

World Wind Energy Association

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Bonn, 9 February 2011

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## Inquiry on the Social and Economic Impact of Rural Wind Farms

WWEA would like to express our strong support for the accelerated deployment of wind energy and especially of rural wind farms in Australia. Wind energy is a sustainable form of energy and has the potential to contribute substantially to the solution of the three major crises which mankind is facing today: the economic crisis, the energy crisis and the environmental/climate crisis.

WWEA is a non-profit organisation with the aim to promote the utilisation of wind energy all over the world, as part of an energy supply system completely based on renewable energy. Today, WWEA has members in almost 100 countries on all continents and thus comprises a very broad network of experts and expertise on all aspects of wind energy utilisation.

As indicated, wind energy utilisation offers a number of major benefits:

- Wind power is a safe form of electricity generation which can provide electricity at predictable and low prices.
- Wind energy is a domestic and renewable energy source which contributes to security of energy supply.
- And wind energy is an emission-free form of energy utilisation without direct emissions and with very low negative impacts on the environment.

At the same time it is important to state that wind energy is a decentralised form of energy and has to be harvested in a decentralised way. Hence generation of electricity from wind requires different structures than conventional and more centralised sources of electricity generation, such as coal, gas or uranium. This decentralised character not only requires new technical solutions e.g. in terms of grid integration, but also offers major opportunities and new income sources especially for rural areas where the wind farms are situated.

Considering the special emphasis of your inquiry on such rural areas, we would like to draw the attention especially towards wind farms which are owned by local communities. Such ownership can be in the hands of a variety of local stakeholders, whether they are farmers, cooperatives, independent power producers, financial institutions, municipalities, schools, etc.

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WWEA calls such local ownership "Community Power" (CP) and sees it as a very important tool to speed up wind energy deployment, by mobilising local citizens to invest in wind farms, by providing the economic benefits of wind power to the local communities and thus by eventually enhancing the social acceptance and active support for wind energy utilisation throughout local communities.

Local ownership especially of wind farms is not a new phenomenon, in fact, in Denmark such approach has been promoted by government through various initiatives and incentives since the mid 1970's. Other countries, mainly in Europe, such as Germany, have followed the Danish example.

Today, community owned wind farms are getting more and more common around the world. Outside Europe, community wind farms can be found in countries like Canada, the USA, or Japan, and even in several developing countries like South Africa community driven projects are on the way. Several jurisdictions around the world have started to set up special incentives for community ownership, like the Canadian province Ontario which can be regarded as one of the leaders in political support for community power.

Beside from theoretical assumptions, recent empirical studies have clearly demonstrated that in the case of local ownership significantly higher support for wind farms can be observed. It is very important to understand the results of two comparative studies, one from Scotland<sup>1</sup>, the other one from Germany (about to be published in the near future) who asked local citizens for social acceptance of two wind farms in their neighbourhood, one owned by a foreign investor, the other one by the local community. It is important to state that in both studies, the general acceptance of both wind farms was high. And it is very interesting to see that in the case of the community owned wind farm the acceptance was significantly higher.

In the Scottish case, 50% of citizens living nearby the CP wind farm saw a "very positive" visual effect of the wind farm on the landscape, and still 20% saw such "very positive" and another 30% a "positive" effect in the case of the non-CP project. The "very negative" perception of the wind turbines in both cases was below 5%. 95% of the citizens living close to the CP wind farm supported the increased use of wind power, in the non-CP case still 68% had such positive attitude.

The German study came to very similar results.

There is no scientific indication that wind farms cause any health problems for people living nearby wind farms, given that the wind farm planning is done in a proper way. Of course in a psychological perspective, generally negative attitudes of individual persons against wind turbines can cause negative emotions and feelings of inconvenience. It is important to understand that the broad social support for a wind farm within a community can reduce and minimise such effects.

In conclusion, it can be stated that close involvement and especially ownership of wind farms which goes hand in hand with distribution of the related economic benefits of a wind farm to local communities increases the general social support for this sustainable form of electricity generation.

WWEA e.V. – Charles-de-Gaulle-Str. 5 – 53113 Bonn – Germany Registered at AG Bonn: 20 VR 8163, Tax number: 205/5771/0538 President: Dr. Anil Kane Secretary General: Stefan Gsänger

<sup>&</sup>lt;sup>1</sup> "Does community ownership affect public attitudes to wind energy? A case study from south-west Scotland", by Charles R. Warren, Malcolm McFadyen, School of Geography & Geosciences, University of St Andrews, published 2010.

Considering the manifold general and specific benefits of wind power utilisation and especially of those wind farms owned by local communities, WWEA would like to encourage all policymakers in Australia to strengthen their support and the related political frameworks for an accelerated implementation of wind farms, especially taking into account the needs of citizens and local communities to become initiators and owners of such projects.

WWEA will be pleased to provide further advice and information, should this be requested.

With kind regards

Stefan Gsänger Secretary General World Wind Energy Association

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