

# *Impediments for renewables: an environmental organisation and wind power.*

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## 1 - ABSTRACT

The policy for wind power development started by the Dutch government since the energy crises remained ineffective. This policy has a strong top-down character and the way of developing turbines sites is ineffective consequently (Wolsink, 1996). Environmental organisations and other third parties are often offended by project planning. In many cases the dilemma between renewable energy and environmental values becomes manifest. In the important Wadden region the national Wadden Union is reluctant to accept wind turbines.

## 2 - INTRODUCTION

Almost half of the economically feasible wind energy potential in the Netherlands is geographically located in the north and mainly situated around the internationally significant wetland "Waddensea". Because of its ecological value all activities within the Waddensea region should be considered carefully as required by international agreement and national law. For this purpose the *Wadden Vereniging* (wv) was founded in 1965 to prevent building dikes to the Wadden islands. This union wv continued as a national environmental organisation. Mostly the wind power potential is geographically concentrated in ecologically sensitive areas like coastal areas or on top of hills. In public discussions about wind power developments these ecological aspects play a significant role. From their protective point of view environmentalists often consider the development of wind power as problematic.

The wv legally protested against many proposed wind farms and mostly these projects were cancelled as a result of these actions. However, as an environmental organisation they felt caught in a dilemma. Among the members of the union a serious conflict started. The board decided to investigate the members' opinions. A nation wide survey with high response (80%) was carried out among 505 respondents (Beukema et al. 1998).

## 3 - CONDITIONAL ACCEPTANCE

The survey shows many nuances in viewpoints among the members, as listed in descending order in table 1. Obviously a majority does not support the former official standpoint of the wv of rejecting wind turbines. The answers on the questions were very consistent. The statements together with the question which viewpoint was preferred as the one the wv should adopt (table 1, right column) form a scale ( $\alpha = .84$ ) indicating the inclination towards support for wind energy in the Wadden region versus the rejection of it.

**Table 1. Members asked on their (dis-)agreement with statements and the most preferred statement**

<i>Statement:</i>	<i>mean on scale from 1 (dis- agree) to 5 (agree)</i>	<i>agreement with statement (% of total)</i>	<i>preferred as stand-point wv (% of total)</i>
No siting wind turbines anywhere	2.8	38	27
Select sites to build turbines	3.5	65	47
Siting proportionally to other regions	2.9	38	17
Siting more turbines desirable	2.7	29	6
Siting more turbines necessary	2.3	19	3

The statement with the strongest support is to select preferable locations within the Wadden region to build wind turbines. More than half of the members is in favour of building wind turbines on selected sites or prefers even more wind power developments. Previously many expected that there would be a difference between the people actually living in the north of the country and the ones living far away from the Wadden region, as the common sense is that people suffer from a *not-in-my-back-yard* syndrome. However, just like in earlier findings this NIMBY-ism is not a significant factor (Wolsink, 1996). Opposition to wind turbines is based on a general attitude towards wind energy and a specific attitude toward building them on a particular site. The type of landscape is the main factor in the visual evaluation and determines the opinion about suitability of sites. Less significant concerns are interferences (e.g. noise) and impact on natural values (e.g. bird collisions). The main factor in the general attitude is *not* the sustainable character of wind energy. The attitudes are mainly based on visual considerations (Thayer & Hansen, 1988; Wolsink, 1989) and this is also found in the *wv*-survey (Beukema et al, 1988).

The assessment on the degree to which wind turbines would spoil the landscape in the Wadden region is the main reason to oppose further wind turbine developments. The Waddensea is a very important wetland for large numbers of birds, but the impact for birds is only a secondary consideration. The contribution of wind energy to limit the enhanced greenhouse effect remains insignificant, which indicates that the choice between sustainable energy and ecological values is not really a dilemma for the members. The only significant sustainability-factor in the attitude is the assessment of decreased dependence on other resources. The members simply assess the applicability and acceptability of wind turbines in the view of its consequences for visual intrusion and the consequences of the chosen location. From that point of view most *wv*-members think that, even in the sensitive Wadden-are there are sites available for wind turbines. Hence, the key question is what kind of locations are considered acceptable.

**Table 2. Acceptability of locations and its association with attitude on wind energy in Wadden region (df=496; R2=.16).**

<i>location</i>	<i>mean score on 5 point scale</i>	<i>Beta on standpoint wind energy</i>	
Young polders	3.0	.18	
Dikes at Northsea	3.2	.09	ns
Agricultural areas	3.4	.11	ns
Off shore Northsea	3.5	.00	ns
Alongside (rail)roads and waterways	3.5	.12	
Afsluitdijk (separating Waddensea -IJsselmeer)	3.7	.12	
Army areas	3.9	-.02	ns
Industrial and harbour areas	4.4	.03	ns

A list of nineteen options was presented to the respondents. About half of these were rejected by a majority, which concerned obvious rejections such as sites in nature reserves (only 2% 'acceptable'), the dunes along the Northsea-coast (4% 'acceptable') and off-shore in the Waddensea (6% 'acceptable'). Other examples are recreational areas and near the dwelling mounds, which are considered important cultural relics of the past. Locations considered as suitable places for wind turbines by about half of the membership or even by a majority are listed in table 2. Obviously areas for industry and army exercise are accepted by almost anybody for building wind turbines. Considerations about spoiling landscape and scenic values appear not to be valid for these areas. Oponents are accepting these locations just as much as the supporters of wind energy are doing. For the other locations there is a slight tendency that it is mainly the majority of members who are not opposed to wind turbines in the Wadden region that consider these locations suitable for wind turbines.

#### 4 - CONCLUSION

The significant outcome of the survey was that indeed opinions show large variations and there is no majority support for the former policy of rejecting wind power installations within the Wadden region. As aimed the *WaddenVereniging* adopted a new policy based on the survey. They proposed to accept establishment of wind power developments particularly in industrial and harbour areas. This is a rather reluctant policy as it is still

less than the members of the wv are willing to accept. In practice it means that the board of the wv will legally object in cases a majority of the members would tend to accept. This reluctant policy seems to be inspired by the usual top down style of planning wind power projects in the Netherlands (Wolsink, 1996). Mostly projects are planned first and acceptance by other parties is asked later, the classic decide-announce-defend model. This practise offends other parties and turns out to be rather destructive for achieving wind power capacity.

## 5 - REFERENCES:

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