DRAFT Annual Report 2011

Task 28 Social Acceptance of Wind Energy Projects

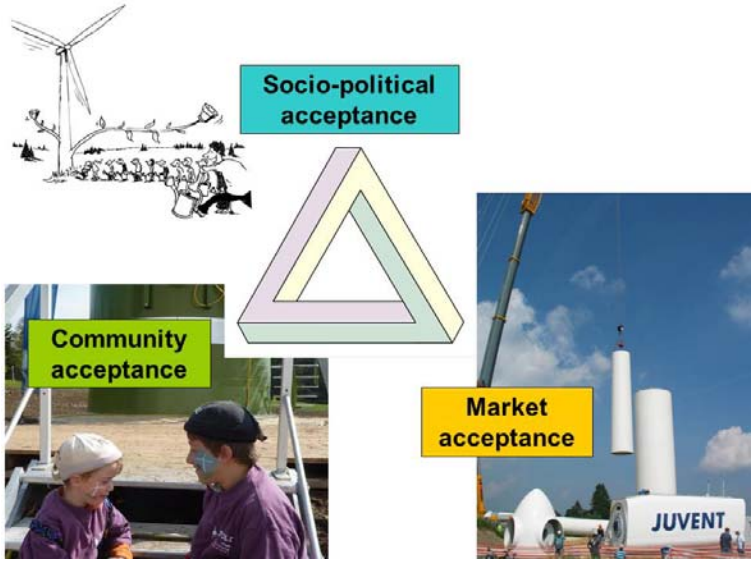

Figure 1: The three dimensions of acceptance (1) around the endless triangle (2, 3)

1.0 Introduction

Renewable energies have a lot of technical aspects that still offer a lot of possibilities for optimization and improvement, for example efficiency or materials. Far off-shore wind and marine energy technologies are still at the beginning of large-scale development. "Social" or "public acceptance" topics on the other hand are non-technical issues and therefore much harder to grasp than technical issues. This means to understand the real concerns behind the opposition to renewable energy technologies or to transmission infrastructure, but also to address the issues and to find viable solutions. Rational arguments may not reach the counterpart, emissions are felt subjectively and there are many different stakeholders involved. Wüstenhagen et al. 2007 (1) tried to capture those actor groups in three dimensions (Figure 1): Socio-political acceptance is about the decision and opinion makers, regional or national institutions, organizations and general opinion, while market acceptance comprises the wind industry, project developers, operators, but also the grid companies, investors and the power consumer. Community acceptance includes the host communities with their manifold interests and population groups. Hansen 2011 (2) proposed the endless triangle in between the groups to symbolize the interactions and interdependencies between them. The endless triangle also highlights the need to take all three stakeholder groups into account as acceptance on a public, market and community level is necessary to set up projects.

IEA Wind Task 28 has been set up three years ago as an interdisciplinary and trans-national working group to consolidate and review the current research and to exchange regional experience with experts from other countries. The diverse background of disciplines, experience and regional framework from Europe, Northern America and Japan (Table 1) enabled a broad view on the issues of wind energy acceptance and is intended to help practitioners, politicians and communities alike to improve the projects and to make them acceptable to a broad majority.

Table 1 Countries and Organizations Participating in Task 28 during 2011

	Country	Institution(s)
1	Canada	Natural Resources Canada, CANMET Energy Technology Centre; University of Québec at Montréal
2	Denmark	Danish Energy Authority; Ministry of Climate and Energy
3	Finland	Finnish Funding Agency for Technology and Innovation, Energy and Environment Industries (TEKES); wpd Finland oy
4	Germany	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety; Martin Luther University; Otto von-Guericke University
5	Ireland	Sustainable Energy Ireland
6	Japan	National Institute of Advanced Industrial Science and Technology; University of Tokyo
7	Norway	Norwegian Water Resources and Energy Directorate; Enova SF; Norwegian University of Science and Technology, Centre for Energy and Society
8	Switzerland	Federal Department of the Environment, Transport, Energy and Communications, Swiss Federal Office of Energy; ENCO Energie Consulting AG, Wind department
9	The Netherlands	Agentschap NL, NL Energy and Climate
10	United States	U.S. Department of Energy, National Renewable Energy Laboratory Wind Technology Center

2.0 Objectives and Strategy

IEA Wind Task 28 aims at assisting participating countries in reaching their ambitious renewable energy goals and the industry in getting their wind parks built. The exchange should result in the translation of current knowledge into the language of developers, planners, administrative bodies and communities to bring forward wind energy projects. The current activities, based on the three work packages proposed (Figure 2), are concentrating on:

- International forum for exchange of knowledge and experiences related to social acceptance and other societal issues of wind energy development: working group meeting regularly and national experts gathering in connection with the working group meetings
- Based on the knowledge of the State-of-the-Art Report, Good Practice Recommendations have been developed and will be published in 2012 as an excerpt of the three year exchange.
- Dissemination activities have been developed successively in the last three years including working group members promoting the knowledge gained in their work and within the international forum in presentations and papers. The Operating Agent explicitly passed the results of the Task`s work on by presentations, workshops and publications.

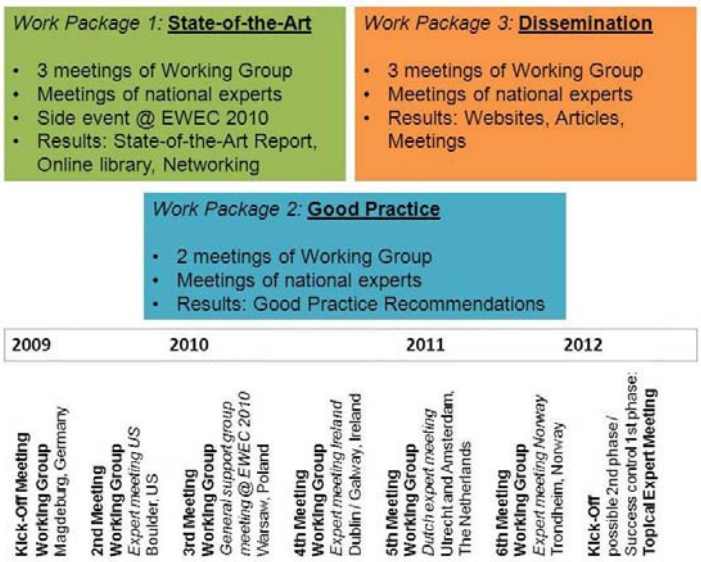

Figure 2 Schedule, work packages, and anticipated results of Task 28

The structure of social acceptance issues developed at the beginning of Task 28`s work has been retained for all following discussions, but has been refined and elaborated (Figure 3):

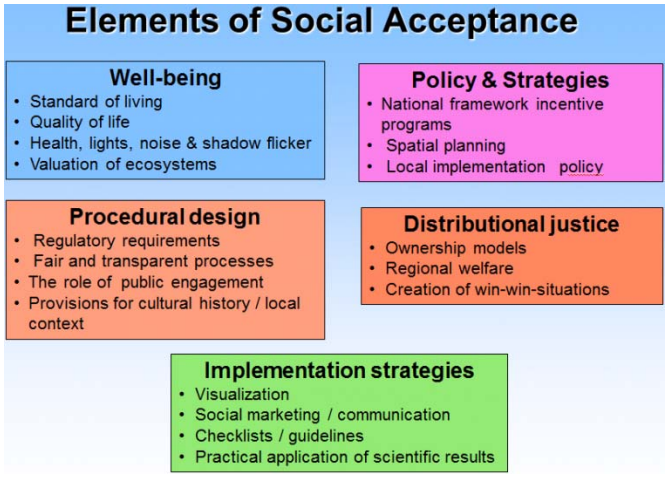

Figure 3: Elements of Social Acceptance (of wind energy) as collected by IEA Wind Task 28

3.0 Progress in 2011

2011 was marked by discussions on “Good Practice Recommendations” as the second result of the Task`s work and dissemination by working group members and the Operating Agent.

The “Good Practice Recommendations” was already broached in 2010, but the two meetings in 2011 centered on the elaboration of this report and gave the working group time to work on them in detail:

- Fifth working group meeting in Utrecht, the Netherlands (spring 2011)
- Sixth working group meeting in Trondheim, Norway (autumn 2011).

Both meetings were connected with half-day meetings of national practitioners and researchers.

A further web meeting was hold in September to prepare the autumn meeting and to keep the working group members up-to-date in a more interactive form than the regular mailings by the Operating Agent could offer.

The Operating Agent and working group members also maintained contacts with experts from non-Task countries, some of them living in IEA Wind countries and therefore maybe being able to participate in a possible second phase of IEA Wind Task 28. The Operating Agent also answered several queries on the issue of social acceptance from around the world or placed social acceptance experts as speakers for conferences.

The dissemination activities of working group members and the Operating Agent included in 2011:
Participation at the IEA Wind side event at EWEA 2011, by Eric Lantz, NREL
Input to an IEA expert`s group on R&D priority setting and evaluation, by Stefanie Huber, ENCO AG
Publication for "Wiley Interdisciplinary Reviews: Energy and Environment", "Large-scale wind deployment", social acceptance, by Robert Horbaty, Stefanie Huber, ENCO AG, and Geraint Ellis, Queen`s University Belfast (in review)
Publication as a book chapter in "Learning from Wind Power: Governance, Societal and Policy Perspectives on Sustainable Energy", "Social Acceptance of Wind Energy Projects: Learning from Trans-national experience", by Stefanie Huber, Robert Horbaty, ENCO AG, Geraint Ellis, Queen`s University Belfast (in review)
Presentation at the 10th wind energy symposium in St. Pölten, Austria, by Jan Hildebrand Zoellner, Otto-von-Guericke-University Magdeburg
Presentation at a bilateral South Africa training event in Johannesburg, by Gundula Hübner, Martin-Luther-University Halle-Wittenberg
Interview for the "Wind Directions" magazine of EWEA, by Stefanie Huber, ENCO AG
Interview for the "Les affaires" journal on social acceptance issues, by Maya Jegen, University of Québec
Publication in the "Bulletin" magazine of the Swiss electricity branch, by Stefanie Huber, ENCO AG, Markus Geissman, Swiss Federal Office of Energy
Results from IEA Wind Task 28 work were also integrated in publications by Gundula Hübner in German publications on acceptance of renewable energies.

The website and the web database were regularly updated and include all available public publications and presentations of IEA Wind Task 28. Amongst others, the dissemination and link page were elaborated.
The working group also discussed a presence on social media, but decided on rather focusing on the production of relevant knowledge and passing this knowledge onto practitioners and institutions.

The visits on the website, www.socialacceptance.ch, developed as shown in Figure 4. The visitors continuously increased during the first three-year period. Very interesting to see is the peak in spring / summer 2011, the time of the events in Fukushima and the redefinition of energy policy in several countries.

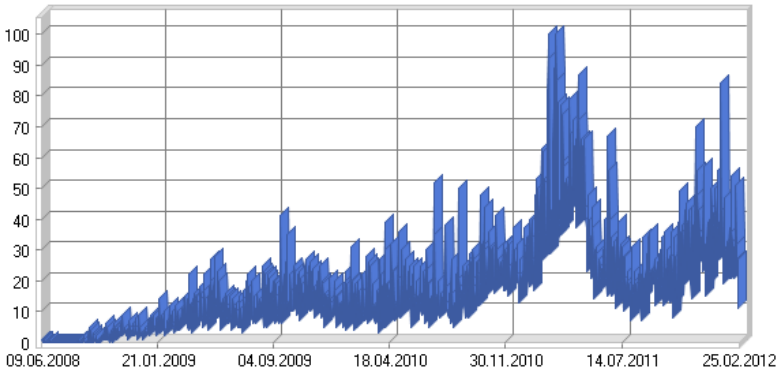

Figure 4: Development of daily visitors on www.socialacceptance.ch between summer 2008 and February 2012, the running time of IEA Wind Task 28

3.0 Plans for 2012 and beyond

In 2012, the final report of IEA Wind Task 28 will be finished and presented to IEA Wind ExCo together with the final proposal on the possible continuation of IEA Wind Task 28 with a second three-year period.

Discussion on a possible continuation of the task already started and a short proposal on the possible second phase was already discussed in autumn with the IEA Wind ExCo.

Interesting topics for the next three year period include: Measurement and monitoring resp. quantification / valuation, assessment of the magnitude of the issue and tracking of developments; support for the establishment of policies and standards; successful supporting structures; discussion of current and new issues influencing social acceptance that are being debated in the participating countries and stressing of research gaps; deduction and dissemination of the lessons learned, good practices, successful strategies etc.

The working group would also like to include new participating countries from IEA Wind. It would be especially useful to have more countries from Asia and other continents to broaden the experience also to developing countries. The core element of Task 28 with a working group meeting regularly and connected national expert meetings should be continued. Already planned is a meeting in summer 2012 where a “success control” of the first phase and the kick-off for the next phase should be combined around a Topical Expert Meeting (IEA Wind Task 11) in Switzerland.

Further, the publications in review / press will be accompanied till publication.

References:

(1) Wüstenhagen, R. et al. (2007). "Social Acceptance of Renewable Energy Innovation - an Introduction to the Concept." Energy Policy 35(5): 2683
(2) Presentation by Hansen G. H. on the national expert meeting in Trondheim, autumn 2011
(3) http://measureofdoubt.files.wordpress.com/2011/11/imp-triangle-drawing.png

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