Social Acceptance & Community Engagement for Wind Energy Project Professionals



HELSINKI NOVEMBER 27TH 2018

GK Background

Language & Stakeholders

Defining Community

Benefits / Distributive Justice

Engagement Strategy Considerations

IEA Task 28

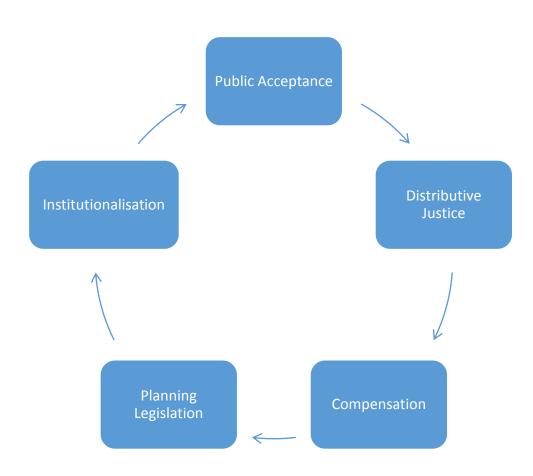
Wind Benefits to Ireland

Local Analysis Example

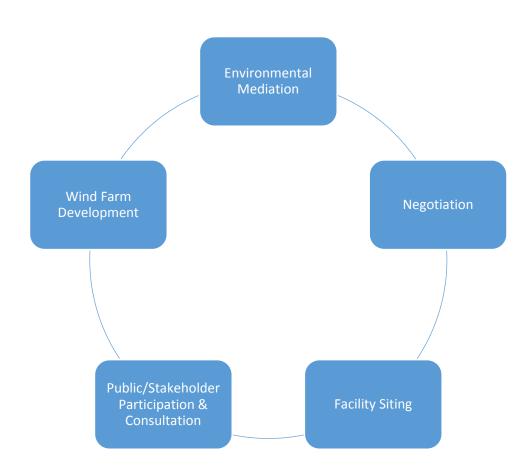
Background

- Public Consultation
- Public Representative
- Community Impact & Stakeholder Engagement on Infrastructure Projects – transport (rail, road, air), energy (wind, HVOTL), urban development (NCH, BQ, Charle)
- Environmental Mediation
- Research (T28)

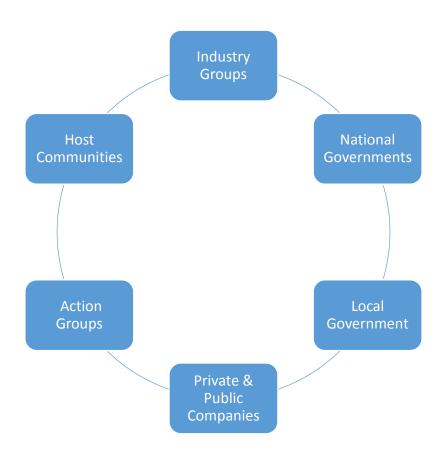
Key words and phrases



Context / Platform



Relevant Stakeholders



- Consulting with the public involves those people who are directly and indirectly affected by a project and other interested parties who have the ability to influence a project's outcome, positively or negatively.
- These are known as **stakeholders**



Why Do People Resist Change?

People resist change because;

- They don't understand or agree with the goals of the proposed change.
- They don't accept the methods or technology which the co./agency plans to employ.
- They have no confidence in the sponsor of the project, program or policy.
- They disagree with the timing of the proposed change it should have been done sooner, or later, but not now.
- They are opposed to the location of the project the Not In My Backyard (NIMBY) syndrome.

Constructive citizen participation is not:

- selling a predetermined solution by public relations techniques;
- planning behind closed doors when, instead, information can be shared;
- one-way communication, e.g., planners telling people what is best for them;
- public confrontations between "people power" and the bureaucracy;
- by-passing elected representatives or impairing their freedom to exercise their decision-making responsibilities.

Considerations



Community perspective to wind:

- Community Defined who do we /you represent?
 - (community of place not necessarily a community of interest)
- Immediate and long-term social and economic benefits?
- Part of decision-making process?
- What are the deal breakers?
- Pockets of Resistance (majority in favour (selling out?) to no movement group.

How is local community defined?

• Those impacted: visual, noise, traffic;

Community of interest: sport, cultural, religious;

• Territory: Historical, Administrative, Geographical;

What are the features of particular models of engagement that have worked?

- Models that investigated / mapped local / social profile (Assessment)
- Early intervention / consultation
- Appointment of Community Liaison Officer
- Presence of Local Authority Policy that make CBA's a prerequisite to planning application (i.e. institutionalised, LA management, ring-fencing policy?)
- Ownership %, lump sums, annual, sustainability projects, amenity, sport, (multitude)
- Negotiation style and approach, collaborative / integrative approach
- Personnel involved, relationship with community

Differences

Wind Farms



- Developer led
- Renewable Energy association
- Positive connotations
- Single-site
- Multi-party, limited community
- One Local Authority
- Proliferation / large scale getting difficult

National Grid







- State Agency
- Not associated with Renewable Energy
- Negative Connotations
- Multi-site along linear alignment / corridor
- Multi-party, multiple communities
- Several Local Authorities

Community Perspective contd/..

Distributive Justice:

- Substantive: Did I get enough €? More or less than you? Fair Distribution?
- Procedural: Fair and Transparent process, so if different amounts, good reason for it e.e. more kids than me, etc.
- Psychological: Was I valued as a person / citizen? Was I taken seriously?

Are people willing to accept payment?

What form should it take?

• Who should represent community in negotiations?

• Who should administer funds? – trust issues – politicians, local

authority officials

Enhance co-operation with LA's; ring-fence contribution for localised area, not broader county areas.

Local projects may include:

- Civic amenity facilities
- Educational bursaries
- Sports grants
- Cultural grants
- Localised sustainable energy projects
- Affordable housing
- First-source hiring
- Community / rural transport schemes

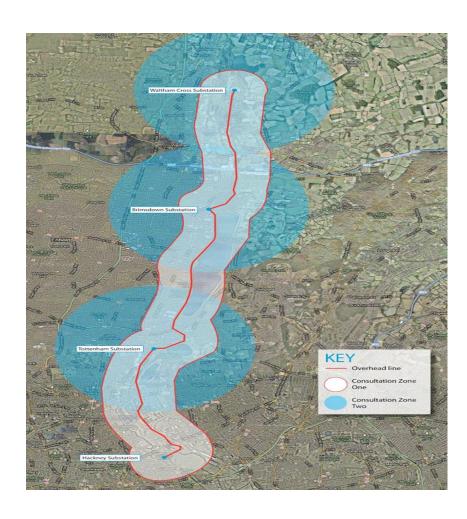
Considerations



Business / TSO perspective to wind & benefits:

- Do CBA's work? What do wind projects contribute to local business environment? Other sector (utility) projects? Local Supply Chain €??
- What are the (cba) indicators / measures / metrics of success?:
 - Less delay (planning process, construction phase)
 - Lower costs
 - Improved pr / relationships
 - Knock-on (re later projects)

Ring-fencing of funds for corridor

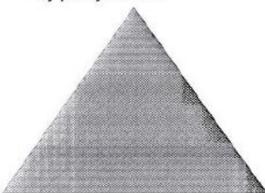


Wustenhagen, Wolsink and Burer (2007)

Social acceptance is an often used term in the practical policy literature, but clear definitions are rarely given. They distinguish three dimensions of social acceptance, which are interdependent?

Socio-political acceptance

- Of technologies and policies
- · By the public
- · By key stakeholders
- · By policy makers



Community acceptance

- · Procedural justice
- Distributional justice
- Trust

Market acceptance

- Consumers
- Investors
- Intra-firm

Fig. 1. The triangle of social acceptance of renewable energy innovation.

Social Acceptance continues to be a key constraint on the development of wind energy projects.

'Social Acceptance' Definition:

'a favourable or positive response relating to proposed or in situ technology or social technical system by members of a given social unit (country or region, community or town and household, organisation' (Upham, 2015, p107)

 Community acceptance refers to the specific acceptance of siting decisions and renewable energy projects by local stakeholders, particularly residents and local authorities.

- Wustenhagen et al endeavour to shed some light on factors influencing community
 acceptance, for example by highlighting the relative importance of <u>distributional justice</u>
 (How are costs and benefits shared?), <u>procedural justice</u> (is there a fair decision-making
 process giving all relevant stakeholders an opportunity to participate?) and does the
 local community trust the information and the intentions of the investors and actors
 from outside the community.
- As for socio-political acceptance, one of the key challenges is to bridge the national-local divide i.e. how to translate national policy objectives in to locally accepted policies (and finally siting decisions)



Good Practice Wind (website, EU project, Scottish Government led)

'Community buy-in is influenced by the destination of financial revenues from wind farms: community funds providing indirect community benefits, equitable benefit schemes, and electricity price reductions can help create a basis for community acceptance'

•Community concerns and acceptance – how to achieve buy-in: the main barrier:

'Although most of the potential issues resulting from wind-energy projects are subject to rigorous studies and strict regulations, the consent, support, buy-in and involvement of citizens and local authorities will be needed if the deployment of wind farms across Europe is to take place in a harmonious way. This is also one of the main factors in speeding the planning process: without community acceptance an adversarial, and therefore slow and expensive, process is very likely and refusal of consent by regulators a significant possibility'.

Aitken (2011) argues institutional guidance would serve a number of worthwhile purposes.

- Firstly, they would give greater clarity.
- Secondly, they would give developers greater confidence to discuss the community benefits package in the early planning stages, and
- Thirdly, they would reduce the likelihood of community benefits being perceived as bribes.
- Aitken places emphasis on the importance of "trust" and "fairness" in debates around proposed renewable energy developments.

RGI European Grid Report, Lessons Learned, December 2012 (7 countries) Benefit sharing and compensation:

Compensation can have a positive impact on public acceptance. However, the risk is high that people may feel there is an intention to "bribe" them if money or compensation measures are offered in the wrong way. A set of clearly communicated and predetermined rules can serve as the basis for acceptable compensation. Experiences drawn from other major infrastructure projects, however, suggest that tangible benefits from the project have greater value than compensation designed to mitigate losses suffered.



WIND FARMS: HOW CAN LOCAL COMMUNITIES BENEFIT?

The Energy Bill announced in the Queen's Speech is sure to ignite intense debate about nuclear power, costs to consumers and the prospects for renewable energy development.

But another agenda that's been siminering away for 20 years is now coming to a head how can massive investment in energy infrestructure be delivered in ways that benefit the communities affected?

The community dimension has been the "Achilles Heel" of British renewable energy policy. While the roll-out of wind power in Denmark and Germany benefited from the widespread perticipation of local cooperatives and farmers, British projects are typically large, commercial, mostly benefit distant a tareholders and encounter local disquiet. It seems unlikely that the Energy Bill will change that,

For this reason, the spotlight needs to shine on ways of channelling some benefits from renewable energy to affected communities, and that is what our Viewpoint for JRF - Wind energy and justice for disadvantaged communities - tries to do.

We focus on how wind farm developers have conventionally delivered benefits to local people, through the provision of community benefit funds. But our research poses three main questions:

- Why should community benefits be paid? Such benefit funds have usually been viewed by policy-makers as a way of fostering acceptance of a scheme. This rarely works. A sounder reason for community benefits, we argue, is to deliver social justice. - redressing the harms caused to those communities. The justice dimension is especially important given that much wind-farm development has taken place in rural. or coastal areas suffering from economic, social and environmental disadvantage.
- To what extent can the level of community benefit payments be increased? Back in the 1996s, typical community benefit payments were £1,000 per magawalt, paid annually, but the best-performing companies are now delivering much more. Our research shows that local authorities have been able to raise contributions by establishing policies that pequest particular levels of community benefits. In Wales, for example, the Forestry Commission has been able to extract community benefits to the tune of £1.8 million each year at the recently approved Pen-y-Cympedd wind
- How might community benefits be best invested? There is a case for helping communities invest the community benefit funds in ways that improve the area's longterm resilience. One neat example is the Stirlingshire village of Finitry, which took its community benefits in the form of ownership of a turbine in a local commercial scheme, and has ploughed back its revenue into sustainable energy measures for local housing.

We would not pretend that community benefit funds can resolve all the conflicts of a transition towards a sustainable one gy system, but we do need a vigorous debate about what constitutes a fair relationship between such major projects and the communities that live with them, improving the level and application of community benefit funds is a pragmatic and vital focus for immediate action.

AUTHOR



Dr Richard Cowell Richard is a researcher and lecturer in the School of City and Regional Planning. Cardiff University, and has specialised in planning and sustainable devalopment.

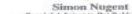
Read all blog posts by Richard

1 1 -A



DCENR Department of Communications, Energy and Natural Resources

Policy Document



Special Adviser to Pat Rabbitto TD Minister for Communications, Energy and Natural Resources

Department of Communications, Energy and Noticeal Resources 29-31 Advance-Basel

Mic 88 615 2003. Mubble 086 243 9679 East: danaunges@done.in Wate wire-done.in

Government Policy Statement on the Strategic Importance of **Transmission and Other Energy** Infrastructure

2012



Roinn Cumarsáide, Fuinnimh agus Acmhainní Nádúrtha Department of Communications, Energy and Natural Resources

Building Community Gain Considerations into Energy Infrastructure Planning and Budgeting

The Government would like to see enhanced co-operation with local authorities on the potential for delivering landscape, biodiversity and civic amenity benefits as part of Grid 25 and other energy infrastructure development. Delivering long lasting benefits to communities is an important way of achieving public acceptability for infrastructure.

Grid 25 and other essential energy infrastructure will have positive impacts for all local communities in underpinning regional and economic development and jobs. While everyone ultimately benefits from national energy infrastructure, potential negative impacts resulting from concerns about visual amenity and health and safety need to be mitigated through the consultation process and,



where appropriate, community gain measures. The Government considers that greater focus needs to be given to co-operative work with local communities and local authorities on landscape, biodiversity and civic amenity bringing long lasting benefits benefits for communities. The Government therefore underlines the appropriateness for the State Companies and energy project developers to examine appropriate means of building community gain considerations into their project budgeting and planning. The Government is therefore fully supportive of a community gain approach in the delivery of energy infrastructure.

Local Policy

 No joined-up or coordinated approach among Irish Local Authorities, although Depts. of Envnt. and Energy conscious of this.

Mayo County Council



Community Benefit Contributions required for certain major developments

Draft Policy

- . Community Benefit
- 1 Community Benefit is a goodwill contribution from a developer of a specific project for the benefit of the communities affected by the development where it will have long term effects on the environment. The contributions are used to fund projects and services over and above those required to be provided by the local authority.
- .2 In this regard Mayo County Council have decided to set up a Community Fund under Section 109 of the Local Government Act 2001 (as amended) whereby developers will be required to make contributions to the Community Fund for certain developments.

Table 1	
Developments subject to Community Benefit & Calculations for Contributions to the Community Fund	
Development Description	Contribution amount to be paid annually for the lifetime of the development
Energy Infrastructure	
A thermal power station or other combustion installation	€2,500/MW
An industrial installation for the production of electricity, steam or hot water with a heat output	€2,500/MW
An industrial installation for carrying gas, steam or hot water with a potential heat output	€2,500/MW
An installation for hydroelectric energy production, including pumped storage	€2,500/MW
An installation for the harnessing of wind power for energy production (a wind turbine)	€2,500/MW
High voltage electricity lines 110kV	€500/kilometre
High voltage electricity lines 220kV	€1000/kilometre
High voltage electricity lines 400kV	€3000/kilometre
Environmental Infrastructure	
A waste disposal installation for the incineration, or the chemical treatment ² or the landfill, of hazardous waste ³	

HCBS's

- What will be the reaction of local communities?
- How will communities be approached?
- How will communities be defined?
- Who in the community will be involved in negotiation, mediation, decision-making?
- How will procedural justice be determined?
- How will trust be established?

HCBA's

Mors et al. (2012) re CCS

Monetary incentives – e.g. provision of tax rebates to local residents

V

Public goods – e.g. construction of a park, a cultural centre, educational bursaries, playgrounds, youth centres, rural transport, sustainable energy programmes, sports grants, services for elderly, refurbishments.

Mors et al. (2012) conclude that while HCBA are no panacea, it can help to prevent or solve facility siting controversies.

Engagement Strategy Considerations

- Stakeholder Identification
- Project & Consultation Timeframe
- Consultation Options
- Importance of Local Knowledge
- Media
- Messaging
- Elements of Engagement Strategy

Why consult with stakeholders?

- Help reduce objections & associated costs
- Increase likelihood of success
- Fulfill legal requirements
- Benefit from local input, create and maintain relationships therefore strengthening project
- Corporate reputation

Consultation

- Communication techniques (liaison structure, (public meetings??) website, newsletters, office, Q&A, media protocol, messaging accuracy, clarity, understandable, consistent, non-technical, constructive)
- Start early & often, must be meaningful
- Anticipate problems
- Community liaison / representative

Timeframes

Must be realistic, cognisant of planning process
 & possible opposition

• Landowner engagement, access issues

Local Knowledge

• Assessment: get to know and feel area, local employers, opinion leaders, previous project experience, stakeholders (residents (concentric hierarchy), businesses, special interest groups, sports clubs, media, local administration officials). (Social Profile)

• Listen!

Summary points

- Consult early, often and clearly (more rather than less)
- Timeframes
- Stakeholder identification & engagement
- Local presence, involvement & knowledge





Implementing Agreement for Co-operation in the Research and Development of Wind Turbine Systems (IEA Wind)

Task 28 – Social Acceptance of Wind Energy Projects Phase III: January 2nd, 2017 – December 31st, 2019.

Operating Agent Garry Keegan, Ireland

Scope

- "IEA Wind Task 28" on Social Acceptance of Wind Energy Projects is a working group involving several countries, some of which included the USA, Germany, Denmark, Switzerland, Japan, Ireland, Portugal and Finland (U.K., Netherlands, Canada, Norway).
- T28 works as an interdisciplinary and international exchange platform with the objective of supporting efforts to achieve social acceptance of wind energy in the participating countries.
- A survey* of Exco members, T28 participants and other relevant third parties between June and August 2016.

^{*}Assisted by Irish national expert to Task 28, Prof Geraint Ellis and John McCann of Sustainable Energy Authority Ireland

Survey results indicated that some of the priorities should be to:

- Transform research into practice;
- Enhance participation of practitioners from the wind energy industry;
- Develop a common approach (framework) to training industry community engagement practitioners;
- Improve the quality of communication between developers and host communities;
- Increase Task 28 participation by national planning authorities and regulators;
- Explore new mechanisms for knowledge exchange between researchers, practitioners and policy makers;
- Share good practice.

Innovative approaches should be shared through international networks so that research is disseminated, communicated, influences and is applied among industry.

The survey results displayed a clear appetite for continued international collaboration

Theme 1:
Interdisciplinary engagement

Work Package 1: Knowledge exchange and co-production of innovation

Work Package 2: Off Shore Wind Energy

Work Package 4: Enhancing the effectiveness of research

IEA Wind: Task 28
Phase III priorities, themes and work r

WP1: Knowledge exchange and co-production of innovation

Incorporating:

- i. Understanding Community Impacts;
- ii. Evaluating Community Benefit & Ownership Models;
- iii.Community Participation Best Practice;
- iv. Training Framework for Industry Practitioners;
- v. State of the Art Reports.

i. Understanding Community Impacts

- Review and exchange experiences in understanding **health** impacts.
- The ongoing significance of <u>landscape</u> impacts of wind energy and the consequences of landscape saturation, critical thresholds of landscape impacts and the link to associated infrastructure such as grid extension;
- An exploration of what is a reasonable level of **annoyance** near turbines. This might include just annoyance from sound, but could also extend to landscape and shadow.
- Landscape amenity
- Tourism
- Property values
- Positive impact on local economy

The deliverable will include fact sheets on:

Community Impacts Overview:

- Social
- Recreation
- Visual
- Tourism
- Economic
- Health

Stakeholder Engagement Overview:

- Stakeholder Mapping (Fishing, Shipping, Aviation, Military, Marine, Birdlife)
- Political and Community Assessments
- Stakeholder Strategies
- Public Perceptions and Attitudes
- Best Practice Case Studies

Research will explore community acceptance and stakeholder engagement issues such as:

- 1. Offshore v On-shore community acceptance and stakeholder engagement differences?
- 2. Floating v Fixed offshore community acceptance differences?
- 3. Near-shore v Far-shore community acceptance differences?
- 4. What stakeholders are involved in offshore zoning and what are the site selection considerations?
- 5. Innovation in stakeholder engagement (e.g. offshore visualisation project, Germany)
- 6. Legal and tax framework differences between floating and fixed? (Explore, not in-depth)
- 7. In some jurisdictions, local and national government tax treatments are applicable; if not fixed to seabed, local and/or national taxes may not apply. (Explore, not in-depth)
- 8. How do local governments influence this local debate among communities?
- 9. What are the local social and economic benefits to off-shore wind farms?
- 10. Offshore Community Benefit Schemes
- 11. Considerations re:
- i. Political (local, regional, municipal, national)
- ii. Ports Infrastructure, Harbour Regeneration
- iii. Socio-economic constraints
- iv. Regulatory Challenges (Explore, not in-depth)

Socio-economic constraints:

•Potential impacts need to be assessed and where required mitigated to an acceptable level.

Potential impacts on:

- Birds
- Marine mammals
- Fishing communities
- Shipping
- Seaside / coastal communities
- •Those who live close to onshore grid connection

Political: As offshore are long-term capital intensive investments, a key challenge facing investors is gaining government strategic confidence in the sector.

Ports Infrastructure: Ports play a crucial role in the construction and operation of offshore wind farms, with different types of ports acting as the construction port, manufacturing port and O&M port.

Requirements for constn & manuf for offshore wind are generally different to that of other sectors due to the need for:

- long quaysides,
- high loading limits,
- •large laydown areas
- and 24 hour unrestricted access.

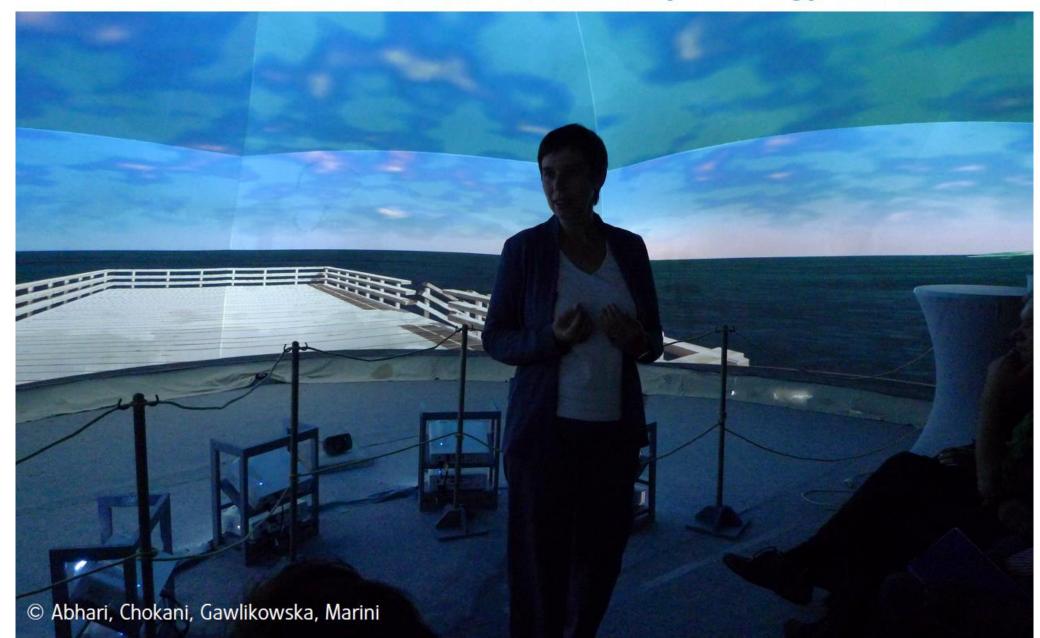
Offshore-Vizualisation

Participants

- Tourists
- Residents
- Experts



inside the dome - ETH Zurich, Laboratory for Energy Conversion



Dom — Ballonflug



Dom — Auf- und Abbau mit Baltic Taucher



qualitative landscape planning

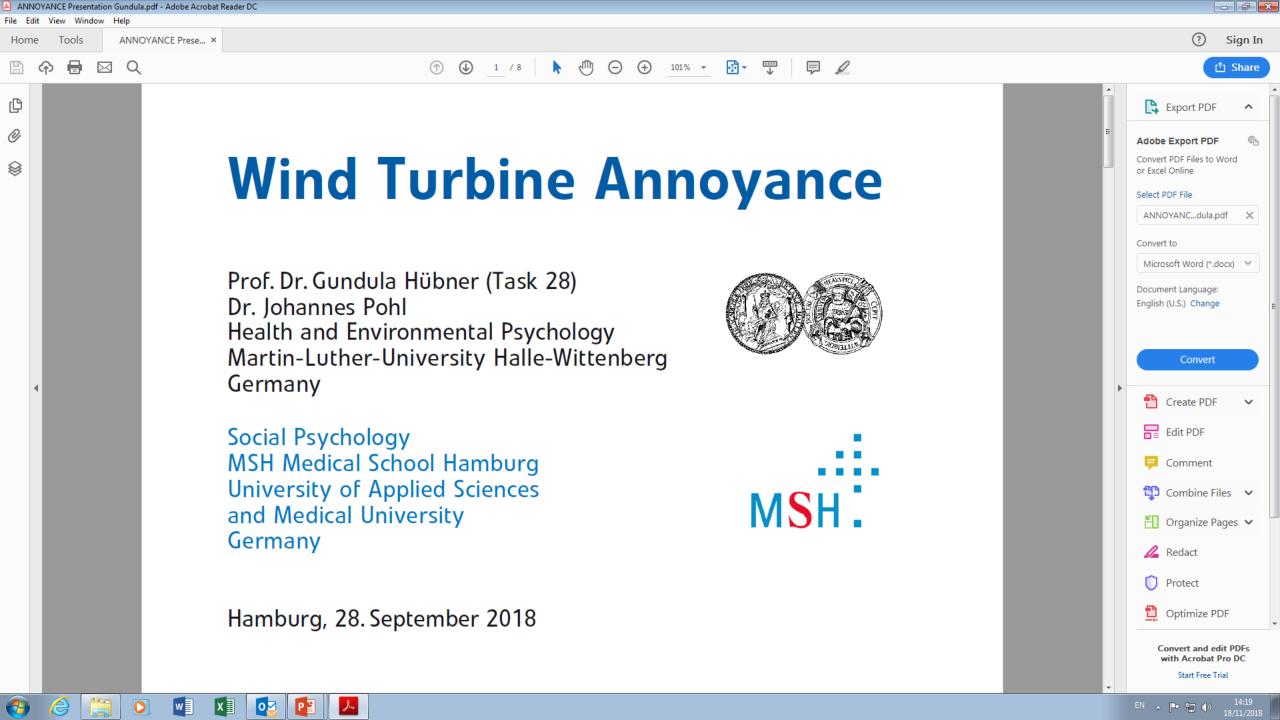


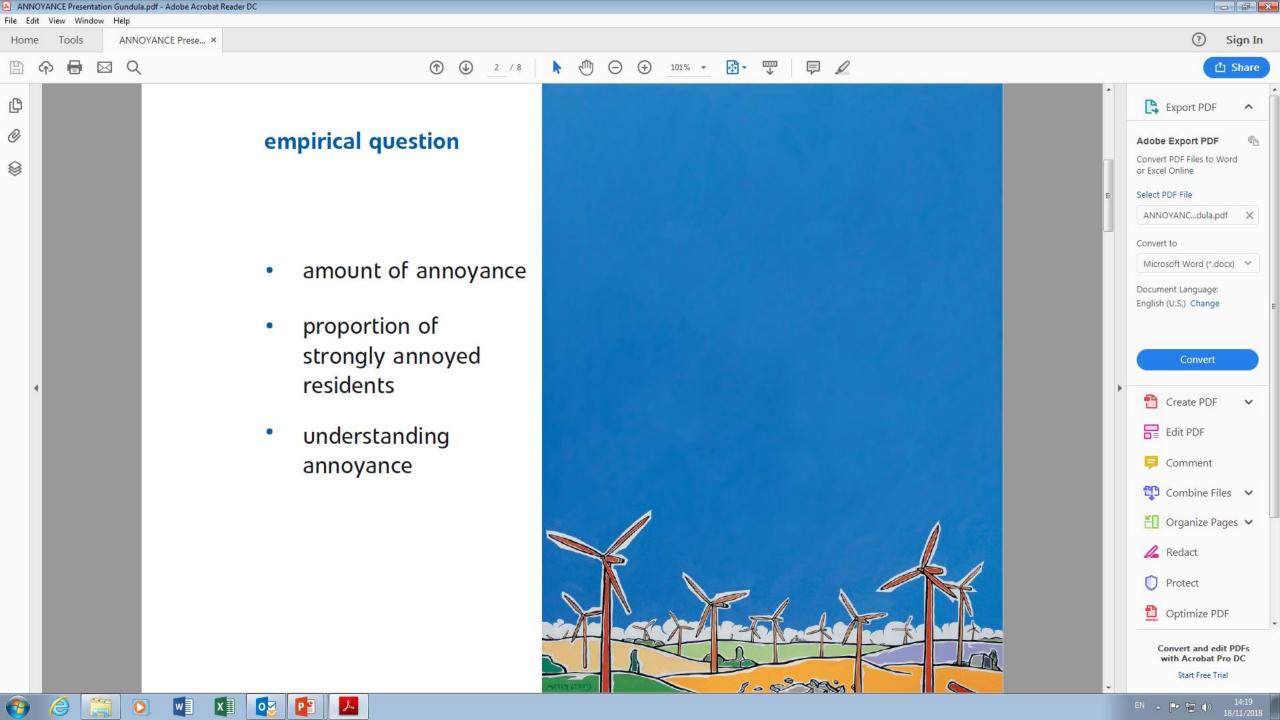
4 Sichtfächer

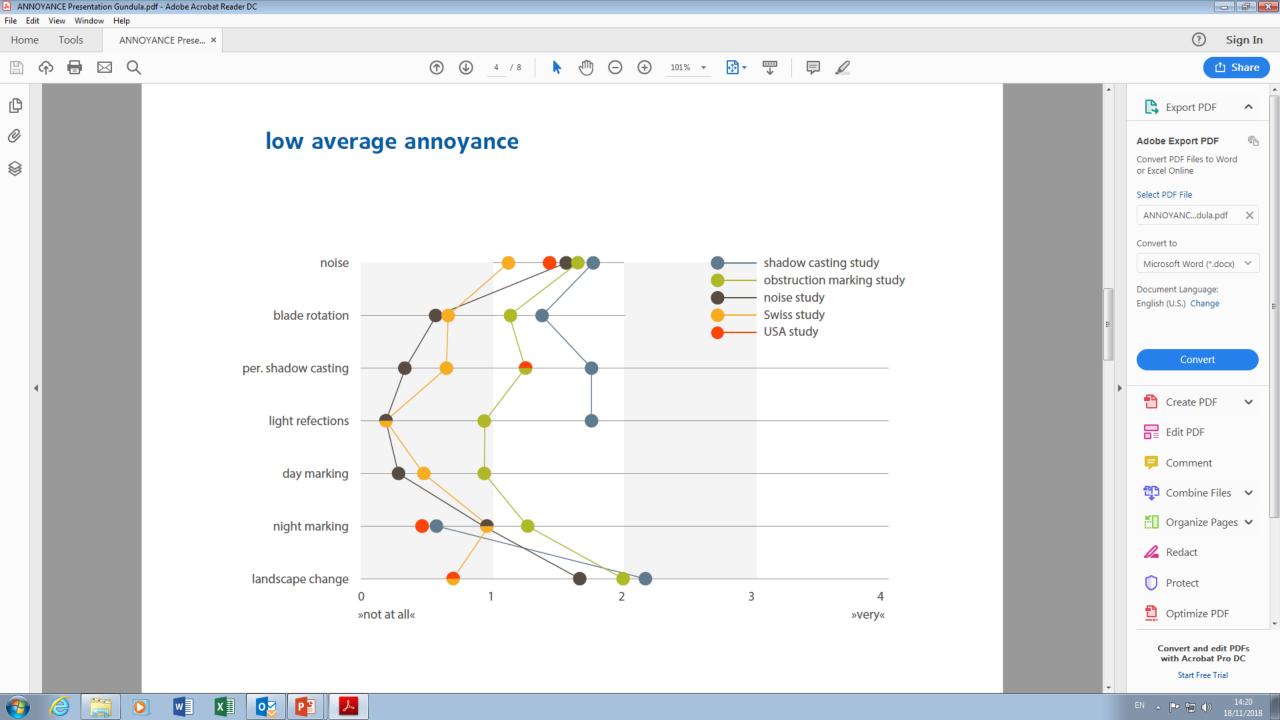
energetisch optimierten Anordnung: 5.015 GWh/a; durchschnittlichen Stromverbrauch von 3.477.809 Personen.

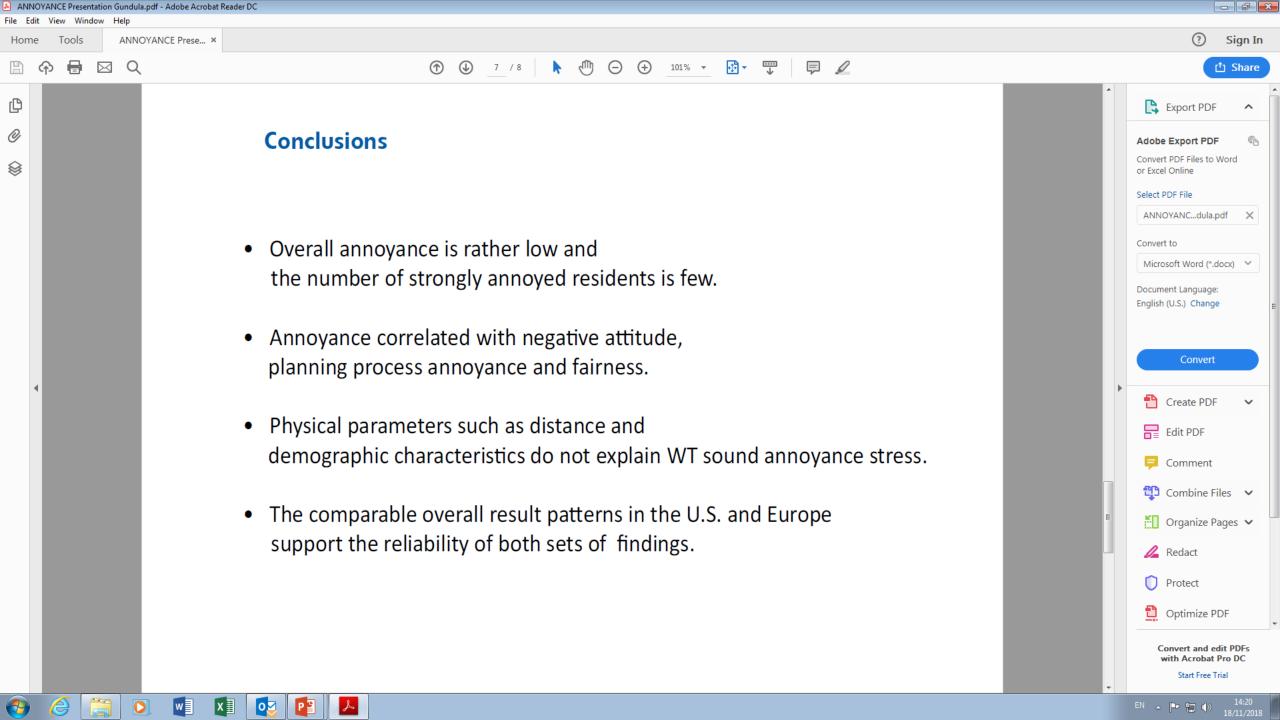


Luftbild: World Imagery - Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





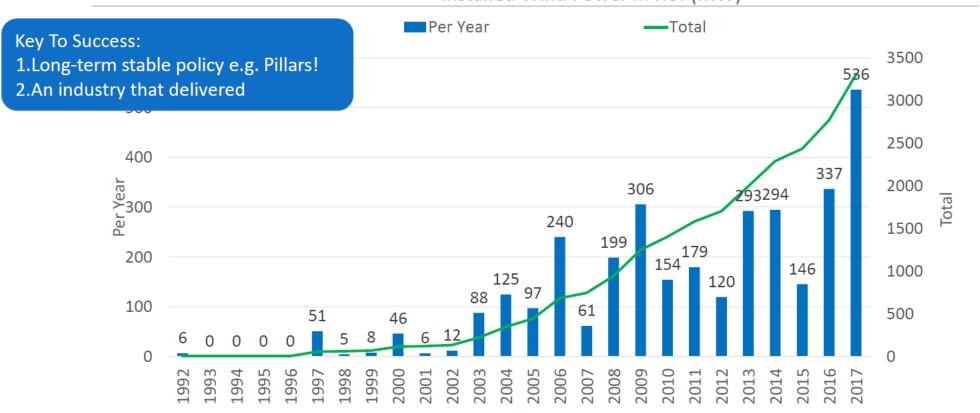




Wind Industry Can Now Deliver >500 MW/year:



Installed Wind Power in ROI (MW)



WIND IS BENEFITING IRELAND





INVESTING IN INFRASTRUCTURE:

APPROXIMATELY €6-7 BILLION SO FAR

REDUCING ENERGY IMPORTS: BY ~€250 MILLION IN 2017

REDUCING ELECTRICITY
GENERATION COSTS



ATTRACTING FDI SUCH AS MICROSOFT DATA CENTRE 2017 SUPPORTING LOCAL AUTHORITIES: RATES OF >€20 MILLION/YEAR

SUPPORTING WIND COMMUNITIES: IWEA MIN RECOMMENDATION OF

~€60K/TURBINE TODAY



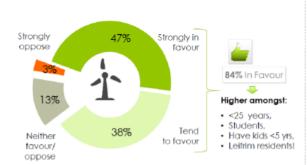
REDUCING CARBON EMISSIONS:

BY ~3 MILLION TONS IN
2017

30 May 2018 7

Attitudes to Wind Power

Q.1 All adults 18+ - 2078





IWEA Research October 2017



- •84% of public favour Wind Energy
 - 47% "strongly favour"; 38% "tend to favour"
- Just 3% "strongly oppose" Wind

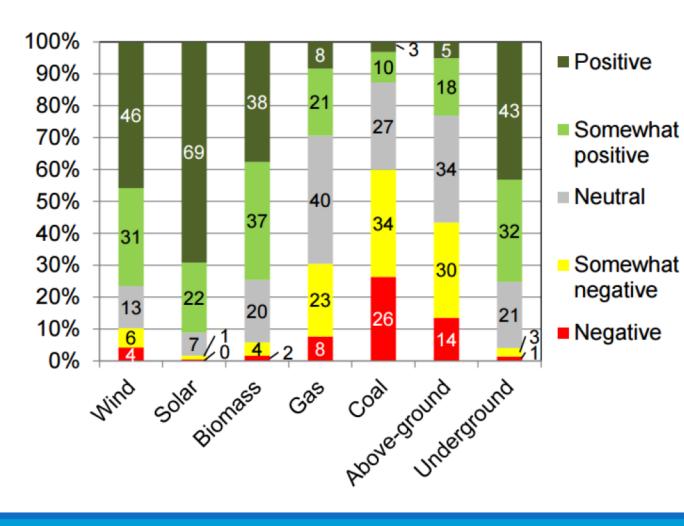
Ranked Benefits of Wind Power

Q.6 All adults 18+ - 2078



 High level of understanding of benefits of wind energy

Independent research commissioned by IWEA. Survey of 2000 adults throughout Ireland, conducted in October 2017 by *Interactions*.



ESRI Paper, 2017

- Only % negative to wind
- Need suite of engagement approaches and early engagement
- Community Benefit most effective form of financial compensation
- Need local authority engagement in communities
- Renewables policy needs to be communicated locally

Onshore Communities

- 250 surveys of people who live <4 km from an existing onshore wind farm
- 40 minutes with each person
- >70% people would keep the wind farm as long as there is sufficient engagement due to other benefits
- Source: <u>https://community.ieawind.org/iw</u> ern/home



Preliminary conclusions and policy implications

- Majority of respondents (82%) are willing to make (monetary) tradeoffs to allow for wind power initiatives and most individuals surveyed are generally supportive of WF
- Negative externalities identified include visual dis-amenities, turbine number, setback distance, electricity export.

IWEA's Previous Documents on Community Engagement





- IWEA looking for positive change in this area and have developed a range of best-practice guidelines on community engagement:
 - Best Practice Guidelines (Chapter 11), 2012
 - Being a Good Neighbour, 2013
 - Includes a recommendation to provide ~€60k/turbine in community benefit
 - IWEA also publicly supports and endorses the department's <u>Code of</u> <u>Practice for Wind Energy Development</u> in Ireland Guidelines for Community <u>Engagement</u>, Dec 2016
 - Ownership: <u>Published IWEA's Policy</u> <u>Recommendations on Shared</u> Ownership, An Irish Energy, 2017

Developing IWEA's Community Engagement Strategy



- •Q2 2017: Reputation Surveys
- •Q3 2017: Community Engagement Sub-Group Formed
- •Q3/4 2017: IWEA Committees Developed a Response to the RESS Consultation
- •Q4 2017: IWEA initiated online CLO Map
- •Q4 2017: Community Subgroup created a draft IWEA Community Engagement Strategy

- •Q1 2018: Interviewed Membership about the Strategy to find Consensus
- •Q1 2018: Launched Community Engagement Strategy at the IWEA conference
- •Q2 2018: Workshop with International experiences
- Q2 2018: Committee established in IWEA to implement the Community Engagement Strategy

IWEA's New Community Engagement Strategy: Currently Gathering Feedback



ENGAGEMENT COMMITMENTS

- •Specific Engagement Commitments at Each Stage of Development:
 - Pre-Planning
 - Pre-Construction/Construction
 - Post Construction/Operation
 - Existing Projects
- Early, open and transparent engagement is key to social acceptance

FINANCIAL COMMITMENTS

- •Community Benefit:
 - Support €2/MWh if standardised for all
 - Equates to ~€250,000/turbine
- Support Community Ownership assuming:
 - Investment terms are standardised
 - Investment terms should not disadvantage one project over another (as a result of varying levels of uptake)
 - The legal structure must be precise to avoid complicating project financing





Agenda Items

- Start Up
- Noise Concerns
- Aviation Lights
- TV Interference
- Flicker Complaints
- Community Fund Management General Fund
- Community Fund Management Residents Fund
- AOB

The Community Fund

- 27. The total Community Fund is €25,000/annum. The split of €15,000/annum to residents and €10,000 per annum as a general community fund was restated. The first distributions will be on the 1-year anniversary of going operational i.e. February 2019.
- 28. It was also restated that the General Fund would be for the benefit of the community within a 2KM radius of the wind farm and the Residents Fund would be for the benefit of the residential occupants within a 1 KM radius of the windfarm.





Garry Keegan

Dublin, Ireland.

00-353-86-235-8913

www.ipc10.com

gmk@ipc10.com

