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Status quo of social acceptance strategies and practices in the wind industry

Fraunhofer ISI

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Abstract

Wind is the most mature of the existing Renewable Energy System (RES) technologies and it is expected to play a fundamental role towards the transition to a new energy system. European citizens are generally in favour of wind energy, however, on a local level wind farm developers often meet opposition. Thus, aspects of social acceptance and how to conduct public participation for wind energy projects is a key challenge. As part of the WISE Power project, this report summarises the findings from an expert survey across Europe in order to map the status quo of these issues in wind farm development.

207 questionnaires from 13 countries were assembled interviewing representatives from administration, project developers, cooperatives, environmental organisations, financial institutions and other active in the field of wind farm development. We find a high prevalence of social acceptance issues in the sample as the majority of study participants has experienced stops or at least delays of projects due to a lack of social acceptance and negative reactions are reported far more often than positive ones. However, it is also the common procedure in wind energy project development to engage in public participation often exceeding legal prescriptions. The main arguments raised against wind farms are the visual impact on landscapes followed by noise and the impact on the local ecosystem and wildlife. On the positive side, the local economic benefits as well as CO_2 emissions reductions are seen as the most relevant. This can be understood that it might be helpful to also further strengthen the economics benefits on the local level to support social acceptance. Furthermore shared ownership, community benefits and involvement of the community in the design process are all perceived as helping measures to foster social acceptance. However they warrant careful implementation. Although public participation is frequent in wind energy projects many organisations involved do not have a standard procedure to deal with it and guidelines and other advice giving documents are often not known nor used. The main barrier to apply this knowledge seems to be the difficulty to transfer it to the specific conditions of a project.

Regarding different levels of public participation, respondents seem to be more in favour of consultation and dialogue as well as informational measures; empowerment of the public is evaluated differently by the respondents. So far, recent experience with public participation concentrate on the phases of permitting, construction and operation. Thus, extending public participation to the preparation phase or later project phases is an issue that requires further attention. When study respondents provide feedback on where they would appreciate input the need for balanced information sticks out.

The results of this report will form the basis for the Social Acceptance Pathways (SAPs) which are to be developed in the future work packages of the WISE Power project.

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The analysis provided in this publication is based on questionnaire based interviews with 207 experts from project developers, administrative bodies and other authorities, cooperatives, financial institutions and other relevant stakeholders involved in wind energy projects from 13 European countries. However, the answers provided are subjective opinions which means that findings and conclusions may not be representative at a larger scale.

WISE Power project partners

- European Wind Energy Association – EWEA (BE) (Coordinator)
- Acciona Energia - Acciona (ES)
- Terna Energy – Terna (GR)
- Scottish Government (UK)
- Comhairle nan Eilean Siar, Regional Authority for the Outer Hebrides in Scotland – (UK)
- Municipality of Guldborgsund - (DK)
- Provincia di Savona (IT)
- DUNEA l.l.c. Regional Development Agency Dubrovnik Neretva County – DUNEA (HR)
- Association pour la Promotion des Énergies Renouvelables -APERe (BE)
- Asociación Empresarial Eólica - AEE (ES)
- REScoop.be (BE)
- Fraunhofer ISI – Fraunhofer (DE)
- German Energy Agency - dena (DE)
- United Nations Development Programme Croatia - UNDP Croatia (HR)

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- DE = Germany
- DK = Denmark
- EL = Greece
- ES = Spain
- FI = Finland
- FL = Flanders, Belgium.
- FR = France
- HR = Croatia
- IE = Ireland
- IT = Italy
- PL = Poland
- RO = Romania
- UK = United Kingdom
- WAL = Wallonia, Belgium

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Wind Barriers

Intelligent Energy Europe project aimed at gathering up to date and comprehensive information on the administrative and grid access barriers that obstruct the development of wind energy in Europe. The project started on 01 December 2008 and came to an end on 30 November 2010

GP Wind

Intelligent Energy Europe project launched in August 2010 and finalised in October 2012. The project was aimed at addressing barriers to the deployment of onshore and offshore wind energy generation, by recording and sharing good practice in reconciling renewable energy objectives with wider environmental objectives and actively involving communities in planning and implementation.

1 Introduction

For the EU to meet its 2020 climate and energy security targets, increased deployment of renewable energy generation and extensions to electricity infrastructure are necessary. Wind is the most mature of the existing renewable energy technologies. It is expected to play a fundamental role for the EU to reach its 2020 climate and energy targets. Moreover, beyond 2020, wind energy will be the key technology in all EU energy scenarios (Energy Roadmap 2050 of the European Commission, 2011). Generally speaking, European citizens are in favour of wind energy (Eurobarometer 2007, Eurobarometer 2011). They also support the EU goal of moving away from conventional electricity generation towards renewable power. However, on a local level, project developers are repeatedly confronted with criticism and opposition (Windbarriers 2010). This lack of public supports has the effect that over 20 % of wind energy projects are delayed and nearly 20 % are seriously threatened due to appeals (Windbarriers 2010). Thus, dealing with social acceptance for wind energy infrastructure is a necessity for all stakeholders involved in wind energy projects. Several studies and projects (e.g. Wind Barriers, GP Wind, "Akzeptanz der Offshore-Windenergienutzung") have analysed issues around social acceptance of wind energy and advice giving documents have extensively been compiled by a variety of institutions for dealing with and often fostering acceptance for wind energy. In order to gain an overview of these advice giving documents the deliverable 2.1 of the WISE Power project provides a summary of up to date guidelines, best practices, toolkits and research papers on fostering social acceptance. The document consolidated research to date on social acceptance and the development of social acceptance strategies, expounding among others, the perceived benefits and disadvantages of wind power (e.g. IEA 2013), engagement along the project life-cycle (e.g. IEA 2013), contextual analyses (e.g. Jobert A. et al. 2007; Centre for Sustainable Energy-CSE 2009), stakeholder identification and mapping (e.g. Local energy Scotland 2014), technical requirements and furthermore procedural (e.g. Gross 2007) and distributional (e.g. Aitken 2010;CSE 2009) justice issues. Apart from that the following gaps, weaknesses and contradictions have been identified:

- Most guidelines and toolkits available so far focus on the time frame between site selection and start of operation. Social acceptance during the operation phase and especially in the later phases of decommissioning & repowering are rarely addressed.
- While a vast amount of guidelines and toolkits have been published, there has been little evaluation of which documents and specific measures are employed by developers and have led to positive effects.

- Many toolkits focus on the relationship between the developer and the (local) public. Other relationships such as developer-municipal administration or local decision makers have not received great scrutiny to date.
- Most toolkits state that very early involvement of the local community is one of the key conditions for successful development of a wind farm. While this might be true from a social acceptance viewpoint, this approach might neglect the competitive business side, where it is important to be the first in securing a site.
- Much of the work carried out in assessing social opinion regarding a wind farm is focused on collecting complaints and negative comments. Where advice is given on social acceptance, it is generally focused on increasing acceptance levels from a very low starting point. There is a lack of research into high levels of support from a community for a wind farm proposal.

The aim of this work task is to look at how far best practices, strategies and toolkits are known and applied by the wind industry and other stakeholders. It also explores barriers to their application and where, generally, the greatest need for input and knowledge is required with regard to social acceptance activities by the relevant stakeholders. Thus, it maps the status quo and identifies the most relevant gaps between theory and practice. This is done based on an expert survey across 13 European countries. For this survey a questionnaire was developed by the WISE Power consortium in summer 2014 and 207 completed questionnaires from stakeholders were gathered in Winter 2014/15. This report now presents the main findings from this data collection and is structured as follows:

- Methodology,
- Analysis of the data generated,
- Discussion of findings and limitations
- Conclusions.

First, the **methodology** applied is presented in more detail. The structure of the questionnaire and the data collection process are described. Next, a general overview of the distribution of the structure variables is given. In the **analysis** chapter, - the lack of social acceptance and its impacts on project management is outlined. Then the status quo regarding public participation processes around wind farms is described in more detail. This also includes mapping in how far standard procedures and the utilisation of guidelines is relevant for today's practice in this field. The analysis chapter closes with results about stated needs for support when dealing with social acceptance. The **findings and limitations** chapter discusses the insights gained from the data analysis and the limitations within the applied methodology are discussed. The last chapter contains general **conclusions** and suggestions for

developing the social acceptance pathways that are due to be developed over the course of the future work packages within the WISE Power project and beyond.

2 Methodology

2.1 Questionnaire and Procedure

The methodology applied to assess the status quo of activities utilising and implementing social acceptance measures in Europe consisted of an expert survey based on a questionnaire. This questionnaire involved both closed and open questions and was divided into the following five parts:

1. Background questions about the organisational affiliation of the person interviewed
2. General experience and evaluation of activities in the respondent's country regarding public participation and social acceptance
3. Activities regarding public participation and social acceptance of the respondent's organisation
4. Evaluation of the potential of innovative funding models on social acceptance
5. Further issues e.g. interest in receiving further information on the project

This report will assess and analyse existing approaches pertaining to non-financial social acceptance methods. The data and findings concerning the potential of innovative funding models are compiled in detail in a separate report as part of task 3.1 of the WISE Power project ("Report on innovative financing models for wind farms" which can be accessed at http://wisepower-project.eu/). As the questionnaire covered a variety of topics, it was created in a modular way so that it could be individually adapted to the field of expertise of the respective respondents. This modular approach is also the reason why the size of the groups analysed varies between variables. The study focused on 13 European countries. When selecting the countries the market categorisation used in the WindBarriers project was applied and such countries were chosen to adequately cover-different stages of market development (WindBarriers, 2010, S. 57)[1].

- **Developed markets** are those where wind power "already provides a significant share of electricity. Growth is steady and the necessary transport and grid infrastructure is in place. Repowering will become widespread in these markets." Offshore development has begun in most of these countries.
  Covered by Denmark, Germany, UK[2] and Spain.
- **Growth markets** are defined as markets that "have high growth combined with a steady project flow, and are Europe's current main driver for growth. In some of these markets, wind covers a a good share of the electricity demand, but considerable growth is still possible.

[1] The WindBarriers project also used a fourth category, so called "unexploited markets". However, due to the very early market stage in these countries they are not part of this analysis.

[2] The data generated in representing the UK was mainly collected in Scotland.

Covered by Greece, France, Italy, Ireland and Belgium[3]

- **Emerging markets** distinguish themselves as those which "have a low level of wind energy capacity installed at present, but higher growth has begun and penetration levels are raising rapidly. However, application processes have not yet been streamlined."
  Covered by Croatia, Finland, Poland and Romania.

The target group of experts to be interviewed within each country was composed out of the following five groups (the respective goals for the data collection are stated in brackets):

- **Project developers** including commercial developers and other parties, e.g. farmers/citizens (up to 5 per country),
- **Administrative bodies and other authorities** concerned with permissions for wind farms (up to 3 per country),
- **Cooperatives** involved in wind projects (up to 3 per country),
- **Financial institutions** e.g. representatives from bank associations, funding agencies (up to 3 per country),
- **Further relevant actors** e.g. environmental organisations ('others' in the following - up to 3 per country)[4].

These groups were chosen in order to provide a comprehensive picture of the issues under study for each country by combining different perspectives of wind energy project development. The questionnaire was drafted in English and then translated into national languages by the partners who were responsible for the data collection. Potential participants were contacted via mail or phone and then either directly interviewed on the phone or filled in PDF-version of the questionnaire on the computer or on paper. The filled-in questionnaires were sent back to Fraunhofer ISI to compile the data set and conduct the analysis.

2.2 Description of data set

For the survey 466 potential respondents were contacted within the 13 target countries. From this group the consortium was able to obtain 207 completed questionnaires (Figure 1). On average, 15 questionnaires per country were obtained, accumulating to a response rate of 44 %.

[3] As the policy in place in Belgium differentiates considerably between the two main regions (Wallonia and Flanders) they will appear separately in all upcoming graphs.

[4] Finally there had been collected 21 completed questionnaires from environmental organisations. Therefore they will be displayed further on as a separate group.

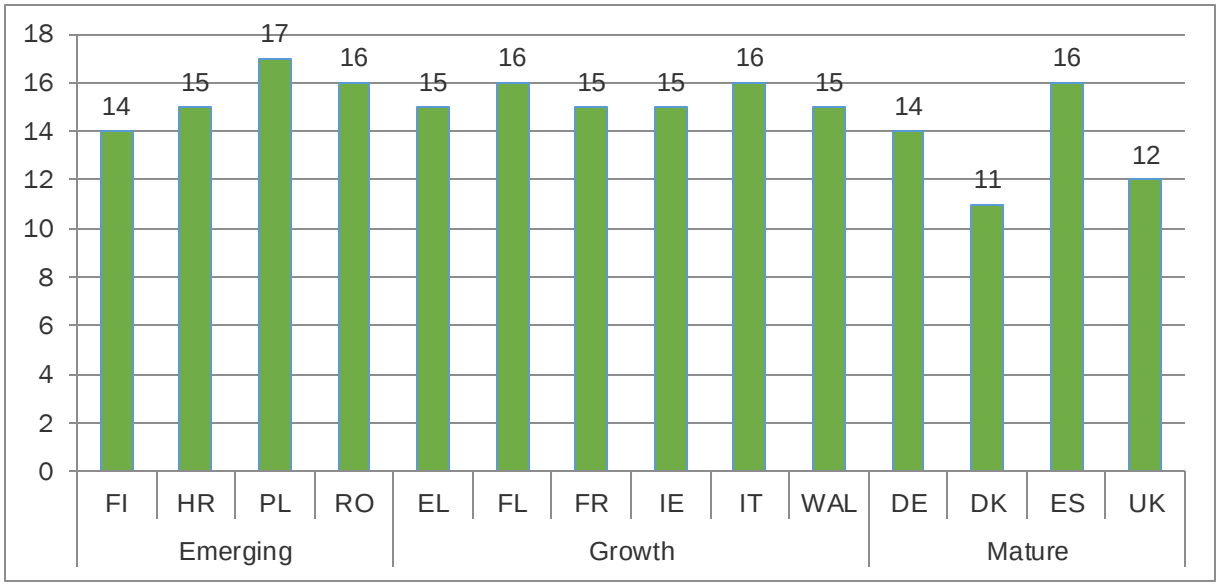

Figure 1. Number of completed questionnaires by country

63 questionnaires out of the 207 were completed by project developers and between 17 and 36 questionnaires by each of the other target groups (Figure 2).

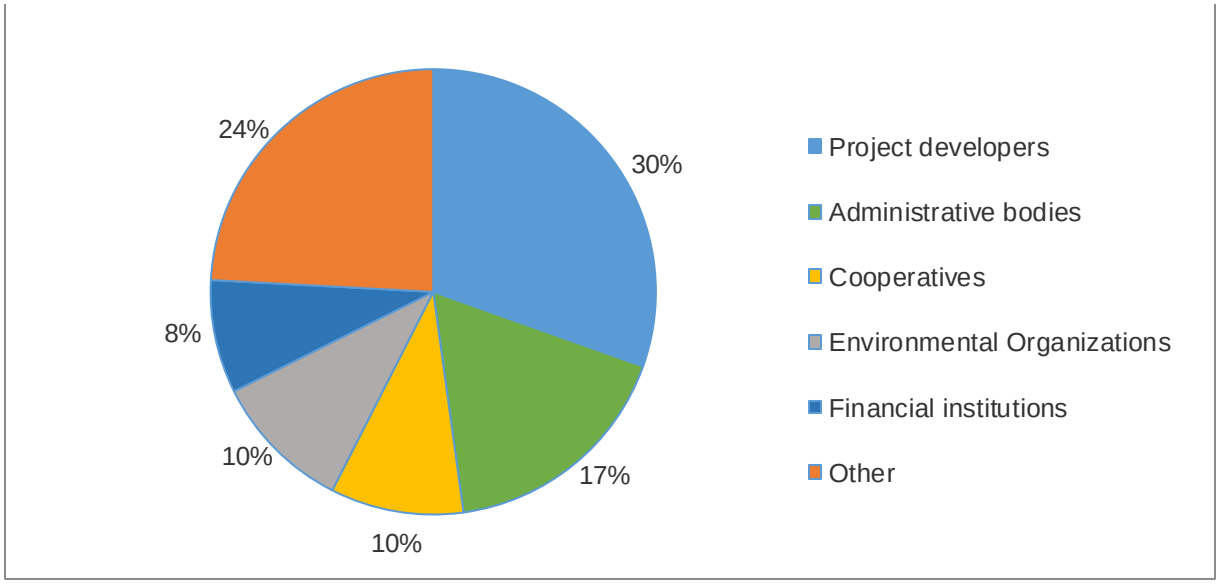

Figure 2. Organisational affiliation of the respondents

Thus, the share of interviewed project developers corresponds to the specifications for data collection; for all other groups a smaller amount of respondents is included which is outweighed by a higher number of respondents in the 'other' group. Thus, on a European level, the expert sample covers a broad range of relevant stakeholders and, therefore, should be able to adequately represent the subject under study. Furthermore, not all categories were covered according to plan in all countries. Cooperatives (missing in Spain, Poland, Romania, Finland and Croatia) and financial institutions (missing in Denmark, United Kingdom and Italy) proved to be most difficult to identify and survey. In

the case of cooperatives, this is due to the fact that cooperatives are not or hardly active in wind energy project development in these countries. Overall, that comparative analysis on a country-level is only meaningful to a very limited extent. Regarding wind market development, 53 respondents came from countries with mature markets, 92 respondents came from growth market countries and 62 came from countries with emerging wind power markets (Figure 3). The distribution of respondents' organisational affiliations is not equal across market development status. The main difference is the number of respondents belonging to the 'other' category which is higher in growth (25 %) and emerging markets (32 %) than in the sample from mature markets (13 %). Furthermore, no representative from a cooperative was interviewed from a country categorised as emerging market while cooperatives have a share of 17 % in the sample from growth markets and 8 % in mature market. Also the share of project developers is nearly twice as high in mature markets (40 %) than in growth markets (23 %) with emerging markets ranging in between (34 %). These differences have to be kept in mind when interpreting results according to market development.

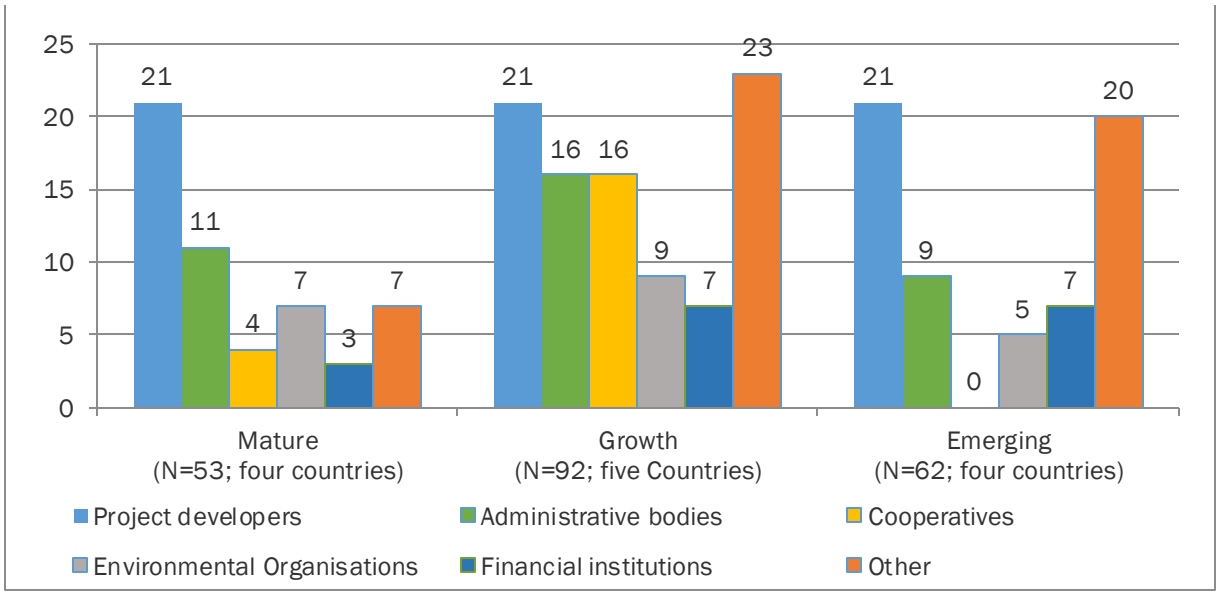

Figure 3. Organisational categories in relation to market development

Project developers & cooperatives: The size and experience of the project developers and cooperatives included in the sample varies strongly, which is mirrored by the number of wind farms, respondents stated that their organisation has been involved - in their respective country in the past three years (2012-2014). This number ranges from zero to over 200 in the case of project developers and from zero to 25 for cooperatives. Almost half of the project developers interviewed are also active with developing other renewable energy projects. Other main activities are planning wind farms, raising funds and funding wind farms, planning and constructing them as well as operating. In the case of the

cooperatives their field of activities includes the same range but is additionally more various. For more details, please refer to the Annex.

Administrative bodies: 36 of the respondents are experts from administrative bodies across Europe. They claim to be active in various areas of responsibility with environmental permits/ impact assessments (64 %) and information and communication activities (58 %) ranging highest and issuing operation permits (19 %) ranging lowest. With regard to the area of responsibility, the majority of experts surveyed works on regional to municipal level (53 %), 28 % on a federal or provincial level and 19 % on a national level. For more details, please refer to the Annex.

Other: This category covers a broad array of organisations including industry association, representatives from academic institutions, subcontractors and consultants of various kinds (e.g. legal advice, architects) or energy agency without being dominated by one of these subcategories.

3 Analysis of the data generated

3.1 Social acceptance as a challenge in wind project development

In order to pin down the relevance of negative impact of the lack of social acceptance on project development those respondents who claimed to have experience with public participation activities were asked about their experiences. From the 51 respondents from administrative bodies, financial institutions, environmental organisations and other relevant actors around half reported that they have experienced delays and/or blockages of wind farm development due to a lack of social acceptance of the proposed wind farms (Figure 4). Conversely 16 % of the respondents have not experienced such impacts and 33 % are not aware of such delays. Focusing on 70 project developers and cooperatives, the following picture is shown, an even higher share has experienced delays and stops of wind farms due to a lack of social acceptance (57 %) while less than a third has not and the share of those not providing a knowledgeable answer is considerably lower (14 %) (Figure 4).

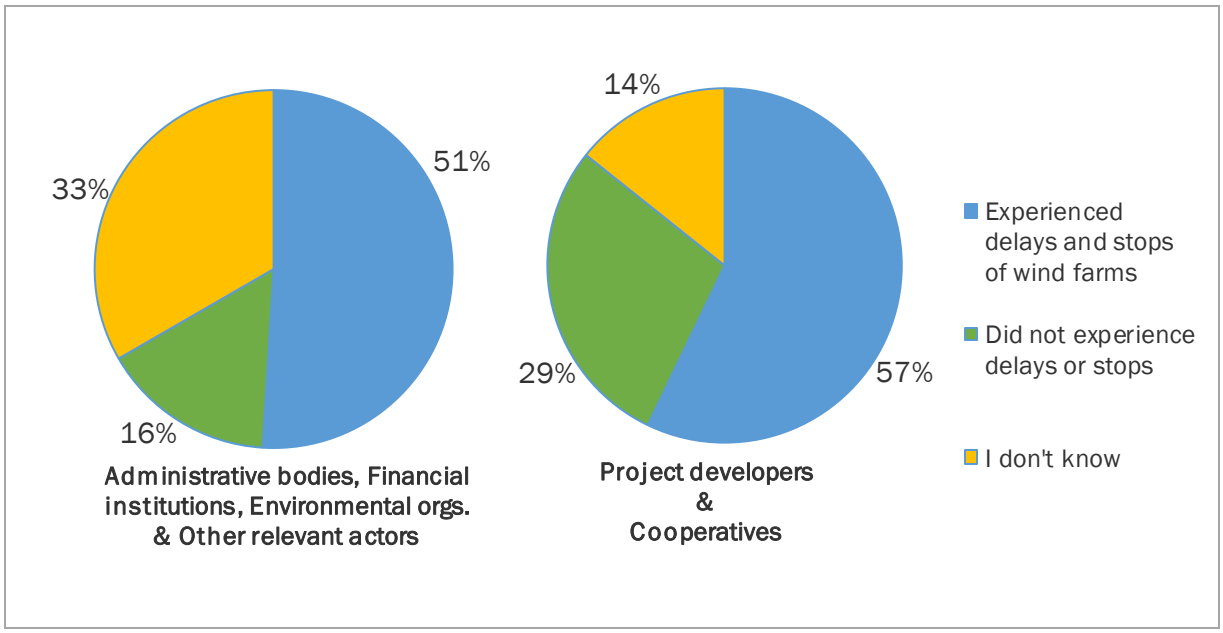

Figure 4. Experience of delays and stops of wind farms due to lack of social acceptance (administrative bodies, financial institutions, environmental orgs .and other relevant actors- N=51; project developers and cooperatives – N=70)

Thus, the data confirms the finding from the WindBarriers project that lack of social acceptance often leads to challenges in development of wind farms and their management. Still, it also points out, that it is not a ubiquitous issue as a considerable share of respondents have not experienced this.

3.2 Policies and activities regarding public participation

When looking at the data displayed in Figure 5, it can be seen that almost half of the respondents (48%) state that there are binding policies in place for public participation during wind farm development. A further third of the respondents state that there are obligatory measures where installations fulfil certain criteria. 15 % state that there are no mandatory elements of public participation in place in their country.

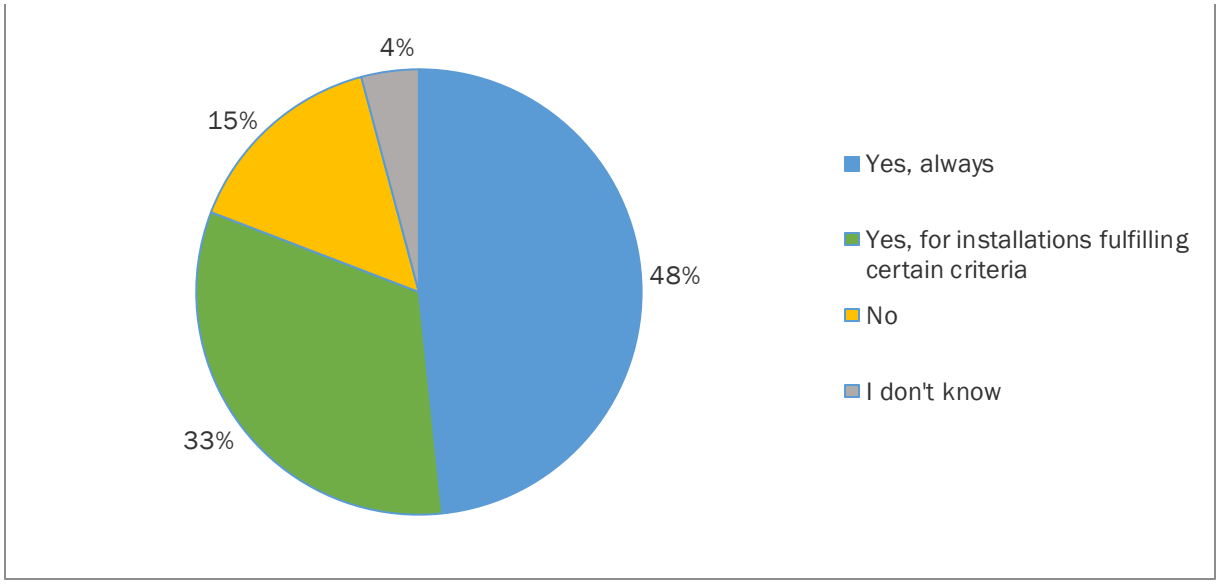

Figure 5. Are elements of public participation obligatory during any phase of wind farm development? (Only respondents who work in organisations that have been directly involved in activities for public participation; N=121)

The comments on the criteria in place are diverse. If an environmental impact assessment (EIA) has to be conducted public participation is mandatory. Furthermore, the obligation often depends on the size and the location (distance to buildings) of the planned wind farm. Regardless of whether public participation is obligatory, two thirds of the respondents report that elements of public participation are always part of the usual procedure (Figure 6). An additional 27 % of the respondents state that elements of public participation are sometimes part of the usual procedure and only 3 % state that public participation is not part of the usual procedure.

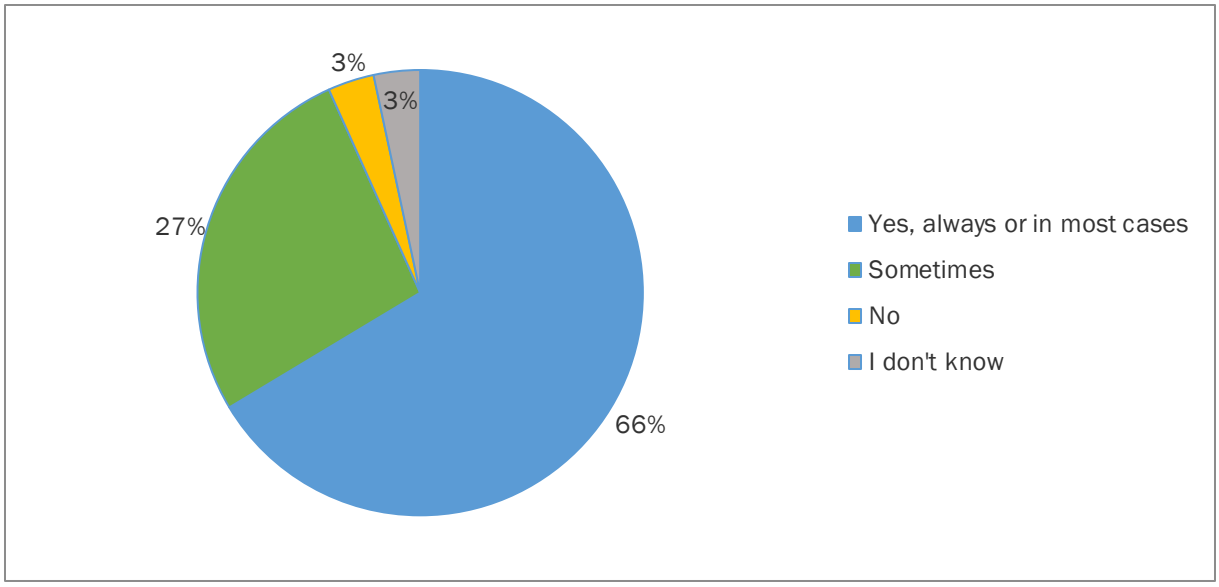

Figure 6. Independent of the fact whether public participation is obligatory, are elements of public participation part of the usual procedure? (Only respondents who work in organisations that have been directly involved in activities for public participation; N=121)

Taking together the two figures, it is shown, that public participation of some kind is usually part of the project development for wind farms and often goes beyond what is prescribed by legislation. This is also mirrored by the fact that 16 out of those 18 respondents that state that public participation is not mandatory point out that some sort of activities are always or at least sometimes put into place. Answers are also similar for respondents from the three categories of market development.

3.3 Reactions to wind power

Respondents were also surveyed about which reactions their company or organisation has experienced in relation to wind power projects in the past three years (2012-2014) (Figure 7). While the majority reported one or more reactions, 17 % of the respondents stated that they have not experienced any public reaction to the wind farms they have been involved in. Overall, negative experiences are reported much more often (if categories from the Figure 7 are summed up they add up to 861 negative reactions and 478 positive ones). However, this is also due to the fact that positive reactions are usually not officially filed. Negative reactions from local citizens, formations of local opponent groups, negative public votes and interference of organised resistance from outside are recorded more often than wind supporting counterparts. In contrast to this, more positive reactions from political stakeholders have been reported on a local level and the media coverage was perceived equally often as negative and positive. About 30% of the respondents have experienced lawsuits which is quite a high number, as they can have significant impact on delaying wind farm projects.

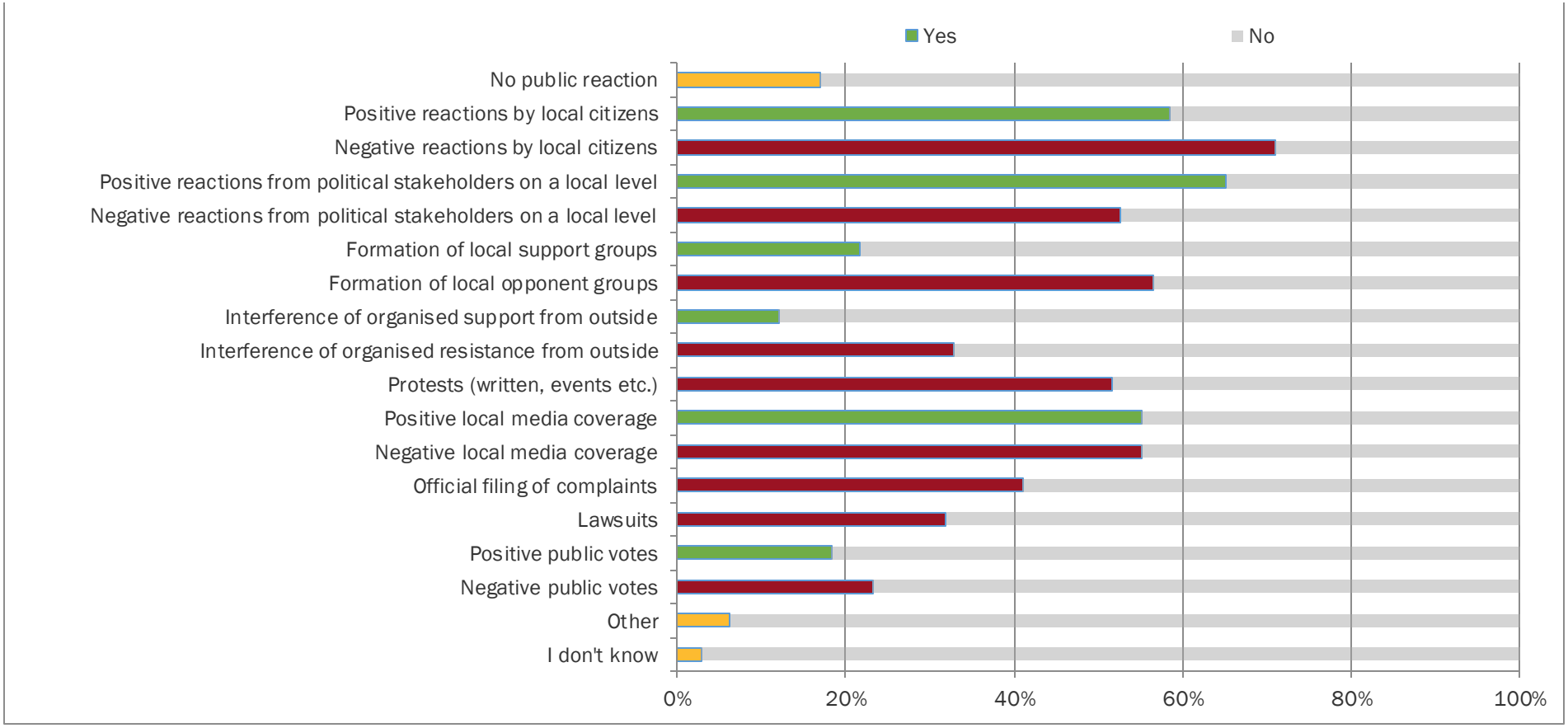

Figure 7. Which of the following reactions has your company or organisation experienced in relation to wind power projects in the past three years? Green=positive reactions; red=negative reactions; orange=other categories.

Other reactions mentioned by the respondents range from a supportive welcome committee at the beginning of wind farm construction, printing of opposing leaflets, emotionally charged reactions during construction activities and council meetings. Further questions more closely analysed the issues – divided into positive and negative arguments – that were under discussion during the projects. Looking at the positive issues raised in relation to wind power, local economic benefits and CO_2-emissions reductions are stated most frequently (Figure 8). Financial benefits for residents, air quality protection and high degree of energy security are also repeatedly discussed. Wind farms as tourist attractions and wind energy as a low risk and innovative technology are given the least relevance in current discussions.

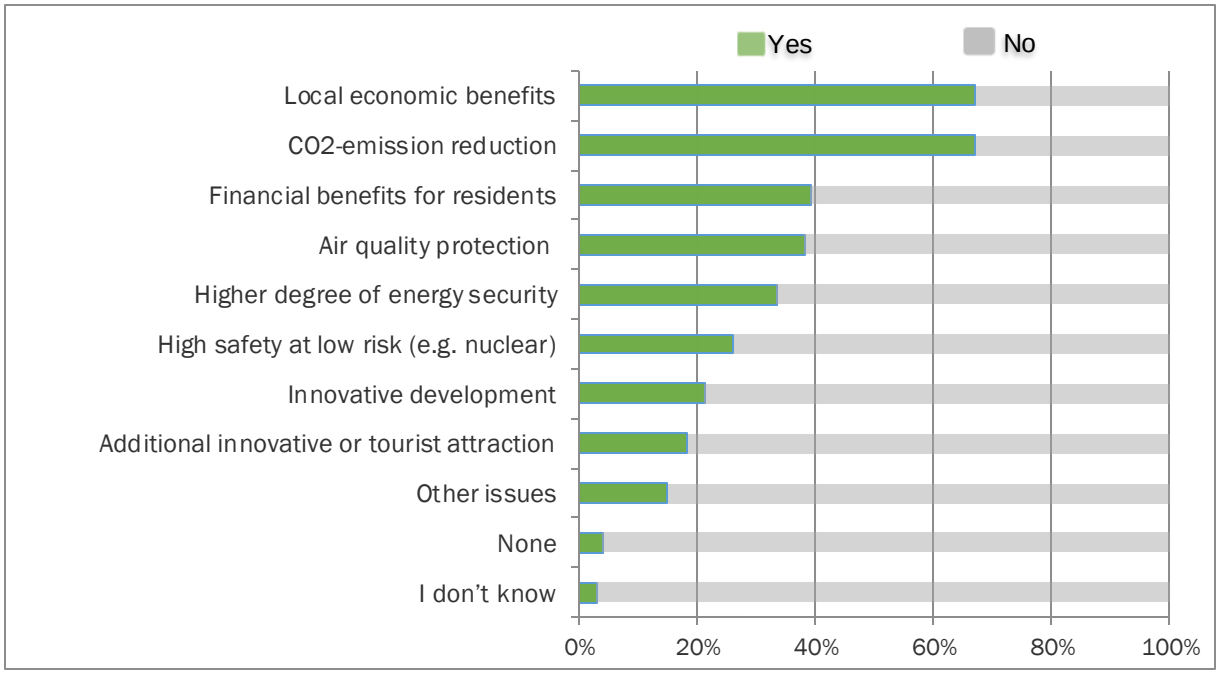

Figure 8. What were the main positive issues raised in relation to wind power projects in the past three years your company or organisation was involved with?

The main negative issues raised in relation to wind power projects are the visual impact on landscapes followed by noise and the impact on the local ecosystem and wildlife (Figure 9). Inefficiency of wind power to reduce CO_2 emissions is a theme which is seldom addressed. This is in line with top ranking pro-arguments. Other topics, which are also seldom addressed, are light emissions at nights, lack of or late provision of information and unfair division of benefits and impacts.

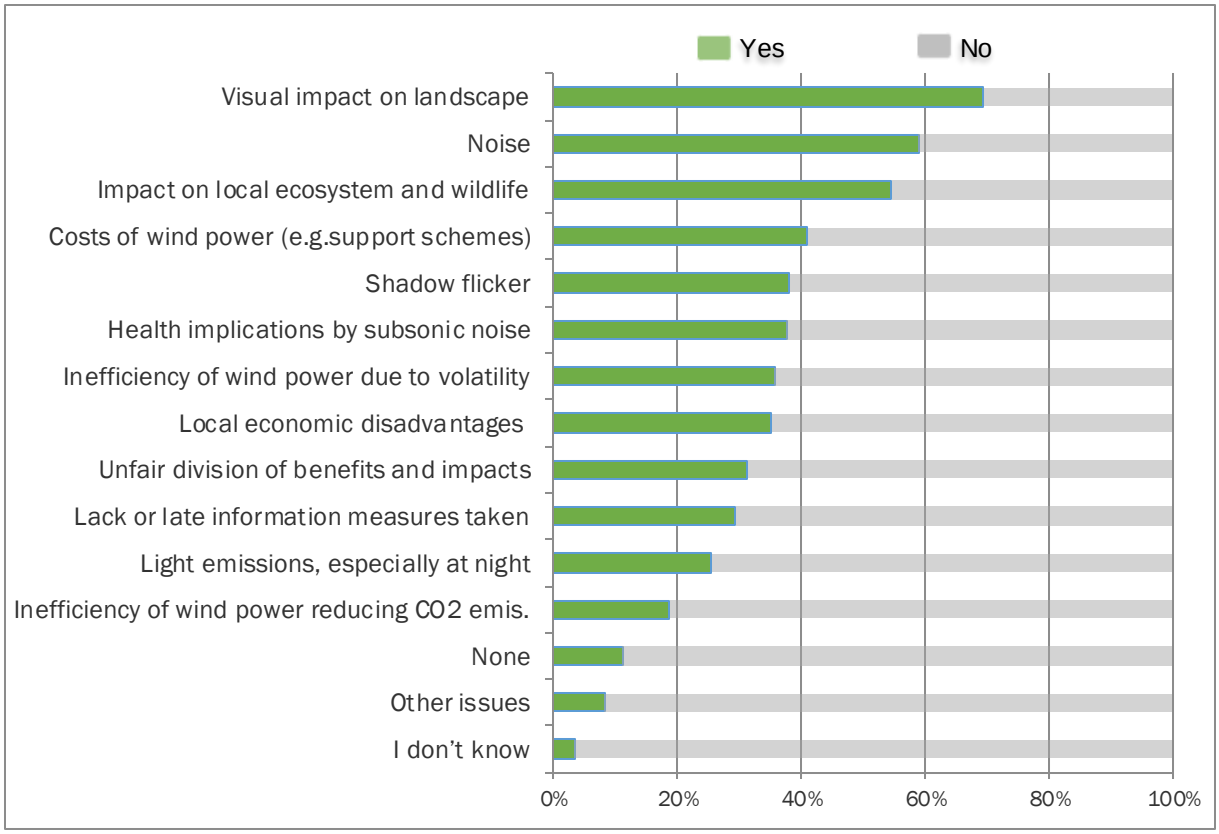

Figure 9. What were the main negative issues raised in relation to wind power projects in the past three years your company or organisation was involved in?

Besides local economic benefits, arguments used to promote wind energy mainly refer to a national or global level. This points to the possible need of highlighting more arguments which make projects more appealing from a local or regional point of view beyond economic issues. This conclusion fits with the findings from the negative side, where visual impacts and noise as well as effects on nature are predominant and financial issues seem less important.

3.4 Successful methods to improve local engagement and foster acceptance

Regarding successful methods to improve local engagements and foster acceptance, the participants were asked whether shared ownership of the wind farm, community benefits or involvement of the community in the designing process can be considered as measures that could contribute to social acceptance. When analysing the data according to market development, it can directly be seen that respondents perceive all of these measures as promising in potentially enhancing social acceptance (Figure 10).

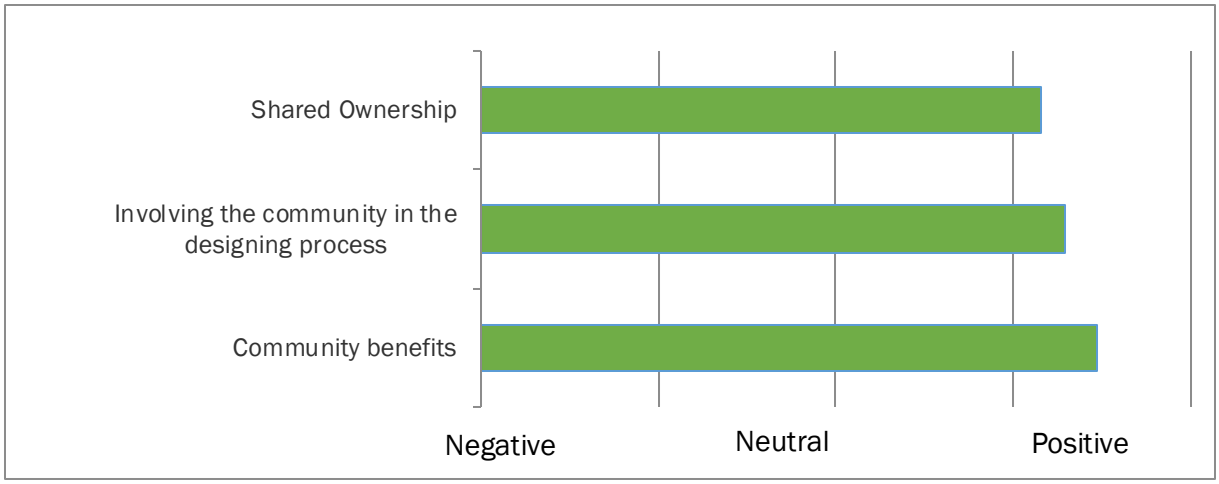

Figure 10. What measures are perceived to contribute to social acceptance for wind power projects? (Shared ownership - N=202; Involving the community in the designing process – N=203; Community benefits – N=203)

Respondents also had the possibility to comment on the different options. Most of these comments towards **shared ownership** are positive, stating that it has the potential to increase social acceptance, however, it is acknowledged by the respondents that shared ownership also means shared risk and thus does not guarantee the absence of opposition, e.g. if a municipality invests into wind projects that could otherwise be invested in by the community, with more direct benefits to the citizens of that community. Another negative aspect of shared ownership which requires individual investment lies in – according to respondents' comments – potentially splitting the community into two groups: one group that is affluent enough to purchase shares of the proposed wind farm and one group that cannot afford to do so.

Community benefits are perceived similarly positive though it was also mentioned that it does not necessarily ensure local community support. On the contrary, some respondents warn that it might turn the initial acceptance into opposition where community benefits are considered as bribery. It is therefore suggested by the respondents that community benefits will have a positive impact on acceptance if they are implemented along with other participation measures; a combination of shared ownership with a benefit package for those without the resources to invest is seen as an ideal solution by the respondents.

Involving the community is seen very positively amongst the respondents that commented on this issue. It minimises the potential for misunderstandings and gives the local population a feeling of being respected and not overlooked. However, the participants also acknowledge the limitations of involving the community as for instance it is not possible to determine the appropriate siting of wind turbines with all members of all stakeholder groups (due to organisational and technical reasons). On top of that, some respondents are convinced that there are a number of individuals in most communities

that cannot be convinced regardless of the level of consultation and information delivered. In addition, it is suggested by the interviewed experts that actions involving the community should be steered by the municipalities seen as neutral institutions rather than by project developers.

3.5 Utilisation of standard procedures (e.g. guidelines, best practices and toolkits)

Further questions asked about internal organisational processes dealing with social acceptance. It turns out that only a third of the respondents report that activities for public participation follow a standard procedure in their organisation (Figure 11). Another 11 % quote that such a procedure exists in their organisation, but that it is not regularly used and another 39 % of the respondents state that it does not exist at all.

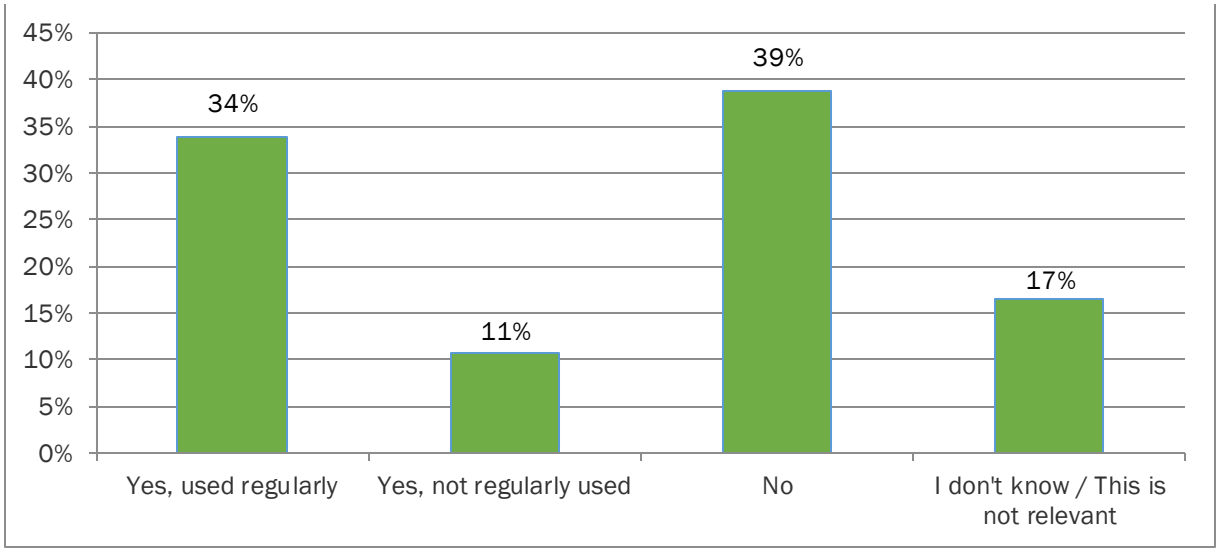

Figure 11. Does your company or organisation have a standard procedure or guideline on how to conduct public participation activities for wind power projects? (Only respondents who work in organisations that have been directly involved in activities for public participation; N=121)

If the scope is focused on the project developers and cooperatives, we find a similar tendency with 39 % indicating the absence of such procedures (Figure 12). Still, only 30 % of them have a standard procedure which is regularly used in conducting participatory activities for wind power projects, i.e. 4 % less than in the overall sample. Beyond that 13 % of the project developers and cooperatives have such procedures at their disposal, however they do not apply them regularly.

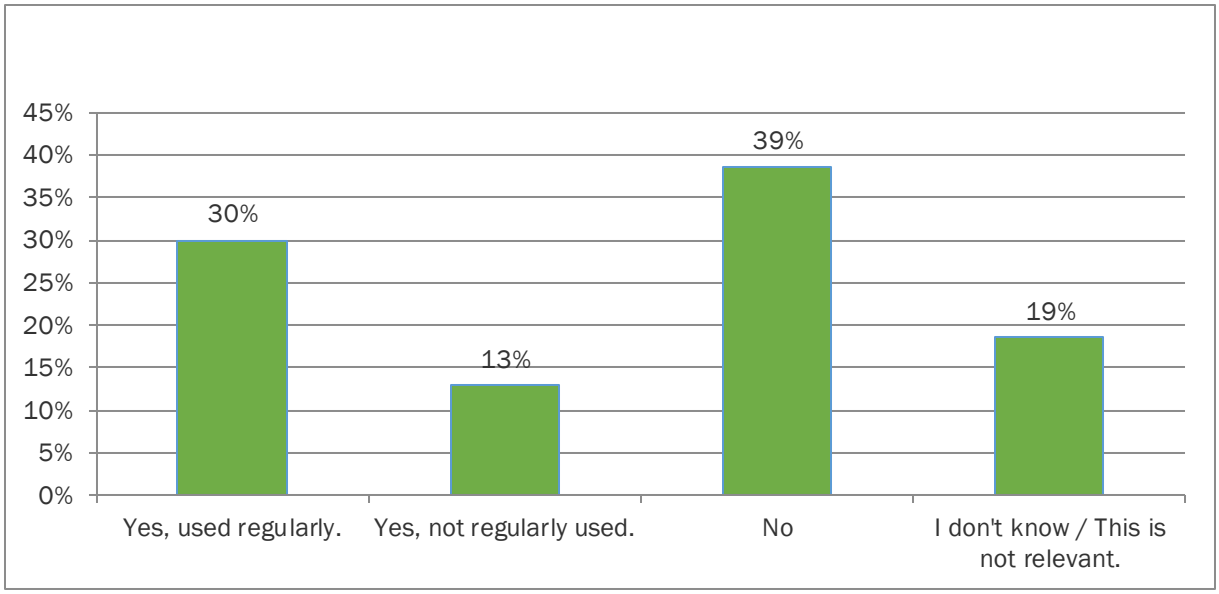

Figure 12. Does your company or organisation have a standard procedure or guideline on how to conduct public participation activities for wind power projects? (Only respondents who work in organisations that have been directly involved in activities for public participation - Only project developers and cooperatives; N=70)

If a standard procedure existed, respondents were asked how it was developed. An overview of the answers is provided in Table 1 and points to a broad variety of development approaches.

Table 1. Overview of strategies used to develop standard procedures for public participation activities (frequencies mentioned in brackets, only strategies mentioned at least twice)

Administrative bodies	Project developers	Cooperatives
Based on (other) legal requirements (3) Following the prerequisites determined by the environmental impact assessment (2)	Internally developed (13) Discussion with interest groups (e.g. citizens) (8) Based on diverse available guidelines for direct participation from a diversity of countries (5) Peer review by other developers (4) Consultants (communication and / or legal) (3)	Discussion with interest groups (e.g. citizens) (3) Internally developed (2)

The finding that standard procedures are not widely used, gained by analysing the last two figures, is in line with the low prominence that widely available English-language toolkits enjoy (Figure 13)[5]. Only 12 % of the respondents have ever applied the practices on social acceptance of wind energy projects from the International Energy Agency (IEA). The recommendations given by members of the GPWind project and the "Best Practices for Community Engagement and Public Consultation" from the Canadian Wind Energy Association have been applied by only 6 % of the respondents. The two reports from the Centre for Sustainable Energy (2007, 2009) and the ESTEEM toolkit (2007) seem to be used to an even lesser extent.

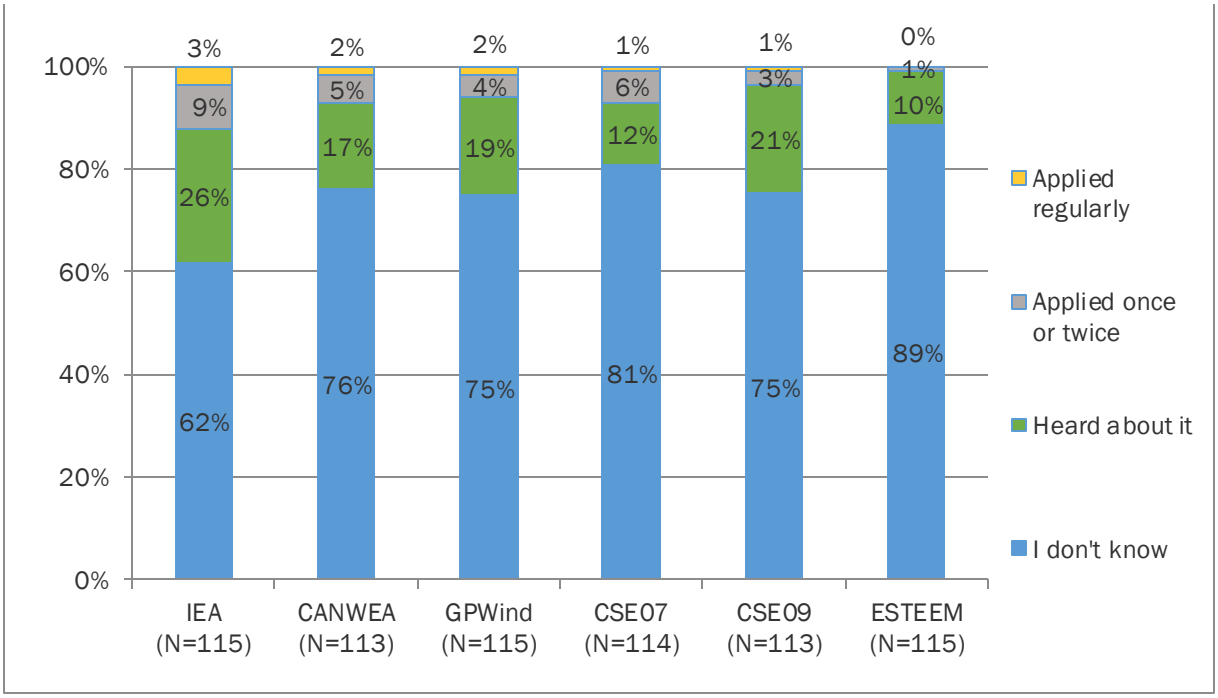

Figure 13. Knowledge and utilisation of selected English social acceptance guidelines and toolkits (Only respondents who have been directly involved in activities for public participation, N=121)

Additionally, further guidelines and toolkits were integrated by the national partner who collected the data (see Annex for details:).

Overall, only 22 (18 %) of the 121 participants who work in organisations that have been directly involved with public participation activities state to have applied one of the six offered international guidelines while 51 (42 %) have not heard of any of those international guidelines. 58 (48 %) participants have never applied any toolkit, neither an international nor national one. Thus, a large

[5] For this question the authors referred to the six supposingly most widespread and subjectively best guidelines, toolkits and best practices from the shortlist of screened documents of the deliverable 2.1 of the WISE Power project.

share of respondents obviously does not draw on this kind of published knowledge for participation activities, several of them because those documents are not known.

3.6 Potential drawbacks and usefulness in using guidelines and toolkits

In order to explore the reasons for the meagre utilisation of standard procedures or guidelines, potential barriers for using standard guidelines and toolkits were surveyed. The reason stated most often is lack of resources. Furthermore, they are not considered helpful for actual project development processes (Figure 14). Some respondents do not see the need to use them.

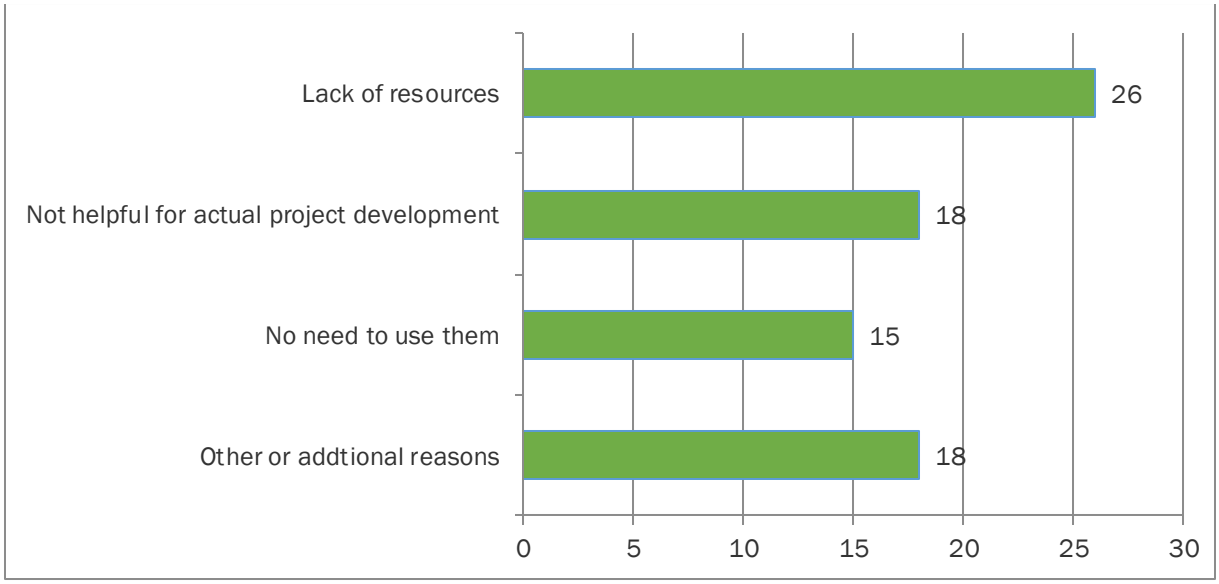

Figure 14. If you know of one or more such guidelines/toolkits, but do not use any of them – what are the reasons for it? (Only respondents who have been directly involved in activities for public participation, N=121)

On top of the possible answers provided in the questionnaire, respondents were also able to fill in additional barriers. The following ones were mentioned repeatedly:

- Standard guidelines, toolkits and best practices often do not fit the local realities,
- Material is perceived as abstract and difficult to transfer to the concrete project,
- Approaches are needed, that can be individually adjusted.

On the other side, those who have applied standardised guidelines quote a more positive attitude. Focusing on the project developers it can be seen, that using such guidelines is on the one hand frequently appreciated because of their credibility e.g. via approval by the national government (e.g. Scotland) or by the national wind energy association (France). Furthermore the guidelines are perceived as providing common sense ideas. Similarly to the barriers mentioned above, respondents are critical as they do not seem to be very helpful considering the contextual implications of each and every project.

Combining the results, it can be confirmed that the main challenge for applying guidelines is to transfer the knowledge and adapt it to the specific project context.

3.7 Allocation of resources

Furthermore, the respondents were asked to what degree resources are systematically allocated to participation and communication activities during project development. 39 % of the respondents who are directly involved in public participation activities state that allocating resources is always part of the standard project planning procedure (Figure 15).18 % quote that specific resources are only allocated under certain conditions and 15 % state that resources are hardly or never allocated towards participation and communication activities. 28 % state not to have any knowledge how their organisation deals with resource allocation on this issue. Further analysis show that those respondents who report that their organisation usually allocates resources for participation are also more likely to have a standard procedure for this, i.e. pointing to a higher level of professionalism in these organisations.

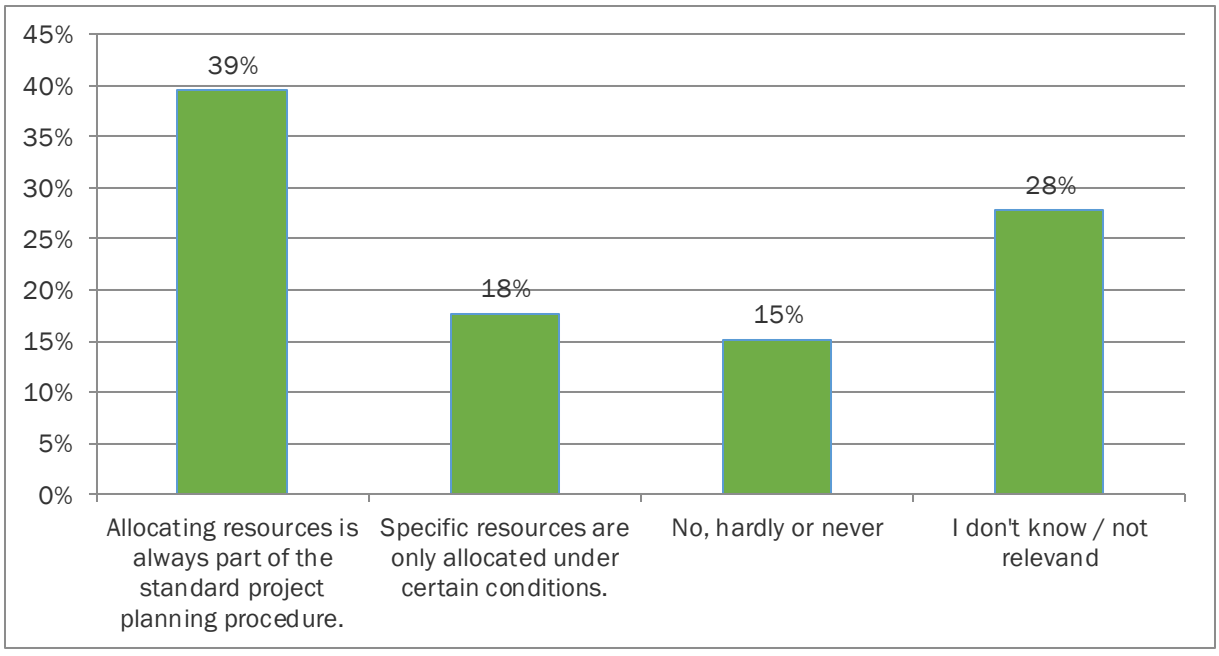

Figure 15. To what extent are resources allocated systematically to participation and communication activities during project development? (Only respondents who have been directly involved in activities for public participation, N=121)

When asked under what conditions resources are allocated, most comments narrow it down to the fact that it mostly depends on the particularities of the project and depends on the expected and/or already witnessed public reaction. Sometimes other reasons arise, for instance when public measures are requested by one or more stakeholders such as the permitting agency, the municipality or a group of local citizens.

3.8 Measures for public involvement

In order to assess the respondents' experience with regard to different levels of public involvement three different approaches were presented:

Informational measures:

Include activities such as distributing brochures/leaflets which provide information about the project or provide possibilities where citizens may ask questions, e.g. information centre, special event, telephone hotline, open houses.

Consultation and dialogue with the public:

Means that the public has the possibility to give feedback on the project and its specifications, e.g. at special events or through the collection of written feedback. The collected feedback is then considered by the project team and / or relevant administration.

Empowerment of the public = decision making:

The public has the opportunity to make final decisions after having been thoroughly engaged regarding the project, e.g. via a citizen vote.

Assessing the experience with the three formulated levels of public involvement measures with regard to social acceptance, firstly it can be stated, that experiences are on average positive. Overall, the involvement level of consultation and dialogue is rated most positively, followed by solely informational measures and empowerment of the public scoring lower. If the answers are analysed according to market development similar results emerge for all three market types. The standard deviation (SD) as an indicator of variability of respondents' ratings between the three levels of involvement deviates considerably, with empowerment of the public having a relatively high value of SD=1.22 in comparison to consultation and dialogue (SD=.85) on the one hand and solely informational measures (SD=.86) on the other hand. This points out that respondents hold very different positive and negative views on public empowerment but most of them agree on the positive evaluation of the other two levels of public involvement.

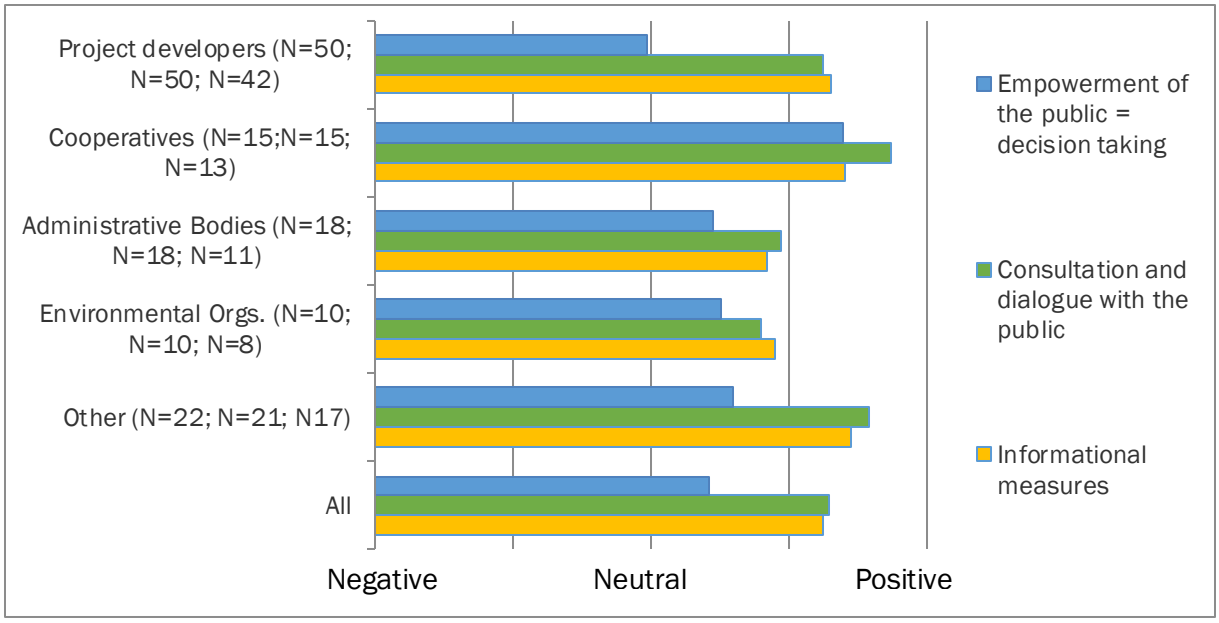

Figure 16. What is your experience with the three different levels of public involvement with regard to social acceptance?

This variation in opinion regarding public empowerment also becomes obvious when the data is analysed according to stakeholder groups (Figure 16): While project developers seem to be diffident about public empowerment, cooperatives' representatives are very positive and other groups on average range in between.

Respondents were also asked to provide comments on all three levels of involvement:

- The comments on the utilisation of **informational measures** mainly suggest that they are only considered a fundamental requirement, but they are not sufficient as such to create public support.
- **Consultation and dialogue** with the public is considered the next step and by many respondents of the survey also considered a basic requirement. On the other hand negative experiences within dialogues with the public or poor levels of interest are reported. This shows that consultation and dialogue does not necessarily lead to success.
- The comments on the issue of **empowering the public** suggest that this approach has not been implemented very often and thus it has not been possible to gather a lot of experience with it yet. The comments suggest that it might be challenging at times to find the right point in time, the right format and to make sure that all representatives of the community including the opponents of wind power come to such meetings. Apart from that one of the respondents argues that such processes are too time-consuming to be in line with investor interests.

Further questions looked at the levels of involvements in relation to project phases (Figure 17). First of all, results point out that public involvement measures are most often used during the planning, permitting, and construction phase. The involvement during the preparation phase is on average lower than in the formerly named phases. Furthermore, it can be stated that all in all, information and consultation measures are more often part of the usual procedure than the measures being used on the empowerment level. However, several participants do not have or know about the procedure in later project phases like repowering or decommissioning (56 % and 58 % respectively state 'I don't know / this is not relevant'). Taken together, recent experience with public participation concentrates on the-planning, permitting and construction phases using informational and consultation measures.

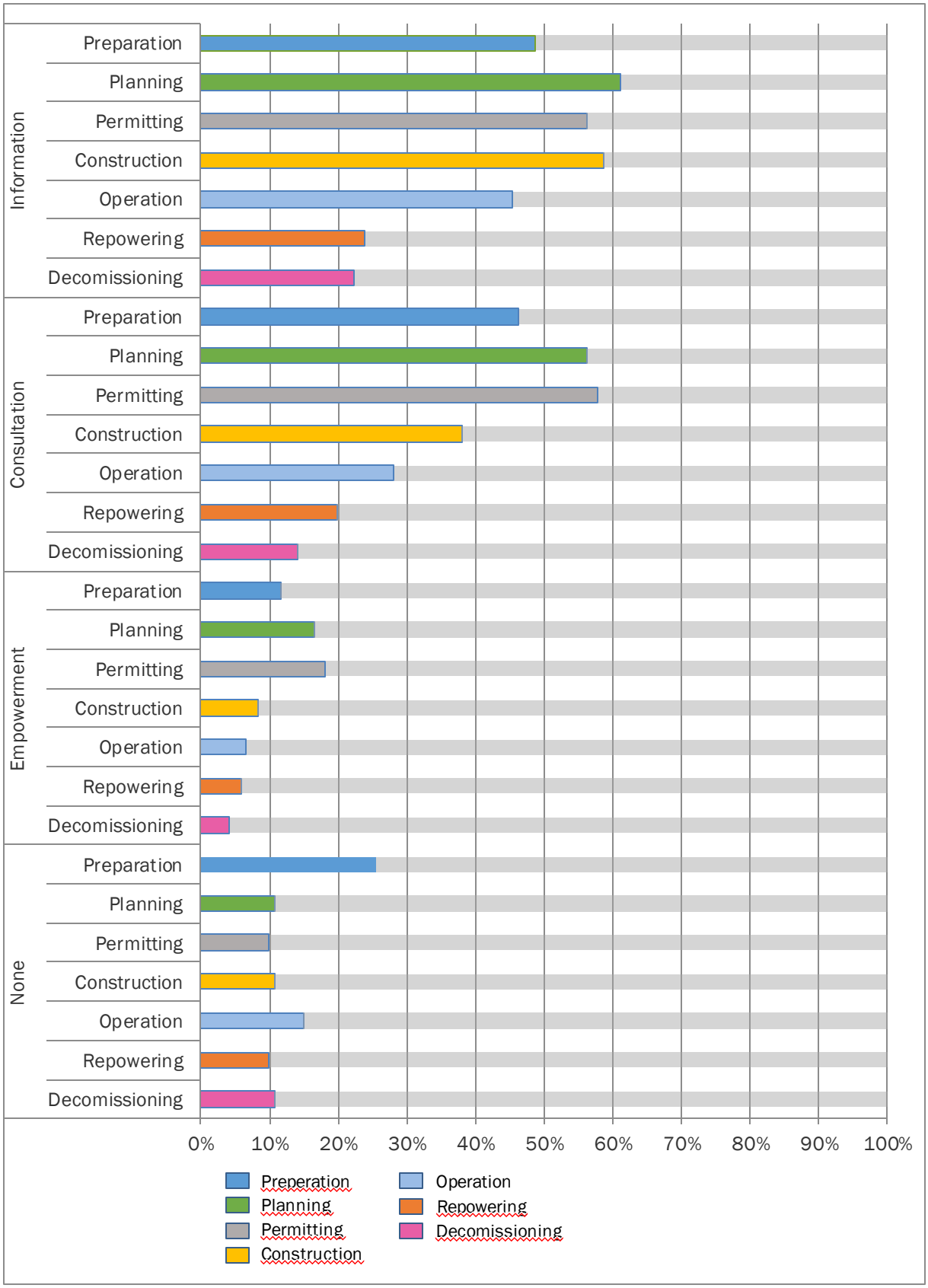

Figure 17. In your company or organisation, which measures form part of the usual procedure and during which phase of the wind farm life cycle?

Further questions referred to the stakeholder groups that are usually involved in participation and communication processes around projects. The collected data suggests that there are four groups that are involved most often in participation and communication processes: local political authorities, local administrations, permitting authorities and the local public/citizens (Figure 18). Environmental organisations, citizen associations, the media and regional political authorities seem to be often part of participation and communication processes but not as often as the previously mentioned players. Financial institutions and the local economy are rarely considered as partners in the participatory and communication processes of wind project developments.

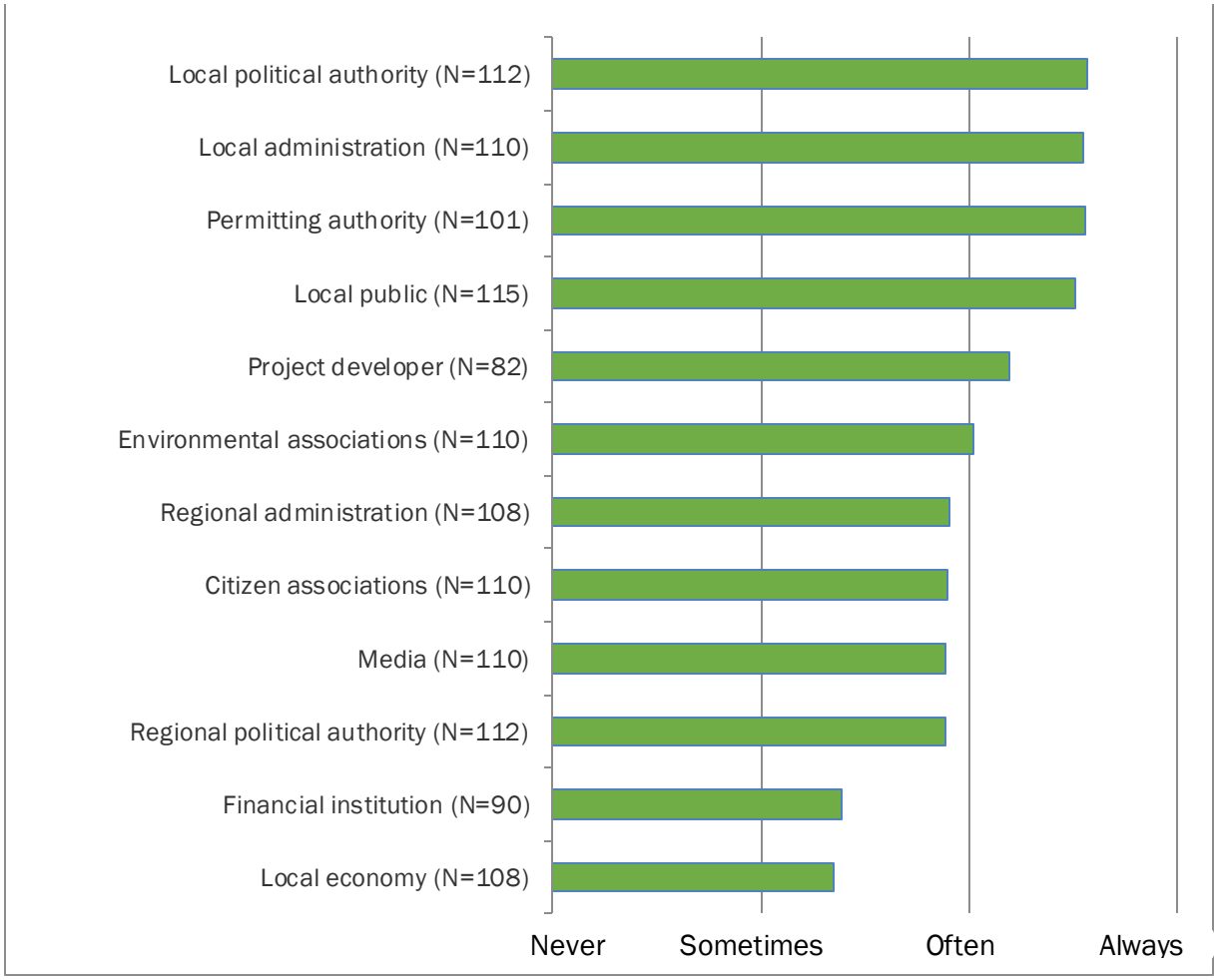

Figure 18. Which of the following groups and actors are usually involved in participation and communication processes of wind power projects of your company or organisation?

3.9 Need for support in dealing with social acceptance

As it is one of the aims of the WISE Power project to develop social acceptance pathways, i.e. to provide guidelines on how to foster social acceptance for wind power projects the respondents were asked how useful they assess a variety of adjacent and potentially affecting aspects:

- Information and learning opportunities,
- Possible concrete measures,
- Support needed to identify and engage with different stakeholder groups.

Analysing the collected data shows that information and learning opportunities were generally valued to be useful (Figure 19). The difference between the six offered approaches was very small though with "detail on the benefit of working with the community", "detail on how to provide objective information" and "case studies" being evaluated most positively. Additional suggestions include the presentation of successful projects, visits to wind farms, providing sound information and arguments in order to be able to respond knowledgeably against myths and sometimes false arguments from the opposing side. Within the concrete measures "promotional material", "workshops or structured workshop formats/materials" and "downloadable guidelines" were more preferred than methods of online engagement with potential partners and online forums (Figure 20). In their comments the respondents pointed out that it is important that, whatever information is provided, it is as balanced as possible. Furthermore, some suggest that the permitting authorities need to be made aware of people who support the planned wind farms in order to reduce the impact that wind power opponents can have in initiating public manifestations. Concerning contact with local residents, it is suggested from several participants that as many as possible are approached for face to face contacts. The respondents agree that support to identify and engage with the supporting, opposed and indifferent people would be welcome (Figure 21). Beyond that the data shows that there might be a special need for assistance in identifying and engaging with people who support wind projects. The comments on this topic are quite diverse with some respondents wishing to intensify engagement with each of the three groups.

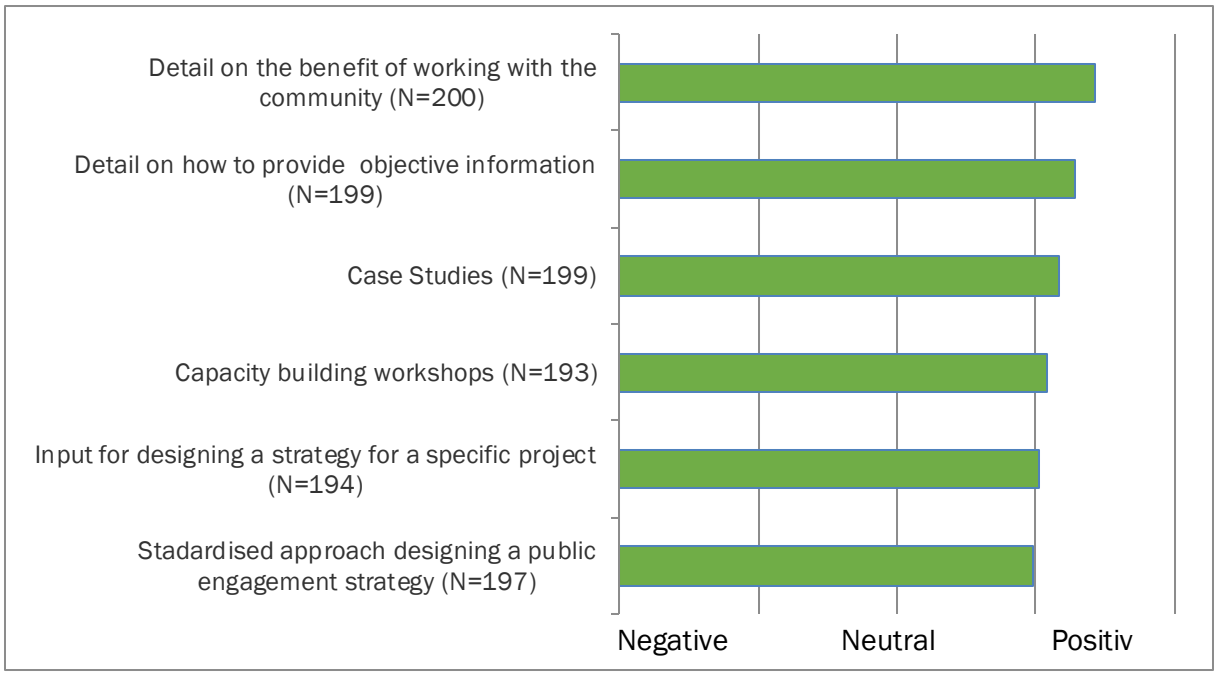

Figure 19. Perceived usefulness of information and learning opportunities in order to support social acceptance

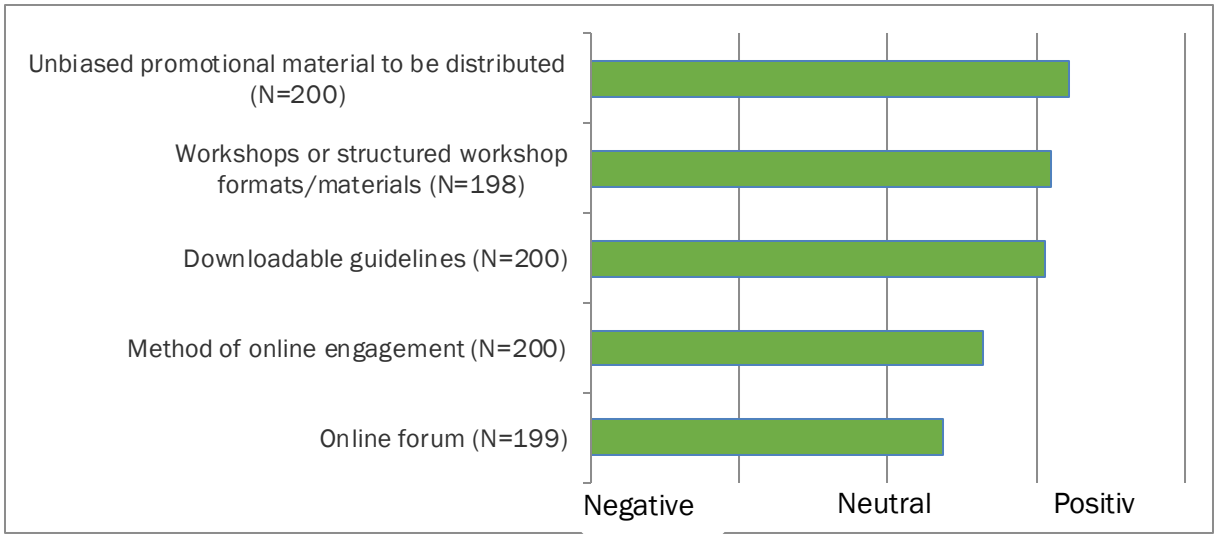

Figure 20. Perceived usefulness of possible measures in order to support social acceptance

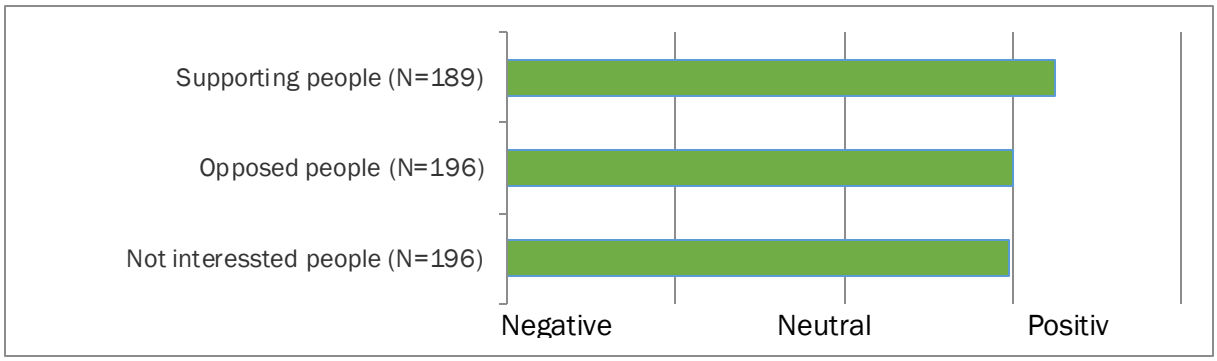

Figure 21. Support needed for identifying and engaging with stakeholder groups

4 Summary and discussion of findings

The aim of this deliverable is to map the status quo/current overview of social acceptance for wind farms with a special focus on best practices, strategies and toolkits. This is done in order to identify needs for further social acceptance development and knowledge of relevant stakeholders. The analysis is based on a sample of 207 experts from project developers, administration, cooperatives, environmental organisations, financial institutions and others from 13 European countries. Due to its size and composition, the sample assembles a broad and knowledgeable perspective on social acceptance around wind farms across Europe. However, on a country level, the sample sizes are relatively small and heterogeneous, thus a comparative analysis across countries is hardly meaningful.

Furthermore it was intended to analyse the data according to the stage of market development. However, hardly any difference between mature, growth and emerging markets was found in the present analysis. Due to this fact, differentiations according to market maturity have not been displayed within this report. WISE Power deliverables 3.1 and 3.2 will provide information pertaining to financial measures fostering acceptance and potential relation to market development.

The majority of study participants has experienced stops or at least delays of projects due to a lack of social acceptance. Furthermore, much more negative than positive reactions to wind farms are reported by the respondents. These findings underline, as expected and already shown by the WindBarriers project, the relevance of social acceptance issues. This is also already common knowledge in wind farm project development as two thirds of the respondents claim that elements of public participation are part of the usual procedure during planning, building and operating wind farms. While many respondents report that integrating elements of public perception are obligatory in their country, the percentage of those stating that they are also part of usual project management is even higher. This indicates that it is the usual case to go beyond what is mandatory.

Opposition to wind farms seems mostly specific, i.e. against a specific installation: the survey shows that the main negative issues mentioned in relation to wind power projects are the visual impact on landscapes followed by noise and the impact on the local ecosystem and wildlife (cp. Hübner & Pohl 2014 for similar results). Arguments that question wind energy on a more general level, e.g. whether it contributes to mitigating climate change, are less frequently reported to play a role. This is in line with the findings from Eurobarometer that were cited in the introduction that Europeans are generally in favour of wind energy. This is further confirmed by the finding that on the positive side respondents report that the reduction of CO_2 emissions or enhanced air quality are often addressed in discussions around wind farms. Taken

together, however, this shows that criticism is mainly manifested on a local level while the advantages of wind energy are perceived to be more relevant on a national or global scale. On a local level, economic benefits is the argument that comes up most frequently as a positive aspect of wind power. However, it may not be sufficient as such. Thus, it seems important to further highlight a broader lines of arguments why a wind farm is necessary and useful in a specific area.

It is also noteworthy that only about 25 % of the respondents mention a lack or late information measures as an issue. Thus, this does not seem to be frequent in discussions around wind farms; nonetheless, providing information is very often seen as a prerequisite but may not be sufficient to gain acceptance. Shared ownership, community benefits and involvement of the community in the design process are all perceived as helping to foster social acceptance across all respondents, independent of market maturity. Though, also the problems of these approaches were mentioned. These include in case of shared ownership for instance the risk to split the community between those who are affluent enough to purchase shares and others who are not. The main challenge related to community benefits was that they need careful implementation in order to avoid the impression of bribery.

Despite the fact that public participation is frequent in wind energy projects, many respondents (39 %) state that they do not have a standard procedure for public participation activities in their organisation. Likewise, allocating resources for these activities does not seem to be part of the usual procedure for some organisations. Additionally, the published advice-giving literature is not widely known and hardly applied. If these findings are taken together, they point out, that although the awareness for social acceptance and public participation is high there may be a lack of professionalism, i.e. standardisation and knowledge management, in this regard. The respondents, however, also point out the reasons why it is difficult for them to make use of existing knowledge, meaning that the main challenge seems to be to transfer this knowledge to the conditions of a specific project.

With regard to different levels of public participation respondents are more in favour of consultation and dialogue as well as informational measures, empowerment of the public where the public has the possibility get involved in the decision itself is evaluated less positively. This finding is due to the fact that the surveyed project developers are less enthusiastic about this issue. The cooperatives are very positive about this high level of public involvement which hints that it may be feasible in practice. To leave the decision to the local public is probably not a practical approach for every wind farm, but an approach that is worthwhile to think about for certain projects. Besides, combinations of these two approaches may be advisable.

Furthermore, our findings point out, that recent experience with public participation concentrates on the phases of planning, permitting and construction. So far little experience has been shared about the late phases of a wind farm lifecycle (operation and maintenance, decommissioning and repowering), however, they may become more important in the future. This indicates that more knowledge is needed on how to deal with social acceptance when repowering or decommissioning is intended. This finding is in line with the analysis provided in deliverable 2.1 from the WISE Power project (cp. Fraunhofer ISI, 2014) where this gap was pointed out as well. The fact that our data points out that public participation mainly starts during the permitting process is on the one hand not surprising as this is often the most complicated part of the process accompanying the issuance of a permit. However, especially in cases where resistance to a planned installation is very likely, it could be advisable to start earlier.

According to the data, four groups are currently most often integrated into participation and communication processes: local political authorities, local administration, permitting authorities and the local public. Financial institutions and members of the local economy are less regularly considered. Securing their public support may, however, be worthwhile as this could positively influence other local stakeholder groups. In addition it is suggested by the interviewed experts that actions involving the community may be steered by the municipalities as neutral institutions rather than by project developers.

Respondents were also asked how useful they consider a variety of related and potentially supporting measures. It was found that all kinds of information and learning opportunities were generally valued to be useful, most concrete measures were assessed positively. Respondents were interested in receiving information from the WISE Power project how to deal with all members of the public – those opposing a project, those in favour and those not interested. As pointed out by deliverable 2.1 from the WISE Power project (cp. Fraunhofer ISI, 2014) most published guidelines deal with negative reactions and gives advice on how to respond to them. So far little knowledge is provided how to make use of supporters or how to mobilise those not interested. Furthermore respondents identify their greatest need in the area of providing balanced information about a project and in learning more about the benefits of working with communities. They are less interested in means of online engagement.

5 Conclusions

The conclusions are divided into (1) general conclusions and (2) specific conclusions with regard to the social acceptance pathways that will be developed within the following tasks of the WISE Power project.

5.1 General Conclusions

- More than 50 % of the respondents state to have had experience with delayed or stopped wind farms because of lack of social acceptance. Thus the data confirms that although wind energy is usually evaluated positively social acceptance for specific projects remains a challenge for many. This is also mirrored by the fact that negative reactions emerge far more frequently than positive ones.
- The relevance of gaining social acceptance seems to be clear to the stakeholders involved in wind farm development. Public participation in wind farm development is the standard case – relatively few projects are realised without integrating the public and public participation measures seem to usually exceed legal requirements.
- However, there is a need for increased knowledge and especially of transferring available theoretical knowledge into practice.

5.2 Conclusions related to the social acceptance pathways

The insights from this study will be used in the further course of the WISE Power project to draft social acceptance pathways (SAPs). Therefore the following conclusions are derived to provide first ideas about input for the SAPs.

What is the main challenge the SAPs should address?

While a lot of advice on social acceptance processes and on advice-giving documents is already published and available it seems difficult for those in charge of these processes to make use of this knowledge for their specific projects. Thus, it may be advisable if the SAPs are divided into general advice that is generally valid and applicable and specific advice according to the respective situation. It should also include guidance how to categorise the individual situation and how to access the relevant information for this situation. Furthermore it should include advice how and when to take into account the national legislation. Furthermore the SAPs need to provide advice in standardising public participation processes during project management and to implement knowledge management. This is not to say that there is a 'one size fits all'-approach to public participation but to ensure through process design that e.g. resources are always allocated and public participation starts early on.

How should the SAP be designed?

The SAPs may be created as a toolkit with a broad range of adjustable features catering to specific needs and contextual factors of the community and project in scope. This flexible approach can also be seen as a measure to counteract the reported barriers to transferring the suggestions of currently available but abstract guidelines into reality. However, the SAPs should be prevented from developing into overly complex and intricate constructs. Regarding the level of public involvement the SAPs should strongly emphasise the need for informational measures and consultation and dialogue with the public as a precondition for social acceptance. Furthermore, advice for empowerment of the public may be introduced as well and define the conditions under which it may be useful.

With whom to engage?

Local political authorities, local administration, permitting authorities and the local public should be at the core for the SAPs as they are certainly the most important groups to be integrated as it is currently the case. However, the potential impact of further groups should not be neglected. Thus the SAPs should include advice how to identify further relevant groups and how to interact with them. Shifting the stakeholder scope from formal assignment to the level of support the data suggests, that the SAPs may suggest not only to engage with opponents but also with the 'silent majority' of indifferent and supporting individuals.

What concrete measures to be conducted?

The SAPs may involve a variety of different measures in order to support social acceptance. As all of the measures that were up for evaluation were found to be helpful it can be suggested, that a combination of these measures can and may be part of the social acceptance pathways. Firstly, there may be informational measures that provide basic information presented in an appealing way to the stakeholders with unbiased material such as leaflets and/or homepage. Our study also points to the need on receiving advice how to produce such material. Furthermore direct face-to-face contact which cannot be standardised beforehand is also relevant and the SAPs should provide advice for these situations as well. Furthermore shared ownership and community benefits may be part of the SAP-approach. It may be taken into account that is advisable to offer shared ownership only together with community benefits in order to prevent splitting the community. Community benefits should be discussed and agreed in an open and transparent way in order to prevent to having them perceived as bribery.

Suggestions for informational measures that may be integrated into the social acceptance pathways may be the following: Balanced promotional material, materials for structured workshop formats,

presentations of successful projects, visits to wind farms, sound information and arguments in order to be able to respond knowledgeably against myths and false arguments from the opposing side. Concerning the use of the internet it seems as if there is probably only one area where the use of new media can be useful, which can be an online webpage offering general information on the project and the specific phases.

What line of arguments is useful?

As there is no 'one-size-fits-all' approach, the line of argument should be tailored to the local context, and the advantages and impacts of the specific project. Visual impact, noise and the impact on the local ecosystem and wildlife are very likely to come up in the discussion. Additionally, while local economic advantages are a convincing argument that is frequently used it may not be sufficient to secure acceptance. Furthermore, local concerns have to be taken into account and flexible engagement that facilitates ongoing dialogue. Raising awareness on the long-term benefits from wind energy deployment and its key role in energy transition, reducing greenhouse gas emissions and tackling the global problem of climate change is advisable to be mentioned.

How does grid infrastructure come into play?

Increased deployment of renewable energy requires the expansion of the electricity grid infrastructure. Transmission system operators (TSOs) have joined forces with NGOs (the RGI coalition) to work on practical steps aimed to facilitate dialogue, transparency and public participation whilst ensuring environmental protection. It is assumed that the knowledge generated in this task with special focus on the wind energy sector is to a great extend also applicable to projects with this specific focus on grid issues. A number of citizen-oriented communication tools, best practice and successful approaches are as well already available and support helping to construct taylor-made approaches to increase local acceptance.

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Annex

I. Further information on the sample

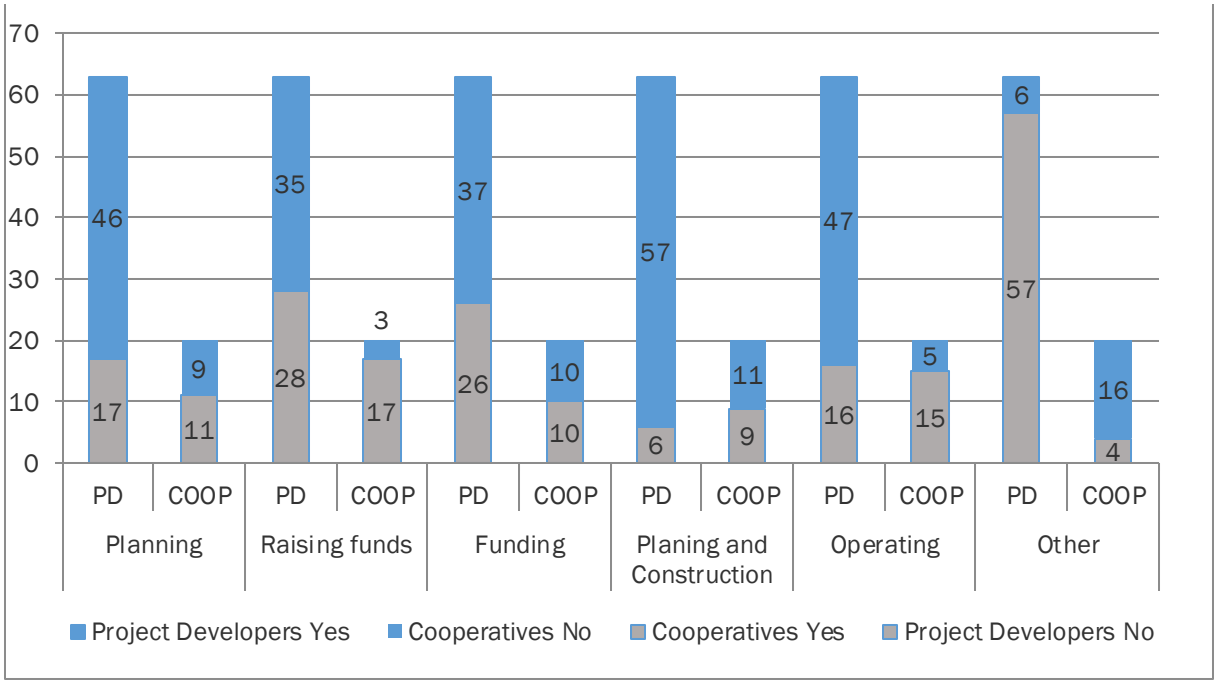

Figure A 1 Further activities of project developers and cooperatives within the wind energy sector (PD = Project developers; COOP = Cooperatives)

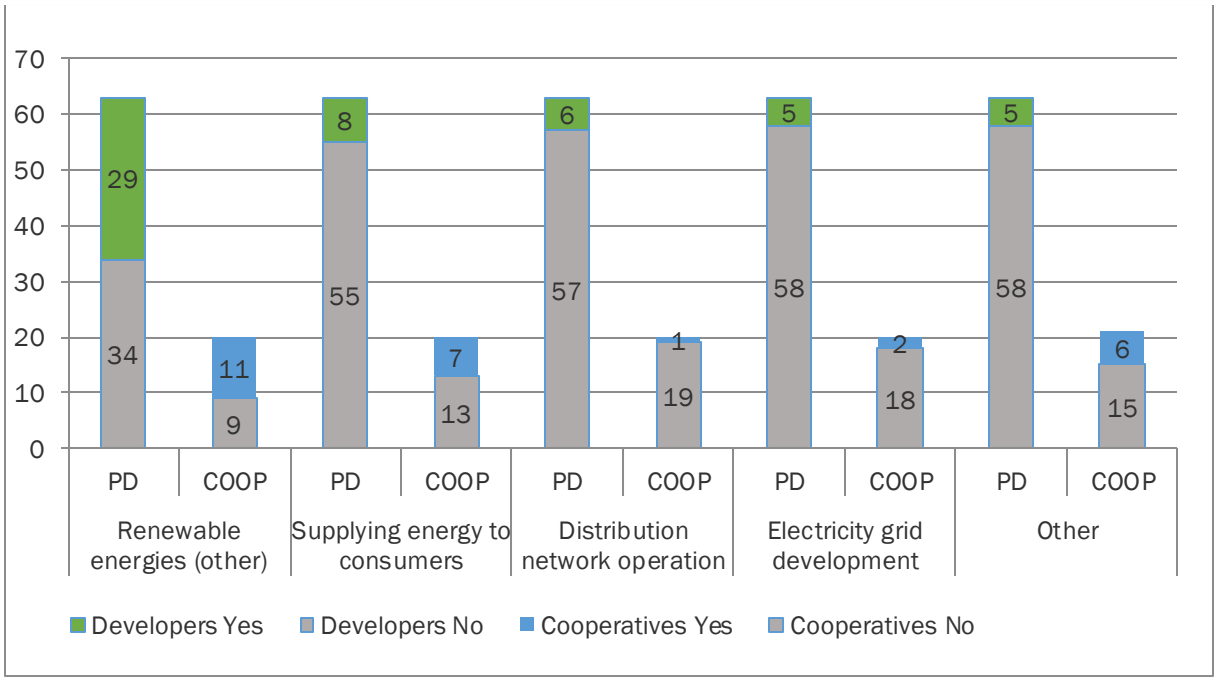

Figure A 2 Further activities of project developers and cooperatives outside of the wind energy sector (PD = Project developers; COOP = Cooperatives)

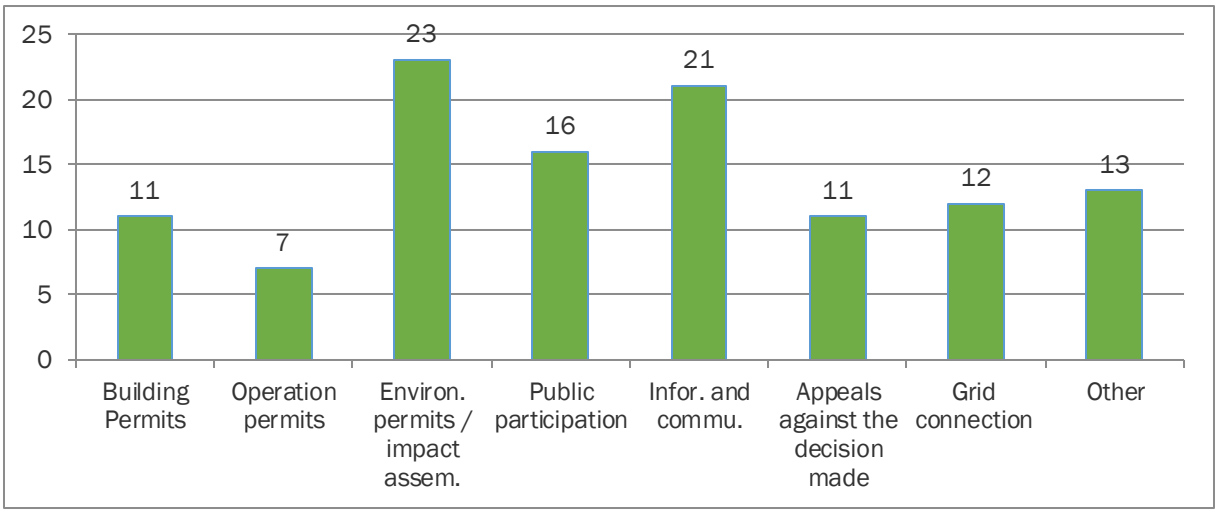

Figure A 3 Area of responsibility of administrative bodies that the respondents (N=36) work for (multiple indications were possible)

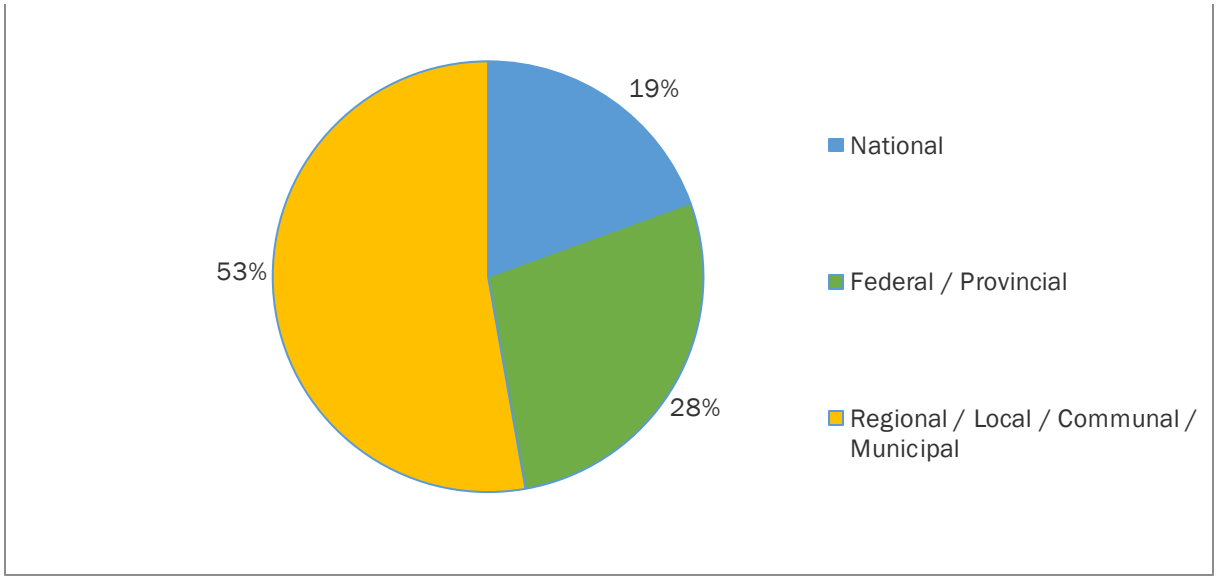

Figure A 4 Geographical level of the bodies that administrative expert surveyed are responsible for.

II. Additional positive and negatvie arguments raised around wind farm development

Other positive issues that were added by the respondents include the following:

- a positive image and more income for the municipality, community benefits payment, reduction of local taxes, local job creation, i.e. arguments which are related to local economic benefits ,
- a higher involvement of local residents in support for wind power,
- electricity grid reinforcement,
- possible utilization wind farm access roads by residents of the local community
- diversification of the energy supply mix
- modernising the local and national economy

Other negative issues that were described are the following:

- The imbalance of the distribution of cost and benefits between the local community and the external wind farm developer
- Lack of contact between wind farm owners and local communities
- Small distances between wind farms and dwellings
- Negative impacts that wind farms have on the tourism potential
- Absence of cooperative wind energy companies that have the needs of the community in mind
- Impact on archaeological sites
- Lack of predictability of support schemes
- Too much resistance in general as the development of new wind farms is not concentrated enough in areas with low opposition potential

III. National guidelines integrated into the questionnaire a priori

The Annex I gives an overview over the national guidelines and toolkits that were integrated in the locally adjusted questionnaires:

The **Danish** questionnaire integrated two extra national procedures:

- Naturstyrelsen, Miljøministeriet (2013): Vejledning om planlægning for og tilladelse til opstilling af vindmøller.
- KL et al. (2009): Den gode proces. Hvordan fremmes lokal forankring og borgerinddragelse i forbindelse med vindmølleplanlægning?

Eight out of the eleven Danish respondents asserted to have been involved in activities for public participation so far. Out of these eight persons, regarding the first document; four respondents were using it regularly, three had heard of it and one was not familiar with it. Regarding the second document, two respondents were using the document regularly, two had used it occasionally, three had heard of it and one was not familiar with it.

The questionnaire from **Flanders** integrated also two additional documents:

- Bond Beter Leefmilieu (2001): "Wind in de zeilen voor duurzame energie Krachtlijnen uit de platformtekst rond windenergie vanuit de milieubeweging".
- Tandem modeladvies voor milieuadviesraden (2008): "Windenergie stimuleren vanuit de gemeente"

Of the eight people that had experience with public participation activities; the document from *Bond Beter Leefmilieu* had been applied once or twice by two people, was known by three people, and the remaining three people do not know about it.

The document from *Tandem modeladvies voor milieuadviesraden* was applied several times by one respondent, applied once or two by another, known by one, and not known by the remaining five.

The **French** questionnaire contained the "Charte éthique" from the French Wind Energy Association (FEE). Out of the nine French respondents that had experience with public participation activities; six apply it regularly, two had applied it once or twice and one person had heard about it before.

The **German** questionnaire entailed two additional documents:

- 100 prozent erneuerbar stiftung (2012): Akzeptanz für Erneuerbare Energien Akzeptanz planen, Beteiligung gestalten, Legitimität gewinnen.

- C.A.R.M.E.N. (2014): Akzeptanz für Erneuerbare Energien – Ein Leitfaden

Out of the eight German respondents that stated to have experience with public participation activities, the toolkit from the "100 prozent erneuerbar stiftung" was used once or twice by three respondents, was known by three, and the remaining two persons did not know about it.

The **Irish** questionnaire entailed two additional documents:

- Sustainable energy Authority of Ireland (SEAI) (2013): Methodology for Local Authority renewable energy strategies
- Irish Wind Energy Associations (IWEA) (2013): Good Neighbour IWEA Best Practice Principles in Community Engagement & Community Commitment

The document from SEAI was used regularly by five out of the eleven Irish respondents that stated to have experience with public participation activities, was applied once or twice by one respondent, was known by four, and one person did not know about it before.
The Best Practice Principles from IWEA has been applied regularly by five respondents, was used once or twice by two, and four have only heard about it.

IV. National guidelines that were named by the respondents

The following guidelines and toolkits were named by the respondents[6]:

Flanders:

- Pepermans Yves, Loots Ilse (2011):Wie wind zaait, zal storm oogsten? De sociale aanvaardbaarheid van onshore windenergie, Antwerpen

France:

- Association nationale des collectivités, des associations et des entreprises pour la gestion des déchets, de l'énergie et des réseaux de chaleur(2014): Charte des collectivités et des professionnels en faveur d'un développement de projets éoliens territoriaux et concertés (Amorce Chartre) (http://www.amorce.asso.fr/media/filer_public/c3/36/c336ec37-fc57-42f3-acc3-bd8c4c84fade/charte_collectivites-professionnels_projets-eoliens-territoriaux-concertes.pdf)

Germany:

- BUND für Umwelt und Naturschutz Deutschland (BUND) Landesverband Baden-Württemberg e.V., Naturschutzbund Deutschland NABU Landesverband Baden-Württemberg (2013): Beteiligungsleitfaden Windenergie Hinweise zu Beteiligungsmöglichkeiten von Verbänden in Verfahren zur Planung und Genehmigung von Windenergieanlagen (http://www.bund-bawue.de/uploads/media/2013-03-19_Beteiligungsleitfaden_Wind.pdf)
- NABU Naturschutzbund Deutschland (2008): Kommunikationsratgeber zum Ausbau Erneuerbarer Energien (http://www.tgks.de/de/documents/NABU_Ratgeber.pdf)
- NABU Naturschutzbund Deutschland (2006): Leitfaden Erneuerbare Energien – Konflikte lösen und vermeiden (https://www.nabu.de/imperia/md/content/nabude/energie/4.pdf)

[6] For further best practices, guidelines and toolkits please refer to the project deliverable 2.1 of the WISE Power project (2014): Wind-Acceptance A user guide for developers and municipalities Review of best practices, guidelines and toolkits on social acceptance in the Wind energy sector (http://wisepower-project.eu/wp-content/uploads/2014_08_Deliverable_2_1_final_version.pdf)

Ireland:

- Irish National Economic & Social Council (NESC) (2014): Wind Energy in Ireland: Building Community Engagement and Social Support (http://files.nesc.ie/nesc_reports/en/139_Wind_Energy_Main_Report.pdf)
- Queen`s university of Belfast: A review of the context for enhancing community acceptance of wind energy in Ireland (on behalf of the Sustainable Energy Authority of Ireland) (2012) (http://www.seai.ie/Renewables/Wind_Energy/Attitudes_towards_Wind_Energy_in_Ireland/A_review_of_the_context_for_enhancing_community_acceptance_of_wind_energy_in_Ireland.pdf)

United Kingdom:

- Department of Environment (2014): Information Leaflet 16 "Pre-Application Community Consultation Guidance" (http://www.planningni.gov.uk/downloads/pre-application_community_consultation_guidance_-_june_2014.pdf)
- Local Energy Scotland (2014): Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments (http://www.localenergyscotland.org/media/34682/Good-Practice-Principles.pdf)
- Local Energy Scotland & Ricardo-AEA Ltd (2014): Community and Renewable Energy Scheme Project Development Toolkit (http://www.localenergyscotland.org/media/21544/cares-toolkit-establishing-a-community-group-module-v4.pdf)
- Scotland's Firm Foundations (2014): A community-led charter on community benefit funds from onshore commercial wind farms (https://www.foundationscotland.org.uk/media/270842/AR%20reviewed_%20Comunity%20Benefit%20Charter_FINAL.pdf)