit policy statements and regulations adopted at the national and provincial level do not always correspond with this vision. Moreover, although the municipalities are highly important for balancing different interests and addressing socio-economic issues on the local level in the Netherlands, they seem to have only limited power with regards to policy for RNE. Depending on the type of RNE and the size of the projects either the State (wind > 100MW) or the province (for biomass installations, solar parks and smaller wind parks) develop strict policies which leave only limited room for area-based approaches in which RNE is integrated in the local spatial and socio-economic context.

The results demonstrate that, although RNE is perceived as an important opportunity for regional economic development, it is not yet perceived as an integrated part of the future physical and socio-economic landscape of the North of the Netherlands. Despite the promising prospects for several smart connections between RNE and area-based social-economic issues, the analysis demonstrates that at all government levels, RNE is hardly considered as a key opportunity for social change, and is often perceived as a threat to the landscape. In general, the documents illustrate a reluctance to change and a focus on staying within the current domain of attraction,

rather than actively looking for ways for using integrating RNE in the socio-economic and spatial context.

These insights provide input into broader discussions regarding the institutional integration of RNE and spatial planning. The study also points to the need to perform a comparative analysis of the situation in the Netherlands with other countries. The North of Germany would form an interesting case study, in particular in the context of ongoing cross-border cooperation, similar issues and opportunities in the rural regions across the border, and the shared vision of becoming the 'European Region of Energy Excellence'.

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