

Appendices

Involving communities in deliberation: A study of 3 citizens' juries on onshore wind farms in Scotland

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For the full report see:

[http://www.climateexchange.org.uk/files/5614/3213/1663/Citizens_Juries -
_Full_Report.pdf](http://www.climateexchange.org.uk/files/5614/3213/1663/Citizens_Juries_-_Full_Report.pdf)



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Appendix 1 - Principles of good practice

On the basis of their research, Aitken et al. suggest that 'good practice' in engaging communities can be defined according to the following principles:

- Developers should be obligated to undertake community engagement throughout all stages (e.g. from pre-application, through to construction, operation and decommissioning). If the project developer changes, then the new developer/operator should be obligated to take on this engagement.
- Relatedly, and as noted in Circular 3/2013, they should be obliged to say how responses gathered during this engagement were (or were not) taken into account
- Engagement should start early; for developers this would be at an early stage of developing their plans, where adaptations in light of suggestions would be more easily made; also developers should be as open as possible about the development and engagement process at the start. Wider community engagement is typically conducted after consulting with statutory consultees, and when many of the key decisions regarding the design and location of the wind farm have been made. Our research suggests that this may be too late.
- Engagement on individual projects should be conceived of as an ongoing process, not just events during pre-application
- Engagement should be undertaken using wide ranging and extensive methods
- These methods should allow for a dialogue, not just a one way distribution of information
- They should be tailored to the particular location, using knowledge gathered about that place, and using methods and timings that are appropriate in each place
- Developers should support communities (who may be fatigued from engagement from multiple wind farms) in being able to participate, for example in terms of the means and timings, providing accessible channels through which community members can respond, and being flexible to adapt the engagement processes to suit that community
- Engagement should not just be seen as a way of avoiding opposition, but of respecting and valuing people's rights and expertise, and allowing for broader social outcomes (which may impact upon approval for that wind farm, any extensions, and wind energy more generally)

Appendix 2 - Research methods

A2.1 Research Ethics Statement

The study complied with the Ethics Policy and Procedure of the School of Social and Political Science at the University of Edinburgh. This entailed a Self Audit Checklist for Level 1 Ethical Review, which was submitted by the Principal Investigator (Oliver Escobar) and filed by the Research Office in September 2014. Formal informed written consent was obtained from all research participants throughout the project.

A2.2 Our mixed methods approach: Pragmatist foundation, dialectic stance

A mixed methods (MM) study entails research in which the investigators generate and analyse data, integrate findings, and draw inferences using both qualitative and quantitative methods in a single program of inquiry (Tashakkori and Creswell 2007: 4). But MM is more than simply combining methods. With Greene (2007:20), we understand MM as “a way of thinking”:

“an orientation toward social research... that invites to participate in dialogue –at the large table of empirical inquiry- multiple ways of seeing and hearing, multiple ways of making sense of the social world, and multiple standpoints on what is important and to be valued...”

After steady development since the 1950s, MM studies have mushroomed in the last two decades across disciplines and particularly within social sciences (Creswell and Plano Clark 2007; Tashakkori and Teddlie 2010). This has been fuelled by the increasing complexity of research problems and the need for more sophisticated evidence for policy and practice (Brannen and Moss 2012; Creswell and Plano Clark 2007: 13). For instance, Mason (2006: 10) points out that “social experience and lived realities are multi-dimensional” and our understanding is “impoverished and may be inadequate if we view these phenomena only along a single dimension”.

Our project is built on that premise, and citizens’ juries offer a unique research setting where MM can help to analyse multiple social and political dynamics. Following Creswell and Plano Clark (2007: 9-10), a MM approach adds value to this project because it

- provides strengths that offset the weaknesses of both quantitative (QUANT) and qualitative (QUAL) research;
- offers more comprehensive evidence for studying a deliberative process than either QUANT or QUAL research alone;
- helps answer questions that cannot be answered by QUAL or QUANT approaches alone;
- encourages researchers to collaborate across the sometimes challenging relationship between QUANT and QUAL work, which enriches the analysis;
- encourages the use of multiple worldviews or paradigms;

- is 'practical' in the sense that the researcher is free to use all methods possible to address a particular research dimension.

As Johnson and Turner (2003: 299) have argued, the fundamental principle to guide fruitful MM research is that "methods should be mixed in a way that has complementary strengths and nonoverlapping weaknesses". Nonetheless, there has been a long-standing debate on the problems of mixing methods. A key component of this debate is the "incompatibility thesis", which states that it is "inappropriate to mix QUAL and QUAN methods due to fundamental differences in the paradigms underlying those methods" (Teddlie and Tashakkori 2009: Location 248-249) At the heart of this dispute is the question of whether research methods carry implicit epistemological and axiological commitments or not –that is, whether QUANT methods are inherently positivist/post-positivist and QUAL methods inherently constructivist/interpretivist.

In our approach to MM, we are persuaded by Howe's (1988) "compatibility thesis", which draws on the philosophical tradition of American pragmatism to reject the 'either-or' choices that underpin the incompatibility thesis (see Johnson and Onwuegbuzie, 2004; Biesta, 2010). From this perspective, the notion that there are inherent linkages between methods and paradigms is questionable. Moreover, pragmatist researchers consider the research question to be more important than either the method used or the paradigm that may underpin it. In this vein, practical inquiry determines philosophical considerations, rather than the other way around (Plowright 2011).

On the basis of this foundation, throughout the report we take a "dialectic stance" to analytical and interpretive work. Following Greene, this entails "a respectful conversation amongst different ways of seeing and knowing" (2007:79), and any tensions generated in the analytical process are seen as creative tensions that can offer further insight (2005; 2007; Greene and Hall 2010). This dialectic approach to analysing data seeks:

Understanding that is woven from strands of particularity and generality, contextual complexity and patterned regularity, inside and outside perspectives, the whole and its constituent parts, change and stability... and so forth. That is... the generation of important understandings and discernments through the juxtaposition of different lenses, perspectives, and stances... (Greene 2005:8)

A2.3 Research design

A key purpose of mixing methods in this project was "complementarity", that is, the "elaboration, enhancement, illustration [and/or] clarification of the results from one method with the results from another" (Greene et al. 1989:259). The project entailed a "parallel mixed methods" research design, where QUAN and QUAL data were generated simultaneously in order to answer different research questions or related aspects of the same questions (Teddlie and Tashakkori, 2009: Location 2557-2563). Overall, it was a "convergent" design, featuring concurrent QUAN and QUAL data generation, separate QUAN and QUAL analyses, and subsequent integration of the two data sets during interpretation (Creswell and Plano Clark 2011:73-76).

There was no *a priori* primacy of one method over another, both strands (QUANT and QUAL) had equal priority in the project, albeit their relevance depended on each research question, and a particular data set could be more prominent in exploring a particular dimension of the inquiry. Thus research questions were addressed through analytical inferences based on QUAN and QUAL datasets. In MM, an “inference” is a conclusion, idea or argument derived from analysis of QUAN or QUAL data: “an inference is a researcher’s construction of the relationship among people, events and variables as well as his or her construction of respondents’ perceptions, behaviors, and feelings and how these relate to each other in a coherent and systematic manner” (Teddlie and Tashakkori 2009: Location 2567-2568). Sometimes we were able to develop “meta-inferences”, that is, conclusions generated by integrating the inferences obtained from the results of the QUAL and QUAN strands of the study (Ibid.).

As noted above, QUAL and QUAN data were initially analysed separately and then brought together during the interpretation and write-up stages. For some research questions, the analytical work then entailed reading the QUAL data through the lenses of the QUAN data, and vice versa, and eventually developing meta-inferences whenever possible. The overall process broadly followed Greene’s (2007:144-145) outline of key activities and phases in data analysis:

- *Data cleaning* – The data sets were reviewed for valid responses and methodological soundness.
- *Data reduction* – Data were analysed and reduced to descriptive form, including the development of frequencies, descriptive statistics, factors, case summaries, descriptive themes, and other reduced displays of information.
- *Data transformation* – In this phase some QUAN data was standardised, scaled and factor analysed; and QUAL data was turned into critical incidents, chronological narratives, and other forms of synthetic display. In addition, some QUAL data was “quantitised” (Teddlie and Tashakkori 2009: Location 4529-4530), that is, converted into numbers –e.g. open survey questions.
- *Data correlation and comparison* – This phase explored patterns of relationship in the data set, making clusters of variables, themes, or stories that appeared to go together, and interrogating similarities and differences between clusters.
- *Analysis for inquiry conclusions* – Higher order interpretations were developed to support, and when possible connect, inferences and meta-inferences.
- To ensure the quality of the study, we were guided by two sets of standards:
 - the traditional criteria for separately assessing the quality of QUAN data (i.e. validity / reliability) and QUAL data (i.e. credibility / dependability);
 - and criteria specific to MM, including inference quality, inference transferability, design quality and interpretive rigor (see Teddlie and Tashakkori, 2009: Locations 467, 470, 4848, 4849).

The assistance of the broader Research Team (see Chapter 2) was invaluable in scrutinising the quality of the study. They helped us (the report authors) to make sense of specific research puzzles during workshops in the analytical stages, and read and provided feedback on our final interpretations during write-up. Nevertheless, any shortcomings are our sole responsibility.

A2.4 Methods and data sources

For each citizens' jury, there were several qualitative and quantitative sources of data generated through methods including participant observation, artefact and document collection, semi-structured interviews, reflective memos and survey questionnaires.

Qualitative data included:

- *Transcriptions* of the materials produced by the juries, such as the principles statements generated to complete the juries' task, or the multiple outputs from different sessions of the jury process.
- *Audio recordings* of all the sessions, including plenary and group deliberation¹.
- *Field notes* written by the ethnographers and evaluators observing the jury.
- *Notes* of the organisers and facilitators' reflections on the process.
- *Documents* produced by organisers including emails, schedules, briefs, plans, drafts, minutes, etc.
- *Interviews* with witnesses and members of the Stewarding Board following the juries.

Extensive **quantitative data**, and some additional qualitative data, were collected through four questionnaires, which jurors completed at the start and end of each day to solicit their individual views and track their evolution. The questions were designed to capture the jurors' views about wind energy and wind farms, politics and decision-making, their personal civic skills, the importance of place (community) and other aspects. Some questions also gauged their knowledge of climate change and energy generation. Many questions were repeated over the course of the four questionnaires to measure changes as the process evolved. An anonymous identity (ID) code chosen by, and known only to, the individual jurors and allowed us to link the four questionnaires for panel analysis for each jurors' responses.

A2.5 An iterative design process:

To ensure excellent research quality, many of the resources were designed iteratively, drawing from the interdisciplinary expertise of the Research Team:

- Ethnographers and evaluators created a crib sheet to guide their observations and notes during the jury.
- Questions in the surveys were principally designed by the Research Co-ordinator for the project, and iteratively improved by the Research Team. A series of cognitive interviews with members of the public (including public for whom English was a second language) ensured that the questions could be easily understood, and that it was clear to people how they should go about answering the questions.
- Questions for the Stewarding Board and the Witnesses interviews were designed by the Research Co-ordinator and the Research Team (namely the Interviewers).

¹ These have not been transcribed yet, but could be consulted to clarify particular instances during the process. We plan to transcribe and analyse them in the aftermath of this project.

These followed a semi-structured format, and a crib sheet aided the research notes. Audio recordings were also made of all the interviews.

A2.6 Data Analysis

A2.6.1 Qualitative Data:

The qualitative data was coded and analysed using NVivo to explore the meanings conveyed in both the participants' reflections on the process and the observations of the researchers and the members of the Stewarding Board.

The codes for the principles statements were decided iteratively using both inductive and abductive logics (Blaikie):

- Firstly, the 2 authors of this report, and 1 of the organisers, worked separately on open coding (i.e. inducing themes from the principles).
- Then, together they discussed and refine the codes until they were reconciled and consolidated.
- Inter-coder reliability was tested by four researchers², who separately applied the codes across all the principles. When there was clear disagreement between these additional coders, the principle in question was double-coded.

All other qualitative sources were coded by the authors, including other materials produced by the jurors (questions asked to the witnesses), qualitative survey responses, and interview data.

A summary report evaluating the process was joint prepared by the evaluators in the Research Team, and interview reports were prepared by the interviewers (two ethnographers from the Research Team).

A2.6.2 Quantitative Data:

The questionnaires were highly structured with mainly closed response options. This led to numerical coding of the answers for a variety of levels of measurement. These data were analysed³ using Stata®, a statistical software package, to explore, describe and model the relationships between the multiple variables derived from the questions.

Where questions measured the same underlying concept, scaled variables were created. Scaled variables in the research report and their constituent questions are shown in Appendix 9.

Three of the scaled variables reflected citizens' underlying opinions about different aspects of wind farm development in Scotland: wind power and energy policy, wind farm planning and siting decisions, and impacts of wind farms on the local area. Each scale is an additive index based on the strength of disagreement/agreement⁴ with a series of statements related to the topics listed in Appendix 9-B. Where data were missing (participants had

² Dr. Leslie Mabon and Dr. Claire Hagget (Research Team members), Darcy Pimblett (ClimateXChange staff) and Prof. Zoe Shipton (University of Strathclyde).

³ The framework for analyses were devised by the authors and shaped by the Research Team. Dr. Niccole Pamphilis performed the analyses.

⁴ Scores on each question ranged from 1 strongly disagree to 5 strongly agree.

indicated “don't know” or had not provided any answer to a question), data values were assigned based on the median response to the given question for the location and survey matching the specific juror.

For the three scales, dependent sample t-tests were used to examine the aggregate change between each questionnaire for statistical change between each phase of the juries: learning, reflection, and deliberation. This was to investigate when participants’ opinions changed and/or changed the most during the citizen jury process. Due to the small sample size⁵, we consider the three groups as one sample and analyse the data as such.

The specific modelling of the phases of the questionnaires used a panel analysis to link the anonymised individuals’ opinion changes at each stage. This employed both unconditional change score models (assuming no impact of response at one time point on change over time) and three-wave random effects GLS regression modelling (comparing changes between pairs of questionnaires) (Berrington et al, 2006; Finkel, 1995). The results reveal if the average change is significantly different between surveys or between locations; not causality or direction of change.

A2.6.3 Data Reporting:

The project reports (and the analyses and arguments therein) benefited from the perspectives and expertise drawn from the interdisciplinary Research Team, and also from ClimateXChange and Scottish Government.

- The two principle authors wrote the reports, but the Research Team had opportunity to comment on its content and research approach (via two workshops) and also reviewed the draft report. Where members of the Research Team assisted with particular aspects of the report they are acknowledged in footnote.
- ClimateXChange staff provided some guidance on report scope and also assistance in practical preparation.
- Members of Scottish Government were given opportunity to comment on the draft reports, without encroaching upon the independence of the research team.

⁵ 47 participants. At the start of the surveys there were 49 participants but two dropped out of the process.

Appendix 3 - Jury Programme

A3.1 Day 1

9.00	-	9.30	Registration [and tea/coffee]
9.30	-	10.30	Project intro & dialogue session
10.30	-	11.00	Questionnaire 1
11.00	-	11.30	<i>Refreshment break</i>
11.30	-	12.20	Witness Session 1: Context information [energy & environment] 1 witness, brief presentation, group work and Q&A
12.20	-	1.20	<i>Lunch</i>
1.20	-	2.40	Witness Session 2: Renewable energy [onshore wind] 2 witnesses, brief presentation each, group work and Q&A
2.40	-	3.10	<i>Refreshment break</i>
3.10	-	4.40	Witness Session 3: Onshore wind farms [differing perspectives] 2 witnesses, brief presentation each, group work and Q&A
4.40	-	5.00	Questionnaire 2 [and refreshment refill]
5.00	-	5.15	Close

A3.2 Day 2

9.00	-	9.20	Registration [and tea/coffee]
9.20	-	9.40	Questionnaire 3
9.40	-	10.05	Reflective Group Conversation
10.05	-	10.50	Session 1: Identifying key areas for principles
10.50	-	11.15	<i>Refreshment break</i>
11.15	-	12.45	Session 2: Drafting proposals of principles
12.45	-	1.45	Lunch
1.45	-	3.00	Session 3: Agreeing principles statements
3.00	-	3.30	<i>Refreshment break</i>
3.30	-	4.30	Session 4: Principles into practice
4.30	-	5.00	Questionnaire 4 [and refreshment refill]
5.00	-	5.15	Reflection and close

Appendix 4 - Project Budget

Citizens' juries are the cheapest mini-publics (cf. Fournier et al. 2011; Warren and Pearse 2008; Dienel 1999), but they are considerably more expensive than standard public engagement processes (see Section 10.4). One citizens' jury can cost anywhere between £10,000-£20,000, and may last between 3-6 days, depending on the policy area in question. Without a research focus, one jury can be delivered by 2-3 staff who may organise, implement and report within 3-6 months –depending on whether they work part time or full time on the project.

The budget provided by ClimateXChange and University of Edinburgh for this project was £40,000 for the three juries (see Section 2.4). Since this was a research project, additional staff time was necessary to prepare, collect, and analyse the data. Thus, the project relied heavily on the pro-bono contributions from the Research Team, as well as additional staff from ClimateXChange. Additionally, members of the Stewarding Board and the witnesses were not paid for their time. The project budget did allow for travel expenses to be reimbursed.

Source	Cost	Per jury
Preparation		
Printing & materials	£676	
Stewarding Board expenses	£60	
Delivering the juries		
Recruitment	£9240	
Venue hire	£464	
Catering	£3210	
Facilitator's fees (2) & Travel	£4,782	
Jurors' stipends (both days)	£8130	
Travel expenses		
<i>Researcher</i>	£564	
<i>Witnesses'</i>	£929	

TOTAL	£28,055 ⁶	£9,352
Contribution in Kind – Time⁷	Days⁸	Per jury
Preparation		
Organisers: organising stewarding board meeting, recruitment (witnesses and jurors), project budgeting, day structure, catering and venue hire, sourcing jury materials, preparing the juror handbook, audio hire etc.	50	
Researchers***⁹	30	
Facilitators: n/a (included in cost above)	-	-
Attending the juries		
Organisers: Attending the juries (three organisers per jury, each jury was a 12 hour day)	27	
Researchers: Attending the juries (one ethnographer, one evaluator, each jury was a 12 hour day)	18	
Reporting		
Organisers: writing up jury materials (principles, questions, audio etc).	10	
Researchers: Evaluator and ethnographer report, only ⁹	6	
Writing of the interim and research reports,	60	
TOTAL	201	67

⁶ The remainder of this budget paid for the data analyses (£4,000), research and project support, and events to disseminate the project and research.

⁷ The researchers and organisers were not paid for their work in this project (their salary is provided by their institutions, and their institutions kindly allowed them to contribute their time to this project).

⁸ Day refers to a working day (8 hours).

⁹ These estimates do not include time contributions for aspects of the project that were purely for research, including preparing the questionnaires and research materials, research management, data preparation and analyses, or project reporting.

Appendix 5 - Witnesses' brief

This appendix contains organised correspondence between the project Organising Team (see Section 2.3) and the witnesses:

- A. Brief for witnesses, sent to all witnesses at the start of September 2013.
- B. Template for the witness guidelines, tailored to each witness, and sent to each at the start of October 2013.

Correspondence with the witnesses following Coldstream Day 1 is detailed in Section 3.3.2.

5-A. Brief for Witnesses

Introduction to the Research Project: Citizens' Juries on Wind farms in Scotland

This research project will look at how people feel about wind farms when they are given an opportunity to learn more about the topic and consider and discuss the issue as part of a group.

A group of 15-20 people will spend two Saturdays together listening to 'witnesses' (on the first day) before being asked to address, as a group, the following task:

"There are strong views on wind farms in Scotland, with some people being strongly opposed, others being strongly in favour and a range of opinions in between. This Citizens' Jury will address the overall question:

What should be the key principles for deciding about wind farm development, and why?"

This is called a 'Citizens' Jury' and works in a similar way to legal trials in court: the jury will hear from witnesses and is then asked to give a verdict on the question. But the citizens' jury's answer is for the research only and will not decide what happens to wind farms in the area or in other parts of Scotland.

The juries are funded by ClimateXChange, Scotland's Centre of Expertise on Climate Change, and the University of Edinburgh. The project researchers are independent (they are working 'pro bono') and come from 3 different Scottish Universities. The researchers will produce a project report in April 2014, which will be publicly available.

We want to engage citizens in different locations in Scotland and learn about the range of public views on the subject of onshore wind farms. We also want to find out if the Citizens' Jury format is a good way of discussing this issue in a balanced and respectful manner.

The Citizens' Jury process

The jury will be organised and facilitated by two of the project researchers. Their role is to help make the process impartial, interesting and enjoyable. They will make sure that

everyone can have a say and that the conversations take place in a respectful and productive way.

The jury will meet on two Saturdays, two weeks apart. On day 1, the jury will hear various perspectives on the topic from diverse ‘witnesses’ who will provide information and opinion. This information forms the basis for the jurors’ discussions on day 2 of the juries – called the deliberative phase.

During the deliberative phase, the jurors will consider and discuss the topic, eventually providing a ‘verdict’ which tries to reflect the views of all jurors. Sometimes jurors agree on a single verdict, and sometimes they don’t. Both results are perfectly valid, and the reasons for agreement or disagreement will be included in the project report.

The role of the witness

Witnesses help the jurors to understand the issues central to the jury’s task. Their role is to assist jurors in getting to grips with key aspects of the topic, and equip and empower them to deliberate and respond to the task.

Witnesses need to be engaging speakers, able to present for an audience who may know very little about the topic and issues around it, and may not have thought about it before. They must be able to explain complexities in language that anyone can understand. They should have a good level of knowledge about the theme of the session in which they are presenting, and be able to answer potentially wide-ranging questions, or to point the jurors towards sources of information about their questions. The witnesses will give short presentations that sketch out their perspective, but a larger portion of time will be devoted to juror questions and discussion.

Witnesses range from an impartial presenter who will introduce jurors to the vocabulary and wider context around the topic, to witnesses who advocate a particular point of view. Different witnesses will present and answer questions in three sessions.

Structured witness sessions

On the first day of each jury there will be three witness sessions on different themes relating to wind farms. These will be structured as follows:

- Session 1 – general context setting (one witness)
- Session 2 – wind energy (two witnesses)
- Session 3 – pros and cons of onshore wind farms (two witnesses)

Session 1 of the jury – general context setting – will feature one witness: an impartial presenter offering a balanced picture of the range of issues involved, and how these play into the overall energy and environment context. The presenter’s role is to make the jurors comfortable with the vocabulary of the topic, and to explain the wider context and cover the range of issues that are relevant to the topic, rather as a teacher might.

Session 2 – wind energy – will have two witnesses, who will present evidence, stories and arguments that dig deeper into the topic and raise more specific issues and perspectives. The two witnesses will provide different perspectives on the theme of wind energy.

Session 3 – pros and cons of onshore wind farms – will also have two witnesses, selected to provide a balance between voices broadly ‘for’ and ‘against’ onshore wind farms in Scotland.

The detailed structure of the sessions, and what the witnesses should cover in each, is set out below.

<p>Session 1: Context Information (energy and environment)</p> <p>Timing: 11:30 – 12:20</p>	<p><u>1 speaker</u></p> <p><u>Structure:</u> 15 minutes of presentation followed by 35 minutes of Q&A and discussion</p> <p><u>Content:</u> <i>Energy and environment overview</i></p> <ul style="list-style-type: none"> - Energy: What is it (heat, transport, electricity)? What are the energy options? - What issues are raised when we think about ‘energy & environment’ and how are they linked? (For example: climate change: what does it mean for our energy system? ; other environmental considerations such as local amenity and air quality.)
<p>Session 2: Renewable Energy (introducing onshore wind)</p> <p>Timing: 13:20 – 14:40</p>	<p><u>2 Speakers</u></p> <p><u>Structure:</u> 2 x 12 minute presentations followed by 56 mins of Q&A and discussion</p> <p><u>Content:</u> <i>Introducing wind energy</i></p> <ul style="list-style-type: none"> - Wind energy technologies: what is involved; how does it work; pros and cons as an energy source - The current policy framework: targets and what those mean
<p>Session 3: Onshore Wind Farms (differing perspectives)</p> <p>Timing: 15:10 – 16:40</p>	<p><u>2 Speakers:</u> One presenting the broad case ‘against’ onshore wind farms; and one speaker presenting the broad case ‘for’ onshore wind farms. (Speaking order to be determined by coin toss).</p> <p><u>Structure:</u> 2 x 15 minute presentations followed by 1 hour Q&A and discussion</p> <p><u>Content:</u> Determined by the speakers (to a greater extent than for sessions 1 & 2) but we suggest covering the following topics:</p> <ul style="list-style-type: none"> - What impacts do wind farms have (positive and negative) and how/where/by whom are those felt? - Case study / real life examples - What should be the key principles for deciding about wind farms?

Time commitment

The juries (day 1) will convene on three Saturdays as follows:

- 26 October 2013
- 9 November 2013
- 18 January 2014

From a research perspective, it is very important that the same witnesses attend all three juries.

Witnesses should arrive at least 20 minutes before their allotted session. They are not expected to stay on beyond the end of their session. Session 1 runs from 11:30 to 12:20; Session 2 runs from 13:20 to 14:40; and Session 3 runs from 15:10 to 16:40.

The project research team is currently finalising the three jury locations. They will all be within 2 hours' travel of Edinburgh and Glasgow.

Expenses

Whilst we cannot pay witnesses a fee, we will cover all travel and incidental costs incurred.

Preparation

The basic material that the witness must prepare is a presentation, using a format that is engaging – e.g. Powerpoint slides with a balance between interesting images and text. Presentations should be sent a week in advance to the organisers, so that they can be uploaded for the session, and printed for the jurors.

If the witness would like to share other materials that are accessible and insightful (e.g. briefs, websites, videos), we will be delighted to consider including them in the Juror Handbook that each participant will get. The Handbook will include a range of materials and pointers that the jurors may decide to check in the 2 weeks between the first and second days of the jury.

When recommending materials for the jurors, it is important to recognise that not everyone has a preference for the written word. Accordingly, we are keen to provide a variety of media that different people may enjoy – e.g. videos, podcasts. Nonetheless, clearly written briefs, blogs, etc will also be recommended as long as they are accessible, insightful and provide an important perspective on the topic.

Suggesting a potential substitute

We would like to be ready for the unexpected, and we will therefore ask each witness to suggest a 'back-up' (a substitute) who could step in if the original witness can no longer attend. This 'back-up' person should also have the qualities outlined in this brief, and be able to take over and work with the presentation prepared by the original witness.

As noted above, it is very important that all 3 juries engage with the same witnesses. So if a 'back-up' witness attends the first jury, it would be desirable that this witness also contributes to the other two.

Therefore, if you are someone who:

- knows a lot about the topic of the session;
- can present in an engaging manner;
- can communicate in lay terms, conveying complexity without jargon;
- can engage in open discussion and answer questions;
- can adapt to the ongoing needs of the jurors and the session;

- and would enjoy contributing to this Citizens' Jury process...

...then you are just the witness we are looking for, and we very much hope you will join us in this exciting project.

Oliver Escobar, University of Edinburgh - oliver.escobar@ed.ac.uk

Ragne Low, ClimateXChange - ragne@sniffer.org.uk

Jen Roberts, Strathclyde University - jen.roberts@strath.ac.uk

5-B. Presentation Guidelines for Witnesses

Dates and times

To remind you, the three dates for the juries are: Saturday 26 October 2013; Saturday 9 November 2013 and Saturday 18 January 2014. The locations and venues are:

- 26 October – Coldstream: Coldstream Town Hall, 73 High Street, Coldstream, TD12 4AE
- 9 November – Helensburgh: Commodore Hotel, 112 -117 West Clyde Street, Helensburgh, Argyll and Bute, G84 8ES
- 18 January – Aberfeldy: Aberfeldy Town Hall, Crieff Road, Aberfeldy, Perthshire, PH15 2BJ

Please arrive by [insert time]. If you need further information about the venues or how to get to them, please contact ragne@sniffer.org.uk

Purpose of your witness presentation

Witnesses help the jurors to understand the issues central to the jury's task. Their role is to assist jurors in getting to grips with key aspects of the topic, and equip and empower them to deliberate and respond to the task.

As you know, the juries are being asked to address, as a group, the following task:

"There are strong views on wind farms in Scotland, with some people being strongly opposed, others being strongly in favour and a range of opinions in between. This Citizens' Jury will address the overall question:

What should be the key principles for deciding about wind farm development, and why?"

Therefore, in your presentation you should focus on providing evidence, stories and insights that will help the jurors to answer the task question.

Your witness session

[Text for Session 1 witness]

You will be presenting in Session 1 of the jury, the general context setting session. This session will feature one witness (you), who has the role of impartial presenter, offering a balanced picture of the range of issues involved and how these play into the overall energy and environment context. Your role is to make the jurors comfortable with the vocabulary of the topic, and to explain the wider context and cover the range of issues that are relevant to the topic, rather as a teacher might.

You should present an overview of energy and environment issues, explaining what energy is and what our energy options are for generating electricity. We suggest you might cover the following questions: What issues are raised when we think about 'energy & environment' and how are they linked? What does climate change mean for our energy system? What other environmental considerations - such as local amenity and air quality - are important?

Session 1 runs from 11:30 – 12:20 (50 minutes in total). It will be structured as follows: 15 minutes of presentation followed by 35 minutes of group work, Q&A and discussion. There is more information about the structure of your session below.

[Text for Session 2 witnesses]

You will be presenting in Session 2 of the jury, the introduction to wind energy session. This will have two witnesses (you and one other), who will present evidence, stories and arguments that dig down into the topic of onshore wind power and raise issues and perspectives specific to the topic. You and the other witness have been selected to provide different perspectives on the theme of onshore wind power – one that is broadly in favour of onshore wind power and one that is broadly opposed. Speaking order will be decided by coin toss.

You should introduce onshore wind power and present an overview of the key issues that the jury should be aware of. We suggest you might cover the following questions: What wind power technologies exist and in what contexts are they deployed? How do they work (at a broad level)? What are the pros and cons of wind power as an electricity source? What are the key themes to highlight from the current policy framework (for example the UK's and Scotland's renewables targets)?

Session 2 runs from 13:20 – 14:40 (1 hour 20 minutes in total). It will be structured as follows: 2 x 12 minute presentations followed by 56 minutes of group work, Q&A and discussion. There is more information about the structure of your session below.

[Text for Session 3 witnesses]

You will be presenting in Session 3 of the jury, which is focused on exploring the arguments for and against onshore wind farms. This session will have two witnesses (you and one other), selected to provide a balance between a broadly 'for' position and a broadly 'against' position on onshore wind farms in Scotland. Speaking order will be decided by coin toss.

You should speak about the task question: What should be the key principles for deciding about wind farms? We suggest you might like to cover the following questions: What sorts of impacts do wind farms have (positive and negative: amenity, environmental, economic, local, national etc. impacts) and how, where and by whom are those felt? Are there examples or case studies that help illustrate the issues? What sorts of ownership structures exist and what are the pros and cons of these?

Session 3 runs from 15:10 – 16:40 (1 hour 30 minutes in total). It will be structured as follows: 2 x 15 minute presentations followed by 1 hour of group work, Q&A and discussion. There is more information about the structure of your session below.

Structure of your witness session

Following your presentation(s), the jurors will have an opportunity to discuss amongst themselves the key questions they would like to ask you. This discussion will be facilitated, and will take about 15-20 minutes. You are welcome during this time to drop in on those facilitated groups to listen to the discussions, or otherwise wait until they come back to the plenary for the Q&A. The key questions will then be posed to you by the jury and we will have in total 20 / 30 [delete as appropriate] minutes of discussion time. The jurors will decide which question is for whom, and there may be questions addressed to both witnesses. Your responses should be as clear and succinct as possible. The facilitator will aim to balance the interventions by both witnesses, and will allow for discussion between you.

The question sessions will be carefully facilitated to ensure that we discuss the issues in a balanced and respectful manner, and that both witnesses have a fair opportunity to respond to the jury's questions.

Your presentation

Your presentation must take no longer than 12 / 15 minutes [delete as appropriate]. As the jury's day is tightly packed and planned, we will be sticking very strictly to time. You will have an opportunity during the Q&A discussion to make further points. If there are key pieces of information that you would like to convey but which you do not have time to cover in your presentation, we would be very grateful if you could send us these in document form or as a website URL or link to a film, blog or interview. We can then include these in the Handbook that the jurors will be able to take away with them.

The jury

The juries are being recruited to represent as broad a spectrum of demographics as possible. We aim to have a really good mix of people that is as far as possible representative of the public at large. As such, there will be people in the room with varied educational backgrounds and varied levels of knowledge about the issues being discussed. Please be aware of that, and do not assume any prior knowledge or familiarity with concepts or terms that are specific to the topic. Obviously, you should avoid using any jargon or acronyms that are not common in everyday language.

Previous research on Citizens' Juries suggests that the witness presentations can substantially influence the Jury's outcomes. Therefore, your arguments and communication skills will most likely have a direct impact on how the jurors understand, discuss and decide on the topic.

Presentation tips

Here are a few principles to bear in mind when making your presentations:

- Feel free to use Powerpoint slides for your presentation. If you do use slides, you should only use a font size of 20 or larger.
- Images and photographs can be useful to break up text, but graphs and diagrams can be confusing and difficult to interpret unless they are *very* simple.
- You may wish to anticipate questions and have extra slides ready if you think that would help you to respond during the Q&A.
- Please speak clearly and relatively *slowly* (it is better to err on the side of caution here, as there may be people in the group who are hard of hearing or for whom English is not their first language).
- Your last presentation slide should summarise your *3-5 key messages*. Please do not provide more than 5 key messages, as people may not be able to take them in and your slide is likely to get overcrowded with text. We will use these final slides as posters. If you are not using Powerpoint slides, please send us your 3-5 key messages by email and we will print them up as a poster.

What you need to do now

Please start to think about what you would like to get across in your presentation. As mentioned above, we will be giving each juror a Handbook to take away and read, if they wish, during the break between the first and second jury days. Please send us any material that you would like us to include in the Handbook (this could be position statements or reports, or links to websites, films, interviews, blogs, fact sheets, pod casts, and so on).

If you are using Powerpoint slides, please email us these by Friday 18 October. Please send them to jen.roberts@strath.ac.uk. If you are not using Powerpoint, please send us a summary of your speaking points and your 3-5 key messages by the same date.

After the juries

The research team will be producing a project report in late May. You may choose to be anonymous in that report if you wish. Please let jen.roberts@strath.ac.uk know if that is the case.

We will send you a copy of the report as soon as it is finalised.

The jury days will be independently evaluated by dedicated members of the research team (experienced social researchers who have been appointed this particular role). As part of that evaluation, your witness session will be evaluated to see how the jurors felt about it and what they got from it. If you have any concerns about this or would like to discuss it, please contact the research coordinator, Jen Roberts jen.roberts@strath.ac.uk.

Following the last jury date (i.e. in late January / early February), the research team will contact you to ask you a few questions about how you found your involvement in the project. This post-participation short interview will be very useful for the research team in assessing the strengths and weaknesses of the Citizens' Juries model and its application in this project. We will very much value the opportunity to record your reflections on the experience.

Finally, you will be invited to an event (date to be decided) following publication of the project report, where the research team will present the report and their findings to an audience of interested stakeholders. The jurors will all be invited to that event too. We will be in touch after the report is published to give you more details about the event.

Facilitation

The jury's day will be organised and facilitated by two of the project researchers, both of whom are very experienced facilitators. Their role is to help make the process impartial, interesting and enjoyable. They will make sure that everyone can have a say and that the conversations take place in a respectful and productive way. If you have any questions about the facilitation, please contact oliver.escobar@ed.ac.uk

Expenses

Whilst we cannot pay witnesses a fee, we will cover all travel and incidental costs incurred. We will provide an expenses form on each day. You may either complete a form for each day or bundle your expenses together in one form. Please note that we require original receipts for any purchases / tickets.

Finally...

We are very excited about the project and are tremendously grateful for your participation. We look forward to seeing you on [insert date]!

If you have any urgent queries in the days just before the juries, please contact Ragne on [number] or Oliver on [number].

Oliver Escobar, University of Edinburgh - oliver.escobar@ed.ac.uk

Jen Roberts, Strathclyde University - jen.roberts@strath.ac.uk

Ragne Low, ClimateXChange - ragne@sniffer.org.uk

Appendix 6 – Juror Information Materials

6-A Project Information Sheet for the Jurors

At the start of Day 1, once the project had been introduced to the jurors, they were given the project information sheet and consent form to read and complete.

Research Project: Public Conversations about Environmental Issues in Scotland – Wind Farms

What is the research project?

This research project will look at how people feel about environmental issues - wind farms in particular - when they are given an opportunity to learn more about the topic and consider and discuss the issue as part of a group.

A group of 15-20 people will spend two Saturdays together (9.30am - 5.15pm each day) listening to speakers before being asked to discuss, as a group, the following question:

“There are strong views on wind farms in Scotland, with some people being strongly opposed, others being strongly in favour and a range of opinions in between. What should be the key principles for deciding about wind farm development, and why?”

There are different ways in which conversations like this can be run. We are going to be using an approach known as a ‘citizens’ jury’. This works in a similar way to a court jury: You (‘the jurors’) have been selected to be representative of citizens in your area. In the course of the two-day jury, you will hear from a number of speakers (the ‘witnesses’), you will have the opportunity to discuss what you have heard, and then you will be asked to give a group verdict on the question in the box above. There is no right or wrong ‘answer’, and there may well be a range of opinions in your group. The citizens’ jury’s verdict is for the research only and will *not* decide what happens to wind farms in the area or in other parts of Scotland.

The juries are funded by the University of Edinburgh and Scotland’s Centre of Expertise on Climate Change (‘ClimateXChange’ for short). ClimateXChange is a network of researchers in Scotland working to provide expertise on all sorts of issues relating to climate change. The Research Team acts independently from the project funders and is made up of researchers from four Scottish Universities.

What will happen on the two citizens’ jury days?

On the first day, you will hear from the ‘witnesses’. There will be an impartial speaker talking about different aspects of energy. You will also hear from speakers in favour of wind energy

and wind farms, and others who are against them. You will be able to ask questions and discuss the issues raised with the witnesses and the other jurors.

On the second day, you will work together with your fellow jurors to reach a group 'verdict' on the question. This should sum up the various opinions of the jury - so you do not need to agree on a single 'verdict'.

The jury process will be assisted by two 'facilitators'. Their role is to help make the process impartial, interesting and enjoyable. They will make sure that everyone can have a say and that the conversations take place in a respectful and productive way.

Why is this research important?

There are strong views on wind farms in Scotland, with some people being strongly opposed, others being strongly in favour and a range of opinions in between. It is important to involve citizens in discussing issues that affect them. This research lets a diverse group of people discuss an issue with the help of evidence and arguments from both sides presented in a calm atmosphere and with time to reflect on the issues raised. The research is also valuable in looking at how we can find new ways of involving citizens when making decisions about complicated issues that may affect them.

Three locations in Scotland will have a jury, so the result is not just one particular community's point of view. The results will provide information about what aspects of wind farms are important to local people in Scotland.

How will what you say be recorded and stored?

At the start and end of each jury day you will be asked to complete a short questionnaire. The sound from the group discussions will be audio-recorded and there will be two researchers making notes and observations throughout the days. All of this information – including the questionnaires – will be anonymous. This means that your name/identity will not be linked to your responses in the questionnaires nor to the views you express during the jury.

The questionnaires, audio recordings, and notes will be stored securely for four years following the end of the project. They will only be available to researchers involved in the project, for the purposes of analysis and reporting. After four years, the sound recordings will be destroyed and the anonymous questionnaires and notes from the juries will be made available so other researchers may use them.

When will the results be published?

The researchers will write a report from the three juries. There will be an event to launch the report, which you are very welcome to attend. The event is likely to be held in Edinburgh in April 2014 and invites will be posted to you closer to the time. The report will be published by the University of Edinburgh. We hope many groups, including local and

national politicians, will find the report interesting and thought-provoking. Researchers will also use the research to write other academic papers.

What will you get out of taking part?

We hope you will find being part of the citizens' jury a rewarding experience and enjoy learning more about wind farms, taking part in the discussions, and getting to know your fellow jurors. We are very grateful to you for giving up two Saturdays to make this research possible. To say thank you for taking part you will be given £70 at the end of the first day and £100 at the end of the second day.

Who can I contact about the project?

If you have any questions about the project, now or later, please contact:

Project Director: Oliver Escobar oliver.escobar@ed.ac.uk tel: 07818 677204

Project Manager: Ragne Low ragne@sniffer.org.uk tel: 07717 586992

Research Coordinator: Jen Roberts jen.roberts@strath.ac.uk tel: 0141 548 3183

6-B Juror Handbook

In case the jurors wished to learn more in between the two jury days, each participant was provided with a Handbook, a short, user-friendly document which presented background information and links to diverse sources for further information and opinion. View the handbook at:

http://www.climatexchange.org.uk/files/2314/3211/1648/Citizens_Juries_Handbook.pdf

Appendix 7 – Evaluators’ Report

This document combines reports of three different evaluators who observed three different juries. Evaluators worked to an agreed format, indicated here by the structure of the report on heading used.

1. Logistics and organisation

A) Clarity of purpose.

This aspect was handled consistently and well in all three juries (CJs). The evaluators point here to a set of tools employed consistently for this purpose during CJs. These include:

- articulation of aims for each day;
- introduction of organisers, researchers and their roles;
- explanation of research questions and data collection process as part of the jury (use of information sheets, participant consent forms and questionnaires)
- Instructions and reminders, re-iterations offered through the day at appropriate times
- timings for activities projected on screen and thus visible to all
- timekeeping discipline

B) Physical environment.

All meetings took place in large, easy to reach public spaces (town hall, library, hotel). These venues were judged on the whole to be have been appropriate for the purpose; however, small problems related to space and ambiance were also noted: while large rooms were useful for panel activities, lack of breakout spaces for small groups was noted as causing small difficulties; poor acoustics of big echoing rooms were noted too in two of the venues; cold temperature of the room was noted in one of the venues on the first day.

The quality of catering varied. Evaluators commented on excellent, homemade food in one of the venues and more basic and lacking in food choice in another. It may be interesting to note here that the evaluator at the venue with the excellent catering commented on food breaks as opportunities to mingle and chat for both the participants and the organisers, who took this opportunity to interact with all the participants in a more personal way.

One of the evaluators noted the management of ambiance through the use of quiet background music at appropriate times to make the atmosphere of the room less cold and empty when no scheduled activities were taking place.

C) Timekeeping/flow.

Time was unobtrusively monitored closely and abided by very effectively throughout the days. It seemed to work well on both days for all three juries.

D) Learning/discussion balance.

There was a good balance between learning and discussion across all three juries due to the design of activities and skillful facilitation. Day 1 was mainly dedicated to learning through the interactive sessions with the witnesses, but there was discussion here too especially in the small group sessions. Day 2 was dedicated to discussion and decision-making amongst the jurors.

2. Adequacy of witnesses' session.

(a) Comments on gaps.

On the whole, jurors offered little comment on gaps in the information presented by the witnesses. There was, however, some questioning of the anecdotal nature of some of the 'evidence' being presented; e.g. impact on health, jobs, climate change.

(b) Follow-up questions.

The key observation here is that the interactions tended to be framed by the information presented by the witnesses (e.g. nuclear fission or fusion; energy mix; cost benefit analyses; need for subsidies; comparisons of Scotland with other countries; etc.) rather than display high levels of jurors' critical independence. Evaluators noted the lack of vigorous debate, uncertainty about what questions to ask, although there were also some jurors who asked several questions and referred to other possible frames (e.g. nationalisation; energy price controls; Scottish independence; etc.).

One, unanticipated, characteristic of the approach taken by the witnesses —passion— emerged as salient to the way in which jurors responded to the witnesses and their evidence. Many commented on the passion expressed by one witness that was palpably lacking in the others, which had a big impact on them as it seemed to express a strong belief, apparently independent of commercial or political interests. Passion communicated through an adversarial approach in the discussion between witnesses and jurors was noted by one of the evaluators as adding interest to this part of the day. However, there was some indication also that participants may have felt overwhelmed by the stark difference between views presented by the witnesses.

3. Support for jurors by organisers/facilitators.

Although a number of specific ways for offering support is listed below separately, techniques used during CJs often worked across a number of dimensions at the same time; for example, by creating opportunities for discussion and questions; contributing to the creation of a safe space; and ensuring inclusiveness.

(a) Opportunities for discussion/questions.

This was made very clear in the introduction and repeated throughout the days (e.g. "no such thing as a stupid question"). While the break-out groups gave opportunities, they were relatively quiet and unassertive on Day 1, probably due to learning to know and trust each other.

(b) Creation of a safe space.

A very good process of setting of guidelines for good conversations was conducted in CJs. The clustering of questions in the groups allowed comments to be made without a potential face-to-face challenge. There were clearly noted examples of facilitation working effectively to instill deliberative skills (for example in post-witness small group discussions).

(c) Inclusiveness.

Consistent, strong attempts were made by facilitators to bring in less articulate/confident jurors through:

- verbal cues: such as the use of “we” while addressing the group, and others to build confidence, ensure space for all contributions, stop breakaway conversations, share power between facilitators and jurors
- allocation of group tasks (e.g. spokesperson in reporting on group activities)
- help with tasks, such as phrasing principles, as ‘should’ statements, with positive reinforcement of each oral and written contribution.

(d) Group dynamics.

Due to their design, Day 1 and Day 2 of the jury process encouraged different dynamics. Day 1 was mainly dedicated to learning through the interactive sessions with the witnesses, but there was discussion here too especially in the small group sessions. Day 2 was dedicated to discussion and decision-making amongst the jurors. On Day 1 there was not a lot of debate (and mostly responsive to the facilitators). On Day 2 evaluators’ comments point to: the presence of heated debates within some groups; growing levels of trust and confidence displayed through oral contributions as well as increasing number of active contributors; and active listening displayed by quieter participants. However, there were also examples of discussions that worked more as a group interview, rather than a focus group, i.e. they were characterized by minimal interaction between participants.

Other shared characteristics of the group dynamics observed across all three CJs were:

- presence of participants who had a tendency to dominate the discussion
- men, especially middle-aged men, showing higher levels of confidence than other jurors
- every jury had members who displayed different levels of participation: taking the lead in discussion by offering regular contributions in addition to invited contributions in rounds; making occasional contributions in addition to invited questions or opinions; actively listening, as demonstrated by body language

(e) Impartiality of facilitators.

Very fairly conducted, with emphasis on diversity and lack of compulsion to reach conclusions. Question proposals were managed through a Delphi process (using voting stars), which gave equal weight to each person’s views.

(f) Appropriateness of interventions.

Overall the facilitators managed the process very impartially. Interventions were never overtly confrontational and all seemed to abide by the pre-agreed rules of debate.

4. Recommendations of process as robust and fair.

Rather than aggregated evaluators comments, this section retains the three distinct voices, reflecting both the nature of the individual CJs and the evaluators' own distinct interest.

[A] "Its operation in this CJ showed that the process could be made to be very supportive and inclusive of a wide range of citizens. The limited amount of inter-juror discussion, debate and deliberation probably reflects the difficulties in engaging people in the context of limited time and the need to keep up a sufficient level of interest throughout. Some of the principles need unpacking due to the unrealistic/superficial nature of some concepts; e.g. full information; impartiality; etc. The focus on one specific issue avoids having to think about relative costs and benefits, but it also seemed to frustrate the jurors as they saw the debate in wider terms. What seemed to be missing from some of the discussions was the need to focus on climate change as the problem to be addressed. All participants said they enjoyed the process and felt it reflected their opinions, even if there was no consensus (albeit close to one), which suggests that it offers one way to engage with citizens over complex, polarising public policy issues. However, we do not know how sustainable such a method would be over the long-term."

[B] This is a complex question, but I do think that citizens' juries (CJs) do have a role to play within the policy process. I certainly think that minipublics in general do. More thought and research is required though to ascertain the specific benefits that smaller minipublics like CJs provide in comparison to the larger minipublics which have greater statistical representative claims. If the main role of minipublics is to be a heuristic indicator of informed and post-deliberative public opinion to policy makers and the broader public, then CJs seem less suited. However, more research needs to be done on what types of minipublics would be the most trusted heuristics and why. This would help to clarify at what stage in the policy process CJs would be best placed to have the most democratic input. CJs are certainly cheaper than larger minipublics, which is why they have been the most used type. It is understandable that this is an attractive attribute for policy makers, but normatively a stronger case needs to be provided and I believe it can be. For example, it could be that CJs produce better quality deliberation, but this claim needs to be tested empirically. In considering the [location] CJ in particular I think it is necessary for the process to be longer than two days. Ideally jurors should also be able to select their own witnesses too, as is common practice in CJs in the USA."

[C] "This is clearly an expensive method of public engagement due to time, complexity of the arrangements, and organisational costs. However, it can produce profound engagement that combines active critical learning with pragmatic focus on forming opinions in a fully open social/public context."

My notes suggest that the process delivered deep learning, opinion change, consensus on a number of levels [these need to be properly assessed through survey data]. While contributing to building of social capital by encouraging participation (derived from the positive experiences of this event), the process managed to keep at bay aggressively assertive behaviours, rigid polarisation of opinions and self-censorship linked to conformist pressures (spiral of silence).”

Appendix 8 - Recruiters' report

Recruitment and Profile of the citizens' juries

Dr Sara Davidson, Ipsos MORI Scotland

Recruitment

Choice of recruitment method

There are three main ways of recruiting a representative sample of the public to a citizen jury: 1) sampling from the electoral roll; 2) face-to-face recruitment (carried out door-to-door and/or in-street); and 3) telephone recruitment using random digit dialling.

The first approach involves buying sample from edited electoral registers, sending an opt-in form and a short questionnaire (to collect sampling variables) to all members of the sample and compiling a database of those who respond. People in the database can then be recontacted and invited to take part in the jury.

There are some disadvantages with using the electoral register as a sampling frame, however. Firstly, coverage of the edited register can be low as some people are reluctant to have their details passed on to companies for marketing purposes. Secondly, asking people to opt into the research introduces self-selection into the process which can potentially bias the sample towards those who are more civically engaged and those who hold particularly strong views. Thirdly, it is easy for people to simply ignore the opt in form, which means it is necessary to send it to a substantial number of people to achieve the desired number of responses. Fourthly, because it is necessary to allow at least a two week opt in period before re-contacting members of the sample, the overall recruitment process can be quite protracted, which increases the likelihood of drop out.

The second approach; face-to-face recruitment, involves commissioning a research agency to send specially trained recruiters to the area where the jury will be held, to enlist jurors according to a pre-agreed specification. The main advantages of this approach are that: the recruitment is undertaken in the immediate run up to the jury so drop outs are less likely; a good rate of participation is usually ensured as people are less likely to refuse to take part in a jury when approached by a recruiter in person; and attendance rates tend to be higher because of the face-to-face commitment jurors have made. Moreover, the jurors tend to be more representative of the population because they are less self-selecting than those recruited through the electoral roll.

The third approach; telephone recruitment, involves using random digit dialling within specified postcode areas to contact prospective jurors. Although the approach can be as effective as face-to-face recruitment in securing a representative sample, it is less cost-effective as a greater degree of over-recruitment is required to ensure the required rate of

attendance (around 50% compared with around 20% in face-to-face recruitment). Also, there is less scope for telephone recruiters to target their recruitment in order to meet quotas (for example, they are less able to identify and target areas of deprivation), meaning that more time is spent screening for prospective jurors.

On the basis of the various considerations outlined above, the recruitment method chosen for the citizen jury project was face-to-face recruitment, conducted door-to-door and in-street. Ipsos MORI Scotland was commissioned to undertake the work.

The recruitment process

Although the target number of jurors per location was 15, it was agreed that 20 people would be recruited in each case to allow for the possibility of some non-attendance.

A target profile for the 20 recruits was subsequently agreed to ensure that they would be representative of the Scottish population in relevant socio-demographic and attitudinal terms. As table 1 below shows, quotas were set on sex, age, working status and income, as well as on civic engagement, level of interest in the environment and attitudes to wind farms developments.

Table 1: Jury quotas

	Quota
Sex	
Male	Equal split
Female	
Age	
18-24	4 (20%)
25-54	10 (50%)
55+	6 (30%)
Working status	
Full time	Mix
Part time	
Not working/retired	
Income	
under 15,999 per year	At least 8 (40%)
£16,000 and £31,199	At least 4 (20%)
£31,200 and £51,999	At least 2 (10%)

£52,000 or above	At least 1 (5%)
Civic engagement	
Have taken part in one or more activity	Mix
Have not taken part in an activity	
Attitudes towards wind farms in Scotland	
Should be more	Mix
Should be fewer	
Current level about right	
Attitudes towards the environment	
Very interested	Mix
Fairly interested	
Not very interested	
Not at all interested	

Sex, age and a measure of socio-economic status are the most commonly used quota variables when recruiting a sample of the general public for social research exercises. Together they usually produce a mixed sample that is also broadly representative of the population on other socio-demographic variables (e.g. family structure). It is inadvisable to have too many demographic quotas in cases such as this where the overall target sample size is small and where there are also attitudinal requirements that must be met because, with every variable added, the recruitment task becomes increasingly difficult to the point of impractical.

The demographic quotas were based on available Scottish population data (Scottish census data for sex and age, and Scottish Household Survey data for income). For age, however, the targets were tweaked to help ensure the representation of the youngest age group. 18-24 year olds comprise only 12% of the adult Scottish population, which would have resulted in only 2 of the 20 recruits per location coming from this age group. Therefore, the target was increased to 20% (4 recruits) to maximise the likelihood of young people being represented, even in the event of drop outs. To allow for this, the target for the oldest age group was reduced slightly from the Scottish figure of 37% (or 7 people out of the 20) to 30% (or 6 people out of the 20) – older people usually being the most reliable in terms of turning up. The target for the middle age category was left in line with the Scottish figure (51% or 10 people).

A recruitment questionnaire, incorporating the quota requirements, was developed for use by the recruiters to enable them to assess the eligibility of potential jurors. The

questionnaire was accompanied by a set of written instructions, which included further information on the study, including how it should be introduced to prospective jurors, and the dates, time and locations for the juries.

Recruitment was undertaken in the two weeks leading up to each jury. The recruiters worked on weekdays and weekends; and during the day and in the evening, to maximise their chances of making contact with a broad range of people. In each location, they began by recruiting door-to-door in areas close to the venue for the jury and worked out from there. They were instructed to recruit only one juror per street to help ensure the diversity of the sample and minimise the likelihood of participants knowing one another.

As the recruitment progressed and it became increasingly difficult for the recruiters to meet the quotas door-to-door, they began to recruit people in-street.

Upon recruitment, all jurors were asked whether they had any special needs that might affect their ability to attend and/or participate in a jury; for example, a need for wheelchair access at venues or a loop hearing system, or any special dietary requirements (In the event, no such special needs were identified). Additionally, all jurors were given a letter containing a brief description of what would be involved in the jury; the date, timing and location; and a map to the venue.

The recruiters re-contacted participants by telephone over the three days leading up to each jury to check that they were still planning to attend. There were no drop outs for any of the juries at this stage so no additional recruitment was required.

Challenges encountered during recruitment

Three main challenges were encountered during recruitment. Firstly, and as in any qualitative recruitment exercise where multiple quotas have been set (including both demographic and attitudinal quotas), it was difficult for the recruiters to meet all quotas exactly. In particular, they struggled to meet the sex and age quotas exactly whilst maintaining a balance across the other quota variables (Further details on the profile of recruits and jurors are provided in section 4 below).

Secondly it proved difficult for the recruiters to find people who were 'not very' or 'not at all' interested in the environment. This problem appeared to stem from the fact that the juries were introduced as being about 'the local environment', which meant that people who had no interest in this issue were often reluctant to take part. At the same time, there may have been a social desirability effect at play, whereby prospective jurors felt that they should say that they were interested in the environment when asked, even if it was not an issue to which they gave a great deal of thought – a commonly encountered difficulty in research on environmental attitudes and behaviours.

That people who were not interested in the environment were especially difficult to find in the Coldstream and Aberfeldy areas suggests that there may also have been a rural dimension to the problem. People who choose to live in rural areas are, almost by definition, people who value the countryside and who are therefore likely to express an interest in the environment when asked.

The third main challenge encountered during recruitment was finding people who could attend both sittings of the juries. Many people approached said that they could make one of the Saturdays but not the other. This meant that the recruiters had to approach considerably more people than would have been the case for a one day event in order to find the target number of jurors.

The recruitment in Coldstream and Aberfeldy presented some additional challenges. Both towns comprised a relatively small number of streets so door-to-door recruitment yielded a low rate of return (bearing in mind that the recruiters could only recruit one person per street). In-street recruitment was similarly more difficult in these areas as, even in the main streets, footfall was very light. The fact that many properties in the Aberfeldy area were holiday homes and empty at the time of recruitment compounded these problems. Ultimately the recruiters had to work many more hours than anticipated in both areas to meet all of their quotas.

Profile of the jurors

Table 2 shows the profile of those recruited to each of the three juries, alongside the profile of attendees (The slightly higher number of people recruited to the Aberfeldy jury was an attempt to redress some shortcomings in the Helensburgh sample, discussed further below).

Despite the challenges recruitment presented, the profile of recruits was broadly in line with the quota targets, outlined above – although the difficulties the recruiters encountered in finding people who were not interested in the environment are self-evident.

In terms of how the profile of attendees compared with that of recruits, a few disparities stand out:

- Women were significantly under-represented on the Helensburgh jury (by a ratio of 1:2). In attempt to redress this and even out the gender balance across the three juries, a higher ratio of women to men was recruited to the Aberfeldy jury. Lower than expected turnout by *men* in Aberfeldy, however, meant that women were *over*-represented on that jury and men under-represented.
- People aged 18-24 years were very slightly under-represented on the Helensburgh jury. To avoid a similar problem in Aberfeldy, three reserve young people were recruited to that jury (The reserve participants are not included in the table below).
- People aged 25-54 years were slightly under-represented on the Coldstream jury and slightly over-represented on the other two juries. In respect of people aged 55 and over, the reverse was the case.
- People who felt that there should be fewer wind farm developments in Scotland were outnumbered on the juries by people who felt that there should be more. However, the ratio was in line with available polling data on the subject¹⁰.

¹⁰ See, for example: <http://www.ipsos-mori.com/Assets/Docs/Polls/renewable-uk-wind-power-topline-april.pdf>

Table 2: Profile of recruits and jurors by location

	Coldstream		Helensburgh		Aberfeldy	
	<i>Recruited</i>	<i>Attended</i>	<i>Recruited</i>	<i>Attended</i>	<i>Recruited</i>	<i>Attended</i>
Sex						
Male	11	7	11	10	10	6
Female	9	9	9	5	14	12
Age						
Aged 18-24	6	4	4	2	5	4
Aged 25-54	8	7	10	9	12	10
Aged 55+	6	5	6	4	7	4
Income						
Under £15,999 per year	10	7	7	6	13	10
£16,000 - £31,199	5	4	6	4	7	4
£31,200 - £51,999	4	3	4	2	3	3
£52,000 and above	1	1	3	3	1	1
Working status						
Working FT	7	7	8	6	7	8
Working PT	2	2	3	2	4	3
Not working	11	7	9	7	13	7
Civic engagement						
Have taken part in one or more activity	6	5	11	9	15	10
Have not taken part in an activity	14	11	9	6	9	8
Attitudes towards wind farms						
Should be more	7	7	8	3	10	7

Current level about right	7	6	5	5	5	6
Should be fewer	6	3	7	7	9	5
Interest in the environment						
Fairly/very interested	14	13	11	10	16	14
Not very/not at all interested	6	3	9	5	8	4
Total	20	16	20	15	24	18

Notwithstanding the issues outlined above, the aggregate profile of the three juries was broadly in line with the aggregate quota targets, as table 3 shows. As such, it can also be said that it was very similar to the profile of the Scottish population in terms of age, gender and income.

Table 3: Aggregate profile of the three juries against the quota targets

	Overall Target	Total attended
Gender		
Male	Equal split	23
Female		26
Age		
Aged 18-24	12 (20%)	10 (20%)
Aged 25-54	30 (50%)	26 (53%)
Aged 55+	18 (30%)	13 (27%)
Income		
Under £15,999 per year	At least 24 (40%)	23 (47%)
£16,000 - £31,199	At least 12 (20%)	12 (24%)
£31,200 - £51,999	At least 6 (10%)	8 (16%)
£52,000 and above	At least 3 (5%)	5 (10%)
Working status		
Working FT	Mix	21
Working PT		7
Not working		21
Civic engagement		
Have taken part in one or more activity	Mix	24
Have not taken part in an activity		25
Attitudes towards wind farms		
Should be more	Mix	22
Current level about right		15
Should be fewer		12
Interest in the environment		
Fairly/very interested		37

Not very/not at all interested	Mix	12
Total	60	49

Additional issues encountered and lessons learned

On paper, the Helensburgh jury appeared reasonably mixed in terms of attitudes towards wind farm developments. However, the views expressed by the jury on the day were predominantly in the anti-wind farm direction. Discussion of this issue in the days following the jury prompted a realisation that the problem may have lain in the recruitment question used to gauge attitudes to wind farms. As mentioned previously, participants were asked whether they felt Scotland needed more or less wind farms, or whether the current level was about right. A response of “more” was interpreted as pro-wind farm, “less” as anti-wind farm and “about right” as a more or less a neutral position. However, it could be the case that some of the Helensburgh jurors who said “about right” did so because they (perhaps emphatically) did not want to see any more wind farms being built; not least in their local area. In other words, these participants may not, as had been assumed at recruitment, been at all neutral on the issue. With this mind, consideration was given to changing the wording of the recruitment question for the Aberfeldy jury so that the response categories were more mutually distinct. In the event, however, the decision was taken to leave the question unaltered in the interest of consistency and comparability.

At the Helensburgh event it also emerged that two of the jurors worked together in a shop, while two others were father and son. Subsequent investigation of these issues by the Ipsos MORI team found that the jurors who worked together were recruited by different recruiters and around a week apart. The father and son were similarly found to have been recruited separately and to have been unaware that each other would be attending the jury until a few days before. There is little that could have been done to avoid such eventualities entirely, which are part and parcel of recruiting in a confined geographic location. Nonetheless, given that the father and son shared a surname, they should, in hindsight, have been asked whether or not they knew one another before being firmly invited to take part in the jury.

Appendix 9 - Survey questions

A9-A: Questions to assess jurors' learning

A9-A.1 Questions to measure self-reported knowledge

A) Self-reported knowledge on political issues

- How much would you say you understand the important political issues facing Scotland and the rest of the UK?
- The Climate Change (Scotland) Act was passed by the Scottish Parliament in 2009. The legislation outlines a commitment to reducing greenhouse gas emissions by 42% before 2020, and by 80% before 2050. *Were you already familiar with Scotland's greenhouse gas emissions targets?*
- In the Climate Change (Scotland) Act, Scotland aims to generate all the electricity Scotland needs from renewable sources by 2020. *Were you already familiar with Scotland's renewable energy targets?*

B) Self-reported knowledge on environmental issues

- I would say I know a lot about environmental issues

C) Self-reported knowledge on climate change

- How would you rate your own knowledge of:
- the causes of climate change
- greenhouse gases
- greenhouse gas emissions in Scotland
- the effects of climate change.

D) Self-reported knowledge on energy generation

- How informed do you feel you are to talk about energy generation in Scotland?
- How would you rate your own knowledge of the following topics?
- How energy is generated at the moment in Scotland (e.g. gas, coal, wind, tidal, etc.)
- Renewable energy technology
- Wind energy

E) Self-reported learning during the jury

- What have you learnt about today that has really stood out for you? *[asked at end of Day 1 and Day 2] [Qualitative]*
- How much did you learn from this witness? *[asked for each witness]*
- What was the most interesting or striking thing (for you personally) that you have learnt from taking part in this citizens' jury? *[Qualitative]*
- On which day would you say you learnt most?

A9-A.2 Questions to assess knowledge gains in the juries

A) Measured knowledge on climate change

Are the following statements about climate change correct?

- Greenhouse gases are causing climate change
- Scientists generally agree that climate change is occurring
- Average global temperatures have not increased over the past hundred years
- The greenhouse effect is caused by a hole in the earth's atmosphere
- Climate change is causing global sea levels to rise

B) Measured knowledge on energy generation

In your opinion, are the following statements about energy correct?

- Scotland currently generates more renewable electricity than most other European countries.
- Nuclear power stations emit large quantities greenhouse gases into the atmosphere.
- Renewable electricity is generated without large amounts of greenhouse gases being emitted.
- The fossil fuels used to generate electricity in Scotland are mostly imported from other countries.

A9-A.3 Questions to assess jurors' sense of efficacy

The collapsed variable for efficacy was based on the following questions that were asked in each survey. Jurors indicated how much they agreed with each statement.

- How comfortable do you feel when voicing your opinion?
- How much do you like participating in discussion and debates?
- How nervous do you feel when speaking in front of a group?
- How unsettled would you say you feel if someone challenges your opinion during a conversation?
- How comfortable would you say you are when working in a group?

A9-B: Questions to assess jurors' perspectives

A9-B.2. Questions to measure overarching opinions about renewable energy development, including wind energy.

Renewable energy development in Scotland

- How strongly do you agree or disagree with the following statement: "Scotland should generate as much renewable energy as it can"? *Participants circled the number that most closely matched their opinion, where (1) Strongly disagree, (2) Slightly disagree, (3) Neither agree nor disagree, (4) Slightly agree, (5) Strongly agree, (DK) Don't know.*
- In the [Climate Change \(Scotland\) Act](#), Scotland aims to generate all the electricity Scotland needs from **renewable** sources by 2020. How much would you say you support these renewable energy targets? *Participants circled the number that most closely matched their opinion, where (1) Not at all, (2) A little, (3) Somewhat, (4) Quite a lot, (5) Very Much, (DK) Don't know.*

Overarching opinion about wind energy development in Scotland

- Overall, do you think that wind energy development has had a positive or negative impact on Scotland? *Participants selected 'Positive', 'Negative' or 'Neutral' and were asked to explain the reasons for their answer.*
- Scotland has the potential to generate more electricity from wind power. How strongly do you agree or disagree with the statement: "for wind energy, the positives outweigh the negatives". *Participants circled the number that most closely matched their opinion, where (1) Strongly disagree, (2) Slightly disagree, (3) Neither agree nor disagree, (4) Slightly agree, (5) Strongly agree, (DK) Don't know.*

A9-B.2. Questions to measure opinions about particular aspects of wind energy and wind farms.

The groups of questions (A) to (C) measure jurors' attitude towards a shared underlying concept, and so are scaled to give a single reliable measure of that concept. For each statement, jurors select 'strongly disagree', 'slightly disagree', 'neutral', 'slightly agree', 'strongly agree', or 'don't know'. Where the statement is negatively phrased, the response score is reversed for the scaled variable. This is indicated by [R] next to the question.

A) Wind energy policy

- It is important for Scotland to develop its wind energy resources
- I think Scotland should invest in other renewable electricity sources rather than wind power [R]
- Wind energy development is important for combatting climate change
- Wind energy development is economically important for Scotland
- For wind energy, the positives outweigh the negatives
- Wind farm developments offer the prospect of future jobs in Scotland

B) Wind farm planning

- I support the development of onshore wind farms in appropriate locations
- I support the development of wind farms offshore (at sea)
- Wind farms pose greater threat to the local environment than climate change [R]
- Wind farms are planned and designed to minimise the potential environmental damage
- Wind farms are planned and designed to minimise the potential disruption to people living nearby
- The rules about wind farm plans minimise the noise and visual appearance of wind farms
- Wind farms are harmful to the health of people living nearby [R]

C) Local impacts of wind farms

- I would like it if this area produced electricity from wind power
- I would like it if this area produced electricity from wind power, if the electricity was for local use
- I would prefer to see electricity from wind power produced somewhere other than this area [R]
- Wind farm developments decrease the value (the price) of houses nearby [R]
- The financial rewards from wind farms benefit the energy companies rather than the local community [R]
- Overall, communities located close to wind farms benefit from the development
- Wind farms would not change my relationship with the countryside

D) Community say in decision making about wind farms (not a scaled variable).

- Local communities have little influence over wind farm development
- Wind farm development is decided in consultation with people like me

Appendix 10 – Results: Graphs

A10-A Interpreting Boxplots

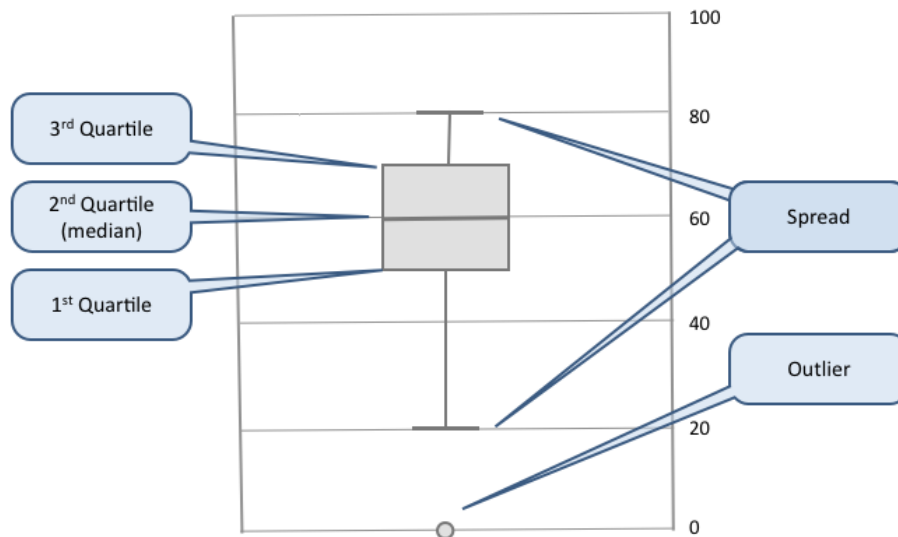
A box plot, or a 'box and whisker' plot, is a way of visualising the distribution of values for a variable, i.e. how dispersed or concentrated the observations are, and whether the observations distribution is normal or skewed. The plot displays the median, the interquartile range (the middle 50% of observations for the variable), the spread of the data (typically 1.5 times the interquartile range; this is akin to a confidence interval and helps to locate potential outliers) and any outlier values (see Figure 9). These are explained in more detail below:

1. **The 'box'**: Boxplots begin by ordering the values of a variable from smallest to largest. The bottom line of the resulting box is the 1st quartile (denoting the value that separates the first 25% of observations from the remaining 75% of observations), the top line is the 3rd quartile (denoting the value that separates the first 75% of the observations from the remaining 25% of observations), and the line in the middle is the 2nd quartile or the median value (denoting the value that separates the first 50% of ordered observations from the last 50% of observations). The difference between the 1st and 3rd quartile is the interquartile range and represents the middle 50% of the data values for a variable.

For example, if we take a variable with 101 data points and rank them from smallest to largest, the three quartiles would be the values of the 25th (1st quartile), 50th (the 2nd quartile, or the 'median'), and 75th (3rd quartile) data points. The shape of the box indicates how much or little variation there was in the data (whether it is widely dispersed or concentrated). If a box plot is simply a single line, the values for the 1st, 2nd, and 3rd quartile were the same - and so the data range was small because all the points for a variable were exactly the same. If one side of the box appears smaller than the other (the distance between the 1st quartile and the median value or the distance between the median value and the 3rd quartile) it implies that a large portion of data values are clustered at one end (conversely it implies that the data values are more spread out on the other side).

2. **The 'whiskers'**: The lines that come off the sides of the box are referred to as whiskers. In this report these represent 1.5 times the distance between the 1st and 3rd quartile. The whiskers demonstrate how spread out the remaining data values may be and helps to locate values that may be substantially different from the majority of the observations (i.e. outliers).
3. **Outliers**: Data points plotted beyond the whiskers are outliers i.e. data points with values that differ from the general pattern of the rest of the observations for a variable.

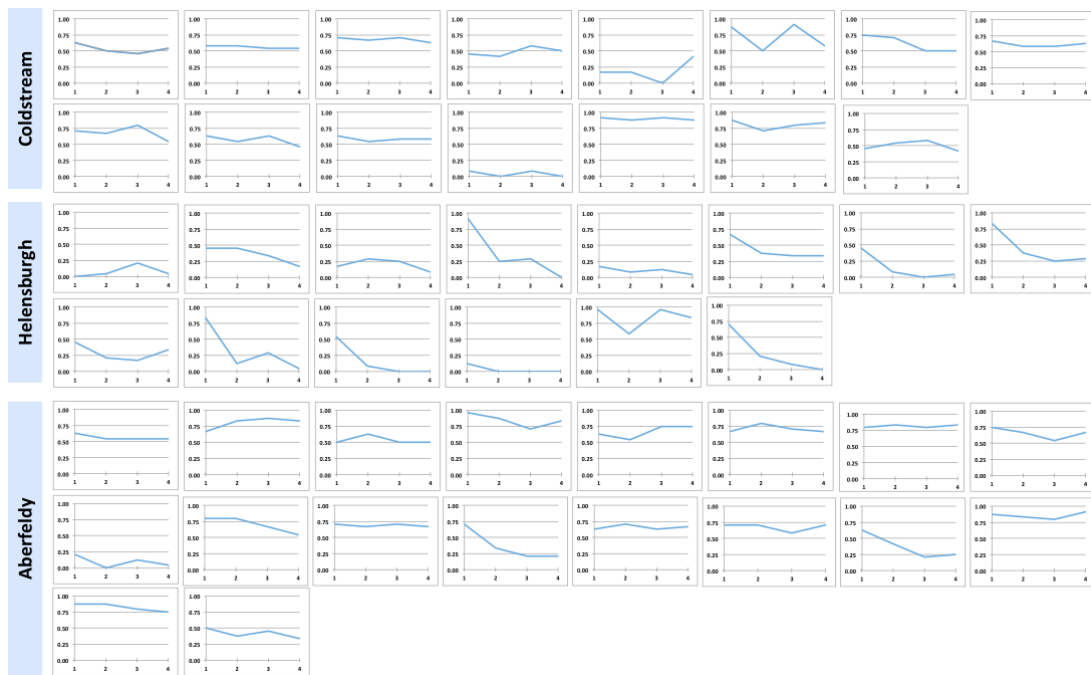
Figure A10. An example boxplot. Here, the data is not skewed, the range is quite narrow, there is one outlier which is shown by a single point with the value of zero.



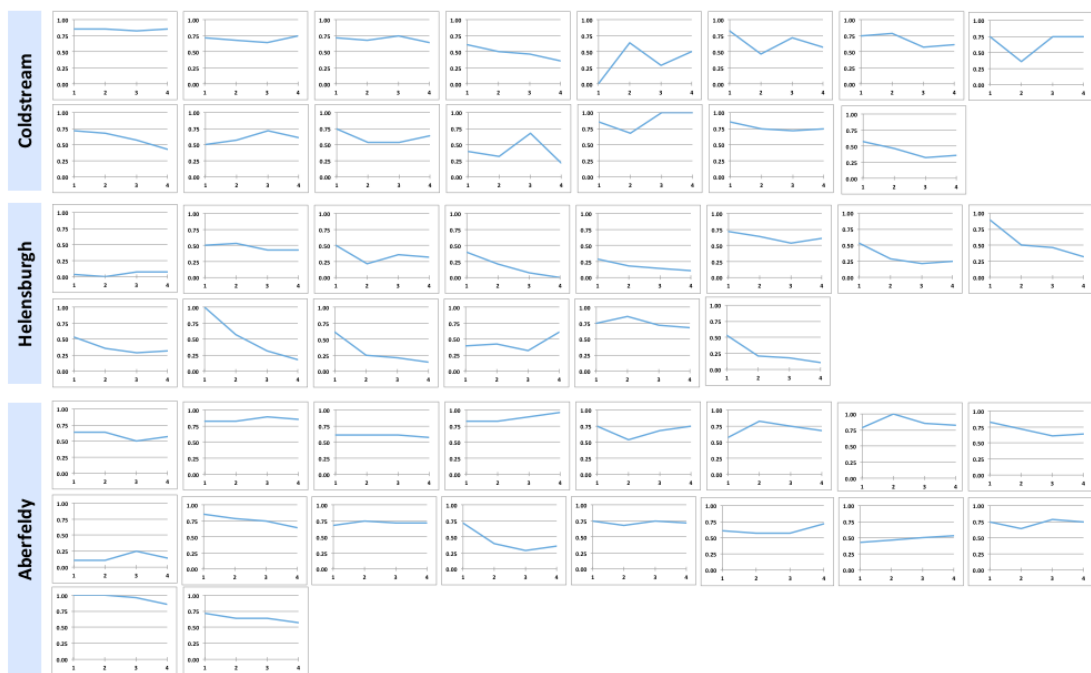
A10-B Additional Graphs

Figures (A) to (C) below shows the opinion of each juror, over each survey, for a scaled measure. A scaled measure means a composite of several questions that capture views on the same underlying concept, where: A – wind energy policy, B – wind farm planning and C – local impacts of wind farms. The method of scaling variables is explained in Appendix 2, and the questions that comprise the scale are listed in Appendix 9-B2. On each of the graphs in the figures below, the x-axis shows the survey number (1 to 4) and the jurors’ opinion on the y-axis, shown here as a scale from 0 to 1, where 0.5 is neutral, 0 is completely negative, and 1 is completely supportive.

A) Panel data for jurors' opinions about wind energy policy



B) Panel data for jurors' opinions about wind farm planning policy



C) Panel data for jurors' opinions about local impacts of wind farms

