Methods Toolkit for Participatory Engagement and Social Research

Scottish Government
Riaghaltas na h-Alba

Methods Toolkit for Participatory Engagement and Social Research

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1. Introduction

The purpose of this Toolkit is to assist developers, consultants, and researchers carrying out Socio-Economic Impact Assessments (SEIA) for different types of offshore marine developments, plans or interventions, to choose the most suitable methods for conducting participatory community and stakeholder engagement and social research to collect primary data that may be needed for the SEIA. The Toolkit draws on the principles of Social Impact Assessment, and incorporates a range of methods used for social research and community engagement.

The Toolkit is targeted at project-level SEIA for developments or interventions occurring in the sea such as offshore renewable developments or marine protected areas, but also considers methods which are appropriate to use at Plan level such sectoral, regional or national marine planning.

The objective of SEIA is to ensure that new developments or interventions are planned and continue to develop in a way that takes account of potential impacts and considers the views of those affected. To this end, the SEIA process has three main aims:

- To gather good quality information and evidence that enables an accurate assessment of potential socio-economic impacts
- To engage with communities and stakeholders to explain what the development or intervention might involve, and ensure that people are involved and have a say in the decisions that affect them
- To use the information gathered through data collection and the relationships developed during engagement to manage any impacts generated by the development or intervention

Achieving these aims necessitates using methods that are rigorous, able to assess and measure change, and which are in line with the principles of SEIA (that are set out in Section 2). It is also important to recognise that different methods will achieve different aims, and to use methods which are most appropriate for the activity in question i.e. engagement, data collection.

The Toolkit therefore provides a categorisation of a wide range of participatory and social research methods, and analysis of the ability of different methods to meet the requirements of different stages of socio-economic impact assessment.

1.1. Overview of key points

The key points set out in the toolkit are:

- **Process matters**: any method, however well intentioned, may not generate meaningful information if not conducted appropriately. Careful planning; careful consideration of the framing and scope of the exercise, and the form in which input from participants is required; and careful analysis of any data collected are all needed.

- **The scope of methods is key:** the ability of any method to assess social change depends on how it is used and applied, for example, whether the scope permits a range of responses and participants are given the ability to explore what matters to them.

- **Multiple methods can add value**: all methods have advantages and drawbacks. Using a combination of methods increases the possibility of capitalising on the valuable aspects and minimising the disadvantages (for example, participatory appraisal sessions to identify issues that matter, and then a survey to explore whether these findings have broader applicability).

- **A need for balance**: choosing appropriate methods will inevitably involve weighing up the advantages that that method brings in terms of meeting the principles and objectives of SEIA, with the time and cost, and the level of expertise required.

- **Effort brings benefits**: participatory and community engagement approaches are often time-consuming and challenging to do well, but bring numerous advantages, including: developing trust and positive relationships between communities and those leading the change (such as offshore developers or government policy makers), reducing any anxiety associated with a proposed development or intervention, and understanding important issues that lead to support and opposition.

- **Engagement should be ongoing:** assessment measures should not be considered as a one-off exercise, but as part of an ongoing process of engagement and communication with communities.
- **Social research is a skill**: the act of doing a SEIA can constitute a social impact in itself. If not undertaken sensitively, SEIA methods may end up doing more harm than good within a community. It is therefore strongly advised that a SEIA is undertaken in collaboration with universities or research organisations, who are trained in carrying out such techniques.
- **SEIA techniques are not public relations tools**: the purpose of engaging with a community or a group of stakeholders for a SEIA is to empower them by giving them a space to provide their views. The purpose of these techniques is not to convince communities or stakeholders of the merits of a proposed development or intervention, or to inform them of a pre-determined course of action.
- **Methods can be adapted**: although engaging with communities is important, and often done best in person, participatory methods can, and should, still be used at times when face-to-face interaction is limited.

1.2. Structure of the toolkit

The Toolkit is set out as follows:
- **Section 2** provides an overview of the key principles and challenges of SEIA.
- **Section 3** sets out the stages of SEIA with appropriate methods suggested for each stage. Methods that may be most appropriate at Plan level are discussed.
- **Section 4** provides an overview of each method, including what they involve, and how they can be used.
- **Section 5** is an analysis of methods, setting out the extent to which they meet the principles of SEIA, and facilitate participation.
- **Section 6** gives more information about each method, with a detailed discussion of the issues to be considered when applying the method.
- **Sections 7** provides advice about ethics.

- **Section 8** identifies some limitations about the processes of conducting an SEIA.
- **Section 9** sets out references and resources.
- **Annex A** set out how to adapt methods if there are restrictions on social interactions e.g., as there were during the Covid-19 pandemic.

2. Principles and Challenges of SEIA

There are a number of key principles drawn upon in this toolkit. The list below is adapted from the International Association for Impact Assessment[1], and Vanclay's Lessons for SIA[2]. In Section 5, methods are analysed against these principles to demonstrate what each method can be used for.

The principles are:

- To treat communities with sensitivity and respect.
- To build trust between communities, and developers, decision-makers, and stakeholder groups.
- To enable a better understanding of the community, developing locally appropriate ideas and mitigation strategies.

It is also worth noting that:

- SEIA is about process as well as measuring impacts; it is about the *ways* in which impacts are assessed as well as the *types* of impacts that are assessed.
- The process of identifying and assessing impacts, weighing up options, and making decisions is as important as the outcome.
- The way engagement is conducted may generate impacts or be an impact in itself.
- Trained social researchers need to carry out social aspects of the SEIA with communities.
- Discussions with communities should start early and be ongoing.
- Any methods need to be effective, genuine, and meaningfully used.
- The approach should build on local knowledge.

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[1] IAIA (2015) Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Development or interventions

[2] Vanclay, F. (2012) The potential application of social impact assessment in integrated coastal zone management, *Ocean & Coastal Management¸* 68: 149-156,

- Two-way communication is needed, with a collaborative approach to decision-making, and using participatory processes of identification, assessment and management of social impacts.
- Stakeholders should be involved in the assessment of socio-economic impacts, the analysis of alternatives, and monitoring of the planned development or intervention.

Challenges:

- Potential social impacts (positive and negative) are often not sufficiently understood to be fully scoped into assessments. Social costs and benefits may not be measurable or quantifiable and therefore not adequately considered.
- Social impacts are much broader than the issues often considered in EIAs (such as demographic changes, job issues, financial security, and impacts on family life). All issues that affect people, directly or indirectly, are pertinent to social impact assessment.
- Fully understanding, defining, and predicting social impacts needs careful consideration, and reflection on the methods used.

2.1. Additional challenges specific to a marine context

Vanclay (2012)[3] notes that SEIA in a coastal and marine setting follows broadly the same principles as SEIA for land-based settings. Nonetheless, Mabon et al (2017)[4] identify some unique challenges for SEIA around marine activities:

- New activities in the sea may not be immediately visible or detectable to citizens; any discussions about impacts have the potential to have an impact themselves, if community members were unaware of any proposed changes and initial scoping work being carried out.
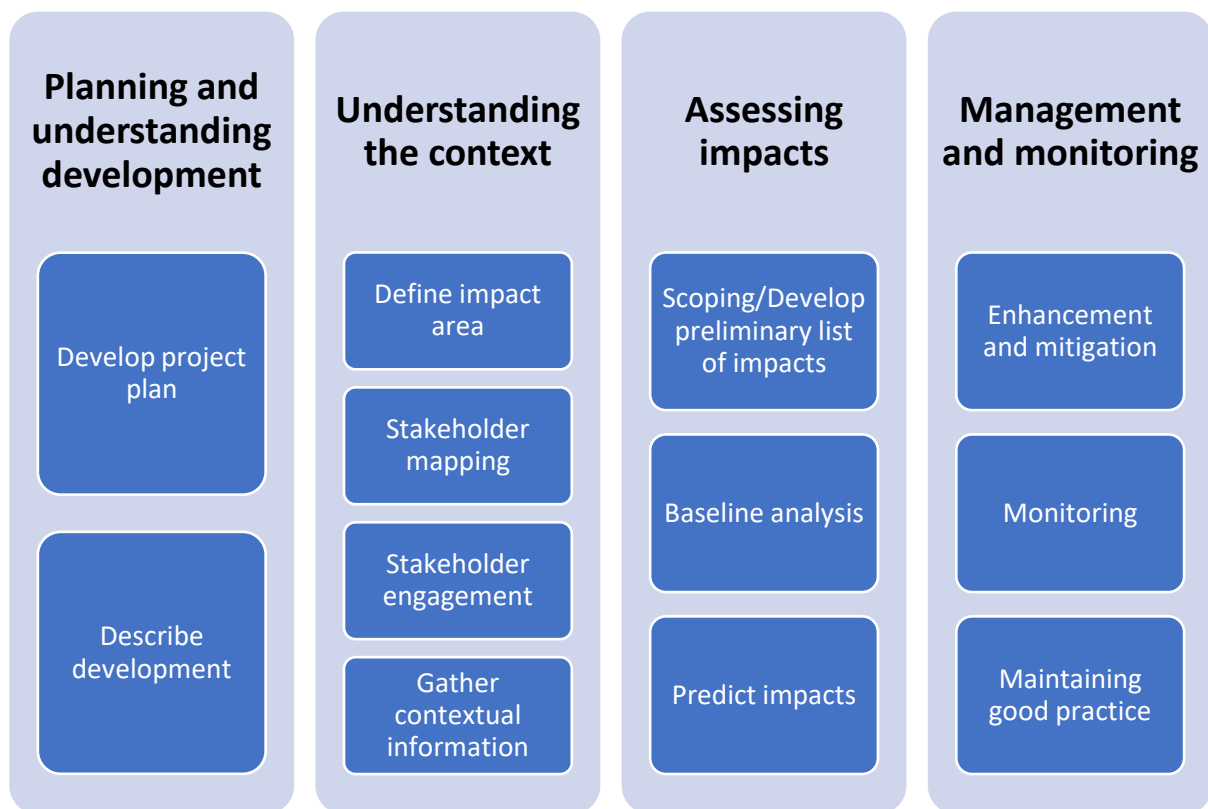
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[3] Vanclay et al 2012: op cit
[4] Mabon, L, Kita, J and Xue Z (2017) 'Challenges for social impact assessment in coastal regions: a case study of the Tomakomai CCS Demonstration Development or intervention' Marine Policy 83: 243-251:

- The seas and coasts, and activities taking place within them, carry significant cultural meaning; and this may be difficult to articulate and capture.

- Related, understandings of 'ownership' of or interest in the sea may transcend conventional geographical boundaries. There may thus be a need to extend community engagement and impact assessment beyond the locality to encompass other coastal communities with an interest in the well-being of the marine environment;

- In the context of a marine development or intervention that is aimed at mitigating climate change, impact assessment ought to be cognisant of the possibility that doing nothing may be the most harmful option of all if it contributes to continued and unabated climate change. This is an especially pointed issue for coastal communities, given the vulnerability of coastal infrastructures and industries to ocean acidification, rising sea levels, and extreme weather events.

These principles have been distilled into a number of key points, against which methods are compared and analysed. This is included in Table 3.

3. Stages in SEIA

This section of the Toolkit sets out suggestions for the most appropriate methods to use at the various stages of a SEIA. The diagram below shows the activities that are typically undertaken when conducting a SEIA. This diagram forms the basis for Table 1 below; listing the different stages, drawing on definitions from the International Association for Impact Assessment[5] to identify further the purpose of that stage and what is involved; and then listing appropriate methods that could be used. Methods are listed alphabetically.

Planning and understanding development	**Understanding the context**	**Assessing impacts**	**Management and monitoring**
Develop project plan	Define impact area	Scoping/Develop preliminary list of impacts	Enhancement and mitigation
Describe development	Stakeholder mapping	Baseline analysis	Monitoring
	Stakeholder engagement	Predict impacts	Maintaining good practice
	Gather contextual information		

Table 1: Stages in the SEIA process and suggested methods for each

Activity (from diagram)	Description of activity	Purpose (adapted from International Association for Impact Assessment, 2015, page 8)	Suggested methods (detailed in Table 3)
Develop project plan	Develop a project plan for the SEIA process, setting out the scope and goals of the process, the resources that will be needed and the methods to be used.	Clarify the responsibilities and roles of all involved in, or associated with the SIA, including relationships to the other specialist studies being undertaken, and establish what national laws and/or international guidelines and standards are to be observed.	This stage is unlikely to require social research methods, although it may be beneficial to consider what methods will be employed throughout the rest of the SEIA, when carrying out this stage
Describe development	Develop a detailed description of the planned	Gain a good understanding of the proposed project, including all ancillary activities necessary to support the project's development and operation	This stage is unlikely to require social research methods

Activity (from diagram)	Description of activity	Purpose (adapted from International Association for Impact Assessment, 2015, page 8)	Suggested methods (detailed in Table 3)
	development or intervention, including the ancillary projects and activities that feed into the main development or intervention.		
Stakeholder mapping	Produce stakeholder map outlining all those who may be impacted by	Gain a good understanding of the communities likely to be affected by the development or intervention, allowing for greater exploration of the ways in which they might be impacted, and a better understanding of how stakeholders might interact with the development or intervention.	Archival research One-to-one interviews Participatory appraisal Secondary data analysis Social media analysis

Activity (from diagram)	Description of activity	Purpose (adapted from International Association for Impact Assessment, 2015, page 8)	Suggested methods (detailed in Table 3)
	the development or intervention or have an interest in it		
Stakeholder engagement	Engage with stakeholders and set up governance structures to enable continued engagement	Inform community members about: the development or intervention; similar developments or interventions elsewhere to give them a sense of how they are likely to be affected; how they can be involved in the SEIA; their rights in the regulatory and social performance framework for the development or intervention; and their access to feedback mechanisms. Devise inclusive participatory processes and deliberative spaces to help community members: understand if and how they will be impacted; determine the acceptability of likely impacts and proposed benefits; make informed decisions about the development or intervention; facilitate community visioning about desired futures; contribute to mitigation and monitoring plans; and prepare for change	Community events Ongoing advisory panel Public meetings

Activity (from diagram)	Description of activity	Purpose (adapted from International Association for Impact Assessment, 2015, page 8)	Suggested methods (detailed in Table 3)
Gather contextual information	Gather contextual information about the communities and stakeholders	Gain a full understanding of communities, including a discussion of the socio-political setting; an assessment of the differing needs, interests, values and aspirations of the various subgroups of the affected communities identifying any equalities issues, an assessment of their impact history, i.e. their experience of past developments or interventions and other historical events; a discussion of trends happening in those communities; and a discussion of the assets, strengths and weaknesses of the communities.	Archival research Community events One-to-one interviews Ongoing advisory panel Participatory appraisal Public dialogues Secondary data analysis Social media analysis Surveys
Scoping	Determine a preliminary list of impacts	This scoping stage involves identifying the range of potential social and economic impacts, or issues, associated with a planned development or intervention in order to identify those that require further, more detailed assessment.	Archival research Community events One-to-one interviews Ongoing advisory panel Participatory appraisal Public dialogues Secondary data analysis Social media analysis Surveys

Activity (from diagram)	Description of activity	Purpose (adapted from International Association for Impact Assessment, 2015, page 8)	Suggested methods (detailed in Table 3)
Baseline analysis	Carry out baseline analysis as a point of reference from which to assess any changes linked to the development	Collate relevant baseline data for key socio-economic issues describing the situation in the absence of the development. Ensure stakeholders agree with the baseline analysis, and with the indicators that are being used to assess the baseline. Also gather input from stakeholders on underlying trends or changes that will affect the baseline regardless of whether or not the development proceeds.	Archival research Citizens' Juries Community events Focus groups Landscape immersion One-to-one interviews Ongoing advisory panel Participatory appraisal Public dialogues Surveys Secondary data analysis
Predict Impacts	Predict impacts which may arise as a result of the development or intervention, and supporting/	Through analysis, determine the social changes and impacts that will likely result from the development or intervention and its various alternatives. Carefully consider the indirect (or second and higher order) impacts. Consider how the development or intervention will contribute to the cumulative impacts being experienced by the host communities. Determine how the various affected groups and communities	Citizens' Juries Community events Focus groups Landscape immersion One-to-one interviews Ongoing advisory panel Participatory appraisal

Activity (from diagram)	Description of activity	Purpose (adapted from International Association for Impact Assessment, 2015, page 8)	Suggested methods (detailed in Table 3)
	ancillary projects	will likely respond. Establish the significance of the predicted changes (i.e. prioritise them). Actively contribute to the design and evaluation of development or intervention alternatives, including no go and other options.	Public dialogues Scenario mapping Secondary data analysis Structured consensus-building Surveys Tours and field trips
Mitigation	Develop enhancement and mitigation plan to ensure impacts are acceptable	Identify ways of addressing potential negative impacts. Develop and implement ways of enhancing benefits and related opportunities. Develop strategies to support communities in coping with change. Develop and implement appropriate feedback mechanisms.	Focus groups One-to-one interviews Ongoing advisory panel Participatory appraisal Public dialogues Scenario mapping Structured consensus-building Surveys
Monitoring	Produce a management and monitoring plan setting out how the SEIA	Develop indicators, methods and a strategy for monitoring the social and economic impacts of the development or intervention. Develop a plan for how monitoring, mitigation and engagement will be managed and responded to throughout the development or intervention's life.	Focus groups Ongoing advisory panel Participatory appraisal Public dialogues Scenario mapping

Activity (from diagram)	Description of activity	Purpose (adapted from International Association for Impact Assessment, 2015, page 8)	Suggested methods (detailed in Table 3)
	process will continue throughout the life of the development or intervention		Structured consensus-building
Maintain good practice	Complete the SEIA, and maintain good practice	Undertake continued monitoring and stakeholder engagement. Undertake evaluation and periodic review.	Ongoing advisory panel Public meetings Social media analysis Surveys

3.1. SEIA at plan level

The list of activities and methods suggested in Table 1 apply to SEIA carried out for proposed new developments or interventions.

SEIA is also appropriate at Plan level, helping to inform strategy and taking account of broader issues. Some methods would be more suitable at this level.

Table 2: Methods for Plan level SEIA

Objective	Method	Brief Summary
Assessing opinion	Archival research	Archival research, for example old newspaper reports or planning applications, can yield insight into the history and experience of marine interventions, developments and infrastructure.
	Community events	Presence and participation at community events can provide information and raise awareness, and can offer an opportunity to collect feedback and gauge community reactions
	Secondary data analysis	Existing data about a locality or topic may already exist through, for instance, Scottish Neighbourhood Statistics or previous qualitative and quantitative research. Further secondary analysis of this data can give insight into key issues within the community and help to shape communication and engagement strategies.
	Social media analysis	Publicly available social media postings on different platforms can be viewed to assess initial public reactions to key issues (such as climate change, or renewable energy).
Exploring broad topics	Citizens' Juries	Small groups of people (chosen to represent a cross-section of the community) brought together over an extended period to consider issues in depth, which could be at a strategic level

Objective	Method	Brief Summary
	Participatory appraisal	A range of techniques which encourage participants to discuss their own views and perspectives in meaningful ways; the topics chosen could be strategic rather than specific to a development or intervention.
	Public dialogues	Public dialogues create opportunities for conversations between community members, experts, and key stakeholders, and could explore broad issues and topics
	Structured consensus-building	Structured approaches, for example using ranking of options, can identify common priorities and recommendations about a range of topics.
	Surveying	Surveying can be used to assess respondents' views towards a topic or range of issues, such as perceptions of offshore renewable energy.

Other methods may be less useful at a Plan level; some work best when they have a more specific focus (such as an ongoing advisory panel, or tours and field trips, or landscape immersion); some would be unhelpful to assess ideas about broad topics (such as public meetings); and others would be too intensive to gather sufficient information from community members about strategic issues (such as one-to-one interviews).

Caution should also be exercised when engaging with communities at a Plan level to not inadvertently give the impression that a development or intervention is imminent or a 'done deal.' Doing so may cause unnecessary concern about the potential for a development or intervention to happen, and/or may reduce goodwill among the community towards for example, the developer and the technology.

4. Overview of Methods

Table 3 below provides an overview of methods that may be used to conduct SEIA, with a summary of the method and the advantages and issues to consider. More details of each method are provided in Section 6. Methods are listed alphabetically. When developing a strategy for undertaking an SEIA, it is worthwhile considering how different methods may complement each other, and to reflect on which methods are appropriate for different steps of the SEIA process depending on the purpose and desired outcome. Within the same development or intervention, it may therefore be appropriate to draw on more than one method across the development or intervention span according to the stage and progress of it..

Table 3: Methods overview and key points

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
Archival research	Archival research, for example old newspaper reports or planning applications, can yield insight into the history of marine developments or interventions and experiences with new infrastructure in the locality. Understanding previous experiences – especially negative experiences – may indicate where and why communities could have concerns.	Stakeholder mapping, Gather contextual information, Scoping, Baseline analysis	Can give a sense of historical context with lower risk of stirring up negative or unpleasant memories. Online news sources and digital planning portals mean assessment can be done remotely.	Cannot assume responses to different kinds of infrastructure in the past will reflect responses to new issues in the present. In-depth records and archives may not be available for every region or locality.	This method is explored in a research project examining the challenges of conducting SEIA in coastal regions, available here

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
Citizens' Juries	Small groups of people (chosen to represent a cross-section of the community) are brought together over an extended period to consider issues in depth. They are presented with different information and perspectives from experts that are then debated to help them reach conclusions about the topic.	Baseline analysis, Predict Impacts	Can be enjoyable and engaging for participants, and their views may evolve during the process. A chance to consider issues in-depth, and to ask questions of experts. Examples show that diverse groups of participants can work together, develop solutions, and build consensus.	Time consuming and costly to run. Requires organisation and facilitation, and participation from experts to give input. Requires significant effort and time commitment from citizen members. This may provide barriers to participation.	Scotland's Climate Assembly – a group of people, broadly representative of the Scottish population, focused on how to address climate change; information available here

A research project for ClimateXChange used Citizens Juries to consider wind farm development in Scotland; available here |

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
Community events	Presence and participation at community events, aimed at providing information on a development or intervention and raising awareness (e.g. drop-in sessions, 'town hall' meetings, information exhibitions). These offer an opportunity to collect feedback and gauge community reactions .	Stakeholder engagement, Gather contextual information, Scoping, Baseline analysis, Predict Impacts	Can be personalised and interactive, people can attend in social groups, can be readily accessible. Can focus public attention on one element. Conducive to media coverage. Allows for different levels of information sharing. Linking public information and engagement events with SEIA activities	Brief attention spans limit amount of information that can be conveyed, with competition for attention at events. Usually expensive to do it well, and can damage image of development or intervention if not done well. Locations are critical, and the public must be motivated to attend. Depending on nature of	An example of this in practice related to the QICS experimental carbon dioxide release into Ardmucknish Bay, Argyll, Scotland. As a new and potentially contentious development, passive observation at community events was agreed to be the best way of systematically assessing community responses without inducing additional anxiety or stress;

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
			can help to reduce risk of 'research fatigue' by reducing number of events and time commitment on community members.	development or intervention - important to keep a distinction between community events which may be designed to inform/consult; and SEIA activities which have the goal of understanding community concerns and providing empowerment.	information available [here]
Focus groups	Interactive sessions with small groups, of community members	Baseline analysis, Predict	Can be useful for fostering discussion, sharing	The value of the data may depend on facilitation - ensuring	The Associated Programme on Flood Management

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	(and/or stakeholders) to explore views and perceptions of impacts. May use a range of tools to elicit ideas about impacts.	Impacts, Mitigation , Monitoring	between participants, and encouraging communication and debate. Can be used to evaluate different options and weigh up the importance of different factors.	that some voices do not dominate, and that techniques are used to encourage discussion. The scope of the focus group is significant; are options for discussion open or limited? Minimal opportunity to ask questions or for two-way discussion about potential impacts.	recommend using focus groups for SEIA; details of their approach are available [here](#).
Landscape immersion	Participants are asked to walk around the	Baseline analysis,	Generates rich, meaningful data.	Time intensive. May need staff in situ to	This method was used in research funded by

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	proposed site of a development or intervention, and note their feelings about the sea and/or landscape. They are then asked to do the walk again imagining the development or intervention in place. This is a hypothetical exercise – participants are asked to imagine what the landscape would be like with the development or intervention in place –	Predict Impacts	Allows and encourages respondents to articulate and express their views. Respects the particular place and the lived experience of that location.	explain process and facilitate effectively. Data is specific to each respondent, and unlikely to provide opportunities for discussion or to ask questions.	Creative Scotland and Scottish Natural Heritage to explore impacts from a new wind farm from the perspectives of a local community; information available here.

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	but it is an exercise that takes in that landscape.				
One-to-one interviews	One-to-one discussions and interviews with community members or key stakeholders to gain in-depth information and understanding.	Stakeholder mapping, Gather contextual information, Scoping, Baseline analysis, Predict Impacts, Mitigation	Can be open-ended or more unstructured, allowing for open or more specific responses. Familiar format, and should be straightforward to organise, allowing the exploration of issues in-depth.	Scheduling multiple interviews can be time consuming. There is no chance for participants to interact with others.	Research by UCL on the use of SEIA to understand and address key issues in planning in London used interviews with community members to identify key issues and challenges that they were facing; information available here
Ongoing advisory panel	A panel may be formed to work alongside developments or	Stakeholder engagement, Gather	Useful as an ongoing process to keep key members	Usually involves a small number of members involved,	An example of using a consultation group throughout a

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	interventions and meet at regular interviews to provide input, hear about progress, and feedback their views. Often made up of key stakeholders and representatives from the community.	contextual information, Scoping, Baseline analysis, Predict Impacts, Mitigation , Monitoring	in touch with progress. Relatively easy to convene, with familiar procedures. Can help participants to understand the development or intervention, and give their views at different stages. Can help to build trust with members and credibility for the development or intervention.	often experts; community members may not be able to participate on an ongoing basis due to time commitment. Care needs to be taken in selecting the membership, to try to ensure representativeness for the larger community.	development is the Middelgrunden offshore wind farm – details are available [here](#)

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
Participatory appraisal	This focuses on participants and allowing them to express themselves in ways which are meaningful to them. Non-directive questions are used to encourage discussion in ways that do not impose external opinions. Everyone is treated as an 'expert' - as people who 'know how things really are'. Emphasis is placed on the use of highly visual tools and techniques, potentially	Stakeholder mapping, Gather contextual information, Scoping, Baseline analysis, Predict Impacts, Mitigation , Monitoring	Rich, meaningful responses are generated, exploring issues in depth, and providing the opportunity to really find out what matters to people and why. An inclusive approach which values and respects the view given, and can encourage responses. Engages those	Can be hard to fit into standard research models. It may not be possible to translate all responses into feedback which is useful for a development or intervention. Can be time-consuming to run and to analyse. Requires facilitation to guide respondents through the process.	A series of projects on 'Mapping Tranquillity' used participatory appraisal to explore value and meaning with participants; information available here

Similar approaches have been used for a range of projects exploring community views and values – such as research |

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	more inclusive than approaches that rely solely on the written word. The aim is to eliminate barriers in participation and include the views of as many different people as possible.		likely to be affected by change, and can help build capacity.		on communities and neighbourhoods, available here
Public dialogues	Public dialogues create opportunities for face-to-face conversations between community members, experts, and key stakeholders. Sessions can use a range of tools to	Gather contextual information, Scoping, Baseline analysis, Predict Impacts,	Generate rich and valuable data. There is opportunity to discuss and ask questions and explore issues; and for mutual learning between community members and key stakeholders and designated experts.	Need to ensure a balance of different community members; cannot be assumed to be representative of the population as a whole.	A Sciencewise project for Marine Scotland, exploring community responses to marine renewable energy developments, used scenario mapping as part of the

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	exchange and explore issues in depth, allowing time for discussion and reflection. Can be used to provide information, share ideas, explain values, and how these influence perceptions of impacts.	Mitigation , Monitoring	Can help to ensure different views are heard and respected.	Strong facilitation is required; time commitments involved. Very rich data can be more complex to feed into decision-making.	conversations that were held with members of the public in a variety of locations around Scotland. See the full report here.
Public meetings	A gathering for a large group of people, usually with presentations from a panel, and the opportunity for community members to ask questions and give	Stakeholder engagement, Maintain good practice	A good opportunity for a large number of people to engage and participate, and at the same time. An opportunity for decision-makers to hear from the	Information can be given, but there is little opportunity for two-way discussion. Loud voices can dominate, and potential speakers discouraged. Can	Public meetings often form part of a range of methods used by developers when engaging communities about proposed wind farms. More details are given in a research

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	comments. Open to all who can attend.		community. Can be widely advertised and provide a visible presence in the community.	be difficult to facilitate effectively, and does not often provide the opportunity for debate or building consensus.	report on this topic, available [here](#)
Scenario mapping	This provides a means to discuss and explore different options, giving participants the opportunity to consider how these might affect the things that they value. Different criteria can be used to assess	Predict Impacts, Mitigation , Monitoring	This method can provide a useful basis for discussion, exploring why certain scenarios are preferred, and drawing out meaning and value.	The scope of the scenarios can limit discussion. The options presented may not feel realistic or include ideas that participants would have valued. Requires facilitation	A Sciencewise development or intervention for Marine Scotland, exploring community responses to marine renewable energy developments used scenario mapping as part of the

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	the different options presented. The principal factors that influence perceptions can be identified. Trade-offs between different factors in various scenarios can be explored		Can be a valuable way of getting participants engaged in the process, can be visual and interesting. Realistic scenarios can help to envisage change. Trade-offs between factors can be useful to inform planning. Can be used at different stages; early on, or when more details	and skill in developing the scenarios. Can be difficult to keep realistic. May be time-consuming and use specialised computer software.	conversations. that were held with members of the public in a variety of locations around Scotland. See the full report here. The community consultations for the Tiree offshore wind farm used scenario mapping to explore different options; information available here

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
			of a development or intervention are available.		
Secondary data analysis	This broadly refers to the re-use or further analysis of existing data, as a means of gaining insight into a topic by making use of research and data collection that has already been undertaken. Secondary data analysis can refer to quantitative data (e.g. censuses, surveys) as well as qualitative (e.g. interview transcripts).	Stakeholder mapping, Gather contextual information, Scoping, Baseline analysis, Predict Impacts	Making further use of existing data can give insights into trends and potential issues within a community, without placing additional burden on the community to provide additional information. The risk of 'research fatigue', or of inducing concern	May be difficult to access existing data if it contains personally-identifiable information (e.g. Addresses, dates of birth etc) and especially qualitative data, such as interviews and focus groups. Conditions of use will have been set out at the	The Scottish Government's (2015) Mapping Flood Disadvantage report, linking socio-economic and environmental data, is an example of this, available here

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
			about the possible impacts of the development or intervention, can therefore be reduced.	time the data was collected, so it is preferable to negotiate and agree access before data is collected if possible, so that information about data-sharing can be built into privacy notices and participant consent forms.	
Social media analysis	Publicly available social media postings on platforms such as Twitter, Facebook,	Stakeholder mapping, Gather contextual	Relatively unobtrusive way of viewing reactions and responses in	Small and vocal minority of people can create distorted sense of opposition.	Analysis of Twitter data to assess societal reactions to the 2010

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	Instagram etc. can be viewed to gauge initial public reactions to proposed developments, or indeed to understand drivers about a sense of place and local identity.	information, Scoping, Maintain good practice	community. May allow influential organisations and/or individuals, who may not be represented in formal consultation processes, to be identified.	Important not to overlook views of those who are not online. Some ethical issues around viewing social media content, even if public domain.	Deepwater Horizon oil spill, available here.
Structured consensus-building	This aims to elicit consensus from respondents on the social impacts of a development or intervention, or to identify common priorities and	Predict Impacts, Mitigation , Monitoring	Can identify areas of common concern/priority on issues with limited baseline data; or where there is the potential for different	Processes require careful design and set-up, including judicious selection of both participants and expert speakers. Also requires skilful	A consensus conference was held in Moray, Scotland, for the SiteChar offshore carbon capture and storage research project; further

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	recommendations. This may involve the ranking and/or scoring of priority issues (e.g. with Delphi Methods and Q-Methodology) either individually or collaboratively; or the facilitated development of a position paper and recommendations based on citizens' responses to project information and expert inputs (such as focus conferences).		stakeholder or citizen groups to have very different viewpoints, as a means of identifying possible points of consensus or areas of shared interest. Dialogue processes during consensus-building activities can offer rich insights into participants' thought processes.	facilitation so as to guide participants to explain and articulate their preferences without excessively prompting or steering them.	information is available [here](#).
Surveying	Surveying encompasses a breadth of approaches	Gather contextual	Enables a large number of opinions	Surveying may be of limited value in	An example of this is discussions that were

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	– face-to-face, online, telephone – which may be used to assess respondents' views towards a proposed development, or their attitudes to how a development or intervention is progressing across the operation phase.	information, Scoping, Baseline analysis, Predict Impacts, Mitigation , Maintain good practice	to be solicited. Quantitative responses allow trends or common themes to be identified and visualised; open-ended questions can elicit deeper and richer information.	understanding concerns for new technologies where public awareness is low and opinions unstable. Information may be less full and detailed than other methods, and limited opportunity to follow on responses, or ask questions.	held with a host community about compensation for a nearby carbon dioxide capture and storage (CCS) project, which compared the preferences of Dutch citizens and local government authorities. Information available here; and summary here.
Tours and field trips	Visits to other developments or interventions or	Predict Impacts	A valuable and interesting way to envisage a	Need to find a community willing to host a visit. Can be	Communities on islands off the east coast of the US

Method	Brief Summary	Activity	Advantages	Issues to consider	Use in practice
	communities for citizens, key stakeholders, and other interested parties; opportunities for discussions with those who have experienced similar potential impacts (both positive and negative)		development or intervention, and gain from the experience of other communities. Can reduce concern by making choices more familiar. Discussing with others what has worked well/not well can be very valuable. Opportunity to share and discuss ideas with others on the visit.	limited to certain community members/stakeholders because of time and potential cost involved. Likely to be available to small numbers of people only. May be hard to directly apply the situation from one community to another.	organised visits to proposed and existing offshore wind farms to understand impacts and the role of community benefits – information is available here.

5. Analysis of Methods

Section 2 listed some of the key principles and challenges of SEIA. The methods listed in Table 3 above are now analysed against this list of principles in Table 4 below.

Table 4 covers in more detail some of the aims of public participation, and the extent to which these are met by different methods.

Table 4: Principles and Methods of SEIA

	Respect and sensitivity	Build trust	Genuine	Collaborative and participatory	Measure broad impacts	Reflect different groups	Two-way	Build on local knowledge	Ongoing	Expertise needed	Locally valued strategies	Time consuming	Costly
Archival research	Yes	Possibly	Yes	Possibly	Possibly	Yes	No	Yes	No	Yes	Yes	Yes	No
Citizens' Juries	Yes	Yes	Yes	Yes	Possibly	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Community events	Possibly	Possibly	Possibly	Possibly	Yes	Yes	Possibly	No	Yes	Yes	Possibly	Yes	Yes
Focus groups	Yes	Possibly	Yes	Possibly	Possibly	Possibly	Unlikely	Yes	Unlikely	Some	Yes	Yes	Yes
Landscape immersion	Yes	Yes	Yes	Yes	Yes	Unlikely	Unlikely	Yes	Unlikely	Yes	Yes	Yes	Yes
Ongoing panel	Yes	Yes	Yes	Yes	Possibly	Unlikely	Yes	Yes	Yes	Yes	Yes	Yes	Possibly
One-to-one interviews	Possibly	Yes	Yes	Yes	Possibly	Unlikely	Unlikely	Yes	Unlikely	Some	Possibly	Yes	Yes
Participatory Appraisal	Yes	Yes	Yes	Yes	Yes	Possibly	Yes	Yes	Possibly	Yes	Yes	Yes	Yes
Public dialogues	Yes	Yes	Yes	Yes	Yes	Unlikely	Yes	Yes	Unlikely	Yes	Yes	Yes	Yes
Public meetings	Unlikely	Unlikely	No	No	No	Possibly	No	Unlikely	No	No	Unlikely	No	No
Scenario mapping	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Possibly	Yes	Possibly	Yes	Yes	Yes	Yes
Secondary data analysis	Possibly	No	Possibly	No	Possibly	Possibly	No	No	Unlikely	Yes	No	Yes	No

	Respect and sensitivity	Build trust	Genuine	Collaborative and participatory	Measure broad impacts	Reflect different groups	Two-way	Build on local knowledge	Ongoing	Expertise needed	Locally valued strategies	Time consuming	Costly
Social media analysis	Possibly	Possibly	Possibly	No	Possibly	Possibly	No	Yes	Yes	Yes	Possibly	Yes	No
Structured consensus-building	Yes	Yes	Yes	Yes	Possibly	Yes	Yes	Yes	Possibly	Yes	Yes	Yes	Yes
Surveys	Possibly	No	Possibly	No	Yes	Yes	No	No	Possibly	Yes	Possibly	No	No
Tours and field trips	Yes	Yes	Yes	Yes	Yes	Unlikely	Yes	Yes	Unlikely	Some	Yes	Yes	Yes

5.1. Defining and Understanding Participation

Participation is a term that means many things and is often used interchangeably with 'engagement', 'deliberation' or 'communication'. There are, however, subtle differences between these terms and each carries a different sense of the public may be able to influence the definition, scope and possible outcomes of the development or intervention. In order to clarify what is meant by participation, the following scale is used – this draws from the IAP2 [International Association of Public Participation] on a *Public Participation Spectrum* (2014), which was developed to define the role of the public in participation processes, and which is internationally recognised. The first two rows are from the IAP2; the third row has been added to list the methods that could be used to achieve each of these goals.

Table 5: Categorisation of methods by participation goal

	Inform	Consult	Involve	Collaborate	Empower
Public participation Goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision-making in the hands of the public.

	Inform	Consult	Involve	Collaborate	Empower
Promise to the Public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide
Appropriate methods	Community events Public meetings Secondary data analysis Social media Tours and field trips	Archival research Community events Focus groups Landscape immersion One-to-one interviews Public meetings Scenario mapping Secondary data analysis Surveys Tours and field trips	Citizens' Juries Ongoing panel Participatory Appraisal Public dialogues Scenario mapping Structured consensus-building	Citizens' Juries Ongoing panel Participatory Appraisal Public dialogues Structured consensus-building	*Community ownership Partnerships Vetoes/casting votes Community ballots

*Note that 'empowerment' approaches are beyond the scope of this Toolkit, as by their nature they extend beyond impact assessment and into areas such as policy, governance and planning which require a much broader set of skills to set up and implement. Nonetheless, for further insight into empowerment approaches, please refer to: [Scottish Government (2019) Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments](#)

Other resources include: [Community Energy Scotland's homepage](#), which includes a section of case study development or interventions.

[Local Energy Scotland guide to community benefits](#).

Key points about participation:

- Community participation is often presented on a spectrum, with increasing public input and involvement in decision-making often corresponding to increasing time and resource commitment on the part of the developer. However, all of the goals of public participation listed in Table 5 may be valuable for socio-economic impact assessment at different stages of a proposal or development or intervention.

- The goal of participation, and therefore the methods used, should be appropriate to the stage of a development or intervention, and to the particular context. It may be appropriate to use more than one technique at different times within a development or intervention depending on the stage of the development or intervention, and the community's response so far.

- Informing a community is sometimes necessary and valuable; however more intensive methods require more input from community members, and may not always be appropriate. Just as lack of consultation can lead to concern or opposition towards a development or intervention, so too can over-engagement and associated 'consultation fatigue' reduce support.

- What matters is the rationale behind the efforts to engage. Different forms of community engagement reflect different rationales (Wilsdon and Willis, 2004): instrumental, where engagement is used to avoid or overcome public opposition and hence increase the likelihood of a development or intervention coming to fruition; normative, where communities are engaged because it is the 'right' thing to do in line with how citizens expect decisions to be made in a

democratic society, or because they have valuable knowledge about their local area; or substantive, where the goal of engagement is to lead to 'better' outcomes for both the developer/policy maker and the community, by building a deeper understanding of what the community's concerns and requirements are and of how the developer/policy maker and community may work together to attain these. It is important that the community knows what the rationale is, and understands how much influence or impact their engagement is expected to have.

6. Methods in detail

The following section provides further details of all of the methods listed in Table 3.

6.1 Archival and historical approaches

Summary: A community or stakeholder group's response to a new development or intervention rarely emerges in isolation. Reactions to new initiatives in the present are likely to be informed by experiences with them in the past, both positive and negative. It is therefore worth looking to the development or intervention and environmental history of a locality, to understand if there are issues which may have arisen with previous initiatives that could inform societal impacts from future ones. Understanding the history of an area can also help to identify the risk of 'development / intervention fatigue', whereby communities may feel they have had to take on too many development or interventions in the past.

Recommendations:

- Archival and historical approaches are a valuable tool for putting local experiences of infrastructure and development into context;
- These methods may be especially helpful in building a good understanding prior to community or stakeholder engagement for situations where there is a history of controversial developments or interventions;
- Caution ought to be exercised, however, not to assume that positive experiences in the past will translate into support in the present.

Potential use: This technique is of most value for producing a stakeholder map, gathering contextual information, identifying and/or predict potential impacts, and; determining a preliminary list of impacts; and carrying out baseline analysis.

Details of use: Understanding local history and context can of course be incorporated into interviews or focus groups with communities and stakeholders; however looking to historical and archival material (e.g. news reports, old environmental impact assessments and environmental statements, historical population data) may give a more systematic understanding of how previous developments or interventions have impacted a locality.

A first step is to set a time horizon over which previous developments or interventions and their social impacts will be considered (say, 30 years). The next step is to consider sources of information that are available. These include (but are not limited to): (a) local newspaper reports, which may be available online for recent years; (b) newspapers, environmental assessments and socio-economic data, which may be available either online or in physical copy in local libraries and archives; and (c) the accounts of key local informants and stakeholders, who may have memory of previous developments or interventions and the reaction to them. Key points can then be noted qualitatively from the available material, and turned into a chronology of activities in the area over time showing key infrastructure projects and events that indicate the impacts these have had on an area.

Information gathering can be structured round a series of simple questions: what happened? When? What was the local reaction? What were the social impacts? Who was affected positively? Who was affected negatively?

Advantages: As above, responses and indeed social impacts do not happen in isolation. Looking to the history of an area can give a fuller sense of potential social impacts, and can give insight into the kinds of concerns a community may have. If undertaken using news sources and/or documentary and archival material, a good understanding of the local context can be gleaned prior to extensive engagement with communities and stakeholders (bearing in mind Vanclay (2012) and the assertion that the act of doing an SEIA can itself be a social impact).

Issues to consider: Positive – or indeed negative – experiences with developments or interventions in the past should not be taken to mean that communities or stakeholders will respond the same way in the present. The impacts of new developments or interventions are complex, and past experience is only one of a number of factors that may give insight into likely impacts in the present. For example, if a developer and operator have a history of working in the locality but is deploying a 'new' technology (for example an oil and gas operator moving to carbon capture and storage), it is especially important not to assume that trust, goodwill or 'social licence' will be transferred to a new development.

Use in practice: Historical and archival-type approaches have been utilised for a breadth of energy and infrastructural-related developments as a means of

understanding communities' and stakeholders' attitudes in the present. These have included, for example, cooperative siting of geological disposal sites for nuclear waste in Cumbria, UK; and understanding fishers' attitudes to sub-seabed carbon dioxide capture and storage in Tomakomai, Japan. In the latter case, by looking to old newspaper reports from the locality, it became apparent that fishers had had previous negative experiences with pollution from a paper mill and port expansion in the locality. As such, it was realised that fishers were likely to have additional concerns about developers introducing a new development (carbon dioxide storage) into the marine environment which could be perceived as a 'pollutant'. Accordingly, additional care was taken to communicate environmental monitoring data to fishers and to maintain good dialogue with the fisheries cooperative in order to acknowledge and respect previous history of environmental pollution in the locality.

Links to further information:

Mabon, L, Kita, J and Xue Z (2017) ['Challenges for social impact assessment in coastal regions: a case study of the Tomakomai CCS Demonstration Project'](#) *Marine Policy* 83: 243-251:

6.2 Citizens' juries

Summary: A citizens' jury is group of people brought together (in person or online) to learn about, discuss, and deliberate a particular a policy topic. The jury usually takes place over a number of days, involving 15-25 people. For SEIA, citizens' juries may present a good opportunity to thoroughly explore a range of issues which relate to impact; and would work best if used early on in the process.

Recommendations:

- Very valuable for in-depth exploration and discussion of issues
- Present a rare opportunity for a variety of experts, stakeholders and community members to meet and share ideas and deliberate
- Time-consuming and intensive, requiring excellent facilitation

Potential use: Most valuable for carrying out baseline analysis and predicting impacts, as citizens' juries are best used to explore important issues in depth.

Details of use: The intention when designing a citizens' jury is to allow community members to be able to hear and speak about issues that affect them; and to prioritise the understanding of non-experts. They are most effective used early on, when a wide range of outcomes are available and before decisions have been made; where there is a genuine desire to effectively engage and to draw on citizen expertise and assistance; and if they are appropriately resourced and facilitated.

Jury members should be chosen to be broadly representative of the wider community, in terms of demographic and attitudinal factors. They are presented with wide-ranging information, sometimes from 'witnesses' – key speakers on different aspects of the topic. These witnesses can include academic experts, policy-makers, stakeholders representing particular organisations, and people with different experience of the topic. The 'evidence' is intended to be balanced, informative, and to help members understand the topic. The members have the opportunity to discuss, debate, ask questions, and attempt to reach a collective set of decision or recommendations. The sessions are facilitated by someone independent, who tries to ensure that all views have been heard.

During the sessions, there is an information phase, when members are provided with different sources of information, usually from a range of experts. This can include

speeches, information packs, and the opportunity to ask questions. Then there is a deliberation phase, where facilitators help small groups discuss their views in light of the information received, and the views of other jurors. The aim is for members to be able to provide a judgement or recommendations that can be used for decision making or policy.

Citizens' juries have been used to feed into policy decisions, providing input on community perspectives on a topic. They would be more unusual for SEIA, but could provide an opportunity to spend time hearing about a particular proposal, or consider in depth how the different impacts might be felt throughout a community.

When using a citizens' jury, the scope, boundaries, and framings of the jury need to be determined, including what will be debated, what information will be provided, in what form are outcomes needed, and what will be done with the recommendations produced.

Advantages: A citizens' jury presents an opportunity to consider issues in-depth, and to ask questions of experts. The provide an opportunity for key stakeholders, policy-makers, campaigners, decision-makers and members of the community to come together and share and deliberate ideas, with time and space for informed discussion about complex topics. Examples show that diverse groups of participants can work together, develop solutions, and build consensus, and participating in a jury can be enjoyable and engaging for members, and they may learn and develop their views during the process.

Issues to consider: Timing is key; a citizens' jury can lack purpose if there is only a narrow set of options to be discussed, or some key decisions have already been made. It may be difficult to find suitable expert witness (with the time to spare), and ensure quality and balanced evidence is presented. Jurors need to be representative of the wider community (both in terms of demographics, and their views and beliefs), and be able to work well with others. They need to have the time and energy to commit to the process (and may need to be paid to lessen barriers to participation). Facilitation is key, creating a fair and balanced context, allowing members to have meaningful discussions, and ensuring inclusivity, and with skills in mediation, communication, and organisation.

Use in practice: A citizens' jury has been used as part of Scotland's Climate Assembly, deliberating on actions to take to address climate change. They have been used in a variety of other contexts also:

Scotland's Climate Assembly Research Report

Links to further information:

Scotland's Climate Assembly

 Research for Climate Exchange which used citizens' juries to explore public responses to wind farms

6.3   Community Events

Summary: During the course of project or policy development, it is likely that a developer or government will hold events within the community to raise awareness of the project or policy. These events may include, for example, drop-in sessions (where representatives are present in a location over the course of several days to answer questions about the project or policy); 'town hall' meetings (presentations followed by question-and-answer sessions); or information boards/panel exhibitions. Although these events are likely to be geared towards informing or consulting with communities, with the aim of building support for a development or intervention, they also provide a useful opportunity to undertake additional SEIA activities by gauging community reactions and/or areas of likely concern.

Recommendations:

- Community events offer an opportunity to incorporate SEIA activities into ongoing engagement, and are recommended for situations where the risk of 'participation fatigue' among community members is high;
- Combining SEIA and engagement activities is particularly desirable at the earlier stages of a development or intervention (albeit once initial relations of trust have been developed), as a way to more systematically gauge participant reactions and feed these back into the project or policy development process;
- Consideration should however be given to the dangers of making community members feel they are being 'observed', or to creating confusion between communication and SEIA activities.

Potential use: Community events can be useful for gathering contextual information, identifying and/or predict potential impacts, and setting up governance structures with stakeholders.

Details of use: Researchers can attend community events to get a sense of how the community reacts to proposed developments and the kinds of questions and concerns that are raised. This may be done through passive observation of how citizens interact with the developer, for instance noting the topics discussed and questions asked, and producing a narrative description based on field notes thereafter. Alternatively, it may be possible to combine community events with more

active socio-economic impact assessment activities, for example asking attendees to fill out a short survey questionnaire to gauge their attitudes to the development or intervention or undertaking short (e.g. 5-10 minutes) conversation-type interviews with attendees to understand their attitudes towards the development or intervention.

Advantages: One of the main advantages of presence at community events is that it can reduce the time pressures – and hence the risk of research fatigue – for community members. Especially if the community events are held at an early stage of the development or intervention, combining community events with socio-economic impact assessment activities can allow potential community concerns to be identified – and acted upon – at an early stage of development or intervention development. Furthermore, reflecting the argument of Vanclay (2012) that social impacts may only become apparent as a development or intervention moves towards deployment and starts to feel more 'real' to communities and stakeholders, it may be the case that observing and interacting with publics in a developer or policy-led setting which is likely to go into detail on the practicalities of a development or intervention (as opposed to a researcher-led setting such as an interview) can give a more genuine insight into how community members may respond to a development or intervention as it nears deployment.

Issues to consider: Just as community events themselves need to be planned carefully, the incorporation of researcher presence at community events needs to be considered carefully. Extreme caution must be exercised not to give community members the impression that they are being 'studied' or 'observed', especially if there is little prior engagement within the community and/or if community trust is already low. Some developers may also wish to retain a greater degree of control over community events, and may be apprehensive about the presence of researchers who may be viewed as introducing additional questions and raising additional concerns among community members.

Use in practice: Mabon et al (2015) attended community engagement events in Benderloch, Argyll, Scotland as a means of researching community perceptions of the QICS experimental carbon dioxide releases in Ardmucknish Bay. As a new and potentially contentious experiment taking place adjacent to a small community, project there were concerns that social scientists interviewing community members

could induce further anxiety. Nonetheless, given the ground-breaking nature of the experience, it was considered important to understand community responses in a systematic way. Accordingly, researchers attended public information sessions and produced field notes based on passive observation.

Link to further information: Mabon, L, Shackley, S, Blackford, J, Stahl, H and Miller, A (2015) *International Journal of Greenhouse Gas Control* 38: 18-25:

6.4   Focus groups

Summary: Interactive sessions, bringing together a range of community members to explore views and perceptions of impacts. May use a range of tools to elicit ideas about impacts.

Recommendations:

- Useful to generate discussion and share ideas and learning; with the potential to reach consensus among participants
- Careful facilitation to manage the discussions is required; careful selection of participants to try and allow balance and representation is required.

Potential use: Focus groups are useful for identifying and/or predicting potential impacts, developing enhancement and mitigation plans to ensure impacts are acceptable, and producing impact management and monitoring plans.

Details of use: Focus groups have become well-used to assess opinion for marketing and testing policy ideas; they are applicable to impact assessment as they give a chance to explore and discuss different ideas. They are often thought of as 'group interviews', but the dynamic that can be generated between respondents, and the potential to share ideas and learning, makes them more than just a way of interviewing multiple people at the same time. While the discussions with others can be useful, there is also the need to manage and facilitate those conversations, ensure they stay on track, and that certain voices don't dominate. Focus groups normally have eight to ten participants, and it can be challenging to manage a discussion to make sure that everyone is heard, and no one overshadows anyone else. Larger numbers of people can become involved than with, for example, one-to-one interviews, but care needs to be taken in the invitation and selection of participants, to try and ensure that multiple perspectives and groups are represented.

Advantages: Focus groups can be useful for fostering discussion, sharing between participants, and encouraging communication and debate. They can be used to evaluate different options and weigh up the importance of different factors, and explore the reasons behind perspectives. The format is relatively familiar, and people may feel more comfortable than being interviewed individually.

Issues to consider: The value of the data generated may depend on the facilitation, and the techniques used to encourage discussion. Some participants may not feel able to speak freely in front of others, and there is the danger that some voices may dominate. The scope of the sessions is significant; are options for discussion open or more closed? If participants are asked to provide input ideas that are already well developed, then the value of the sessions – and on the opportunity to invite meaningful and genuine participation – will be lessened. Focus groups are appropriate as a way to generate information, with limited opportunity to ask questions or for two-way discussion about potential impacts.

Use in practice: The Associated Programme on Flood Management (APFM), which is a joint initiative of the World Meteorological Organization (WMO) and the Global Water Partnership (GWP), recommend using focus groups for socio-economic impact assessment.

Focus groups were used to understand responses and behaviour to climate change, sea-level rise and coastal management, as part of a National Oceanic and Atmospheric Administration Agency project in the US. The group dynamics in the sessions helped to understand complex issues, but needed careful planning and management.

Interactive sessions formed part of the 'Public dialogue on the UK National Ecosystem Assessment' carried out by Sciencewise and the UK Department for Business, Innovation and Skills.

Links to further information:

[The Associated Programme on Flood Management report on using focus groups for social impact assessment](#)

[US National Oceanic and Atmospheric Administration Agency development or intervention](#)

[Sciencewise, 'Naturally speaking' report](#)

6.5 Landscape Immersion

Summary: This method encompasses sessions where participants are asked to walk around the proposed development or intervention site, and note their feelings about the seascape and/or landscape. They are then asked to do the walk again imagining the development or intervention in place. This is a hypothetical exercise – participants are asked to imagine what the landscape would be like with the development or intervention in place.

Recommendations:

- This method is very valuable for making a development or intervention seem real and considering impacts in the places where they will be experienced.
- It is time-consuming, and unlikely to be able to include a large number of people.
- It may be best used to identify key issues, which can then be explored further with participants through other methods.

Potential use: This method is most suitable for generating a baseline of data. The information generated can be very rich and detailed, and can help to capitalise on local knowledge and lived experience. It can also be useful for identifying and/or predicting potential impacts.

Details of use: This method of assessment usually has at least two stages. Participants can be asked to go on a favourite walk, or to be out in the area where the proposed development or intervention would be located. They are asked to note their feelings about the seascape and/or landscape as they go. This can be in the company of a facilitator. Participants are then asked to do the walk again imagining development / intervention proposal in place. They are asked to note all feelings and the frequency of feelings from each walk. This is a hypothetical exercise – participants are asked to imagine what the landscape would be like with the development or intervention in place. It is important that the exercise takes place in that landscape and is not a photo montage looked at on a computer or in a consultation session removed from the setting. So, while participants are asked to imagine the change brought by the development, they do not have to imagine or remember what it is like to be in that place. It is also a repeated exercise, the first

walk is undertaken as usual, the second with, for example, the imagined turbines, so there is direct comparability built into it.

Advantages: Meaningful data, generated in situ, which gives a real sense of the meaning and value of the particular place in which the proposal is planned.

Issues to consider: Time intensive; a lot of commitment may be needed from participants (which may exclude those who are not able to commit this time – such as those with work or caring responsibilities) and those who are not able to get out into particular spaces (such as those with disabilities).

Use in practice: This method was used in a study about responses to proposed onshore wind turbines from nearby residents from the local community. Participants were encouraged to walk about in the landscape, describing how they used it, the meanings associated with it, the value that it held for them, and then to envisage a new development in the location.

Links to further information: Haggett, C., Coleman, R., and Hodges, J. (2015) 'Environment, Imagination and Aesthetics: a new environmental impact assessment for natural Scotland' in Griffith, D. (ed) *Imagining Natural Scotland,* published by Creative Scotland and Scottish Natural Heritage

6.6 One-to-one interviews

Summary: This method involves community members or key stakeholders and aims to gain in-depth information or understanding. Interviews can be structured or more open-ended, allowing for either specific responses or free-flowing discussion. The format is likely to be familiar to respondents, and there is a valuable opportunity to explore meaning, value, and gain rich and interesting data.

Recommendations:

- Very useful for exploring issues in depth, allowing participants to speak in their own words, and understanding what matters
- Time consuming to conduct individually, so unlikely to include a large number of people
- Care needs to be taken in the selection of interviewees, to try and capture a range of opinion and representation of different interests

Potential use: This method is appropriate for stakeholder mapping, identifying and/or predicting potential impacts, gathering baseline data, and developing plans for enhancement and mitigation with members of a community and key stakeholders.

Details of use: Interviews are very common tools in a wide range of contexts, and can be used for SEIA to provide an in-depth understanding of the issues, the relationship between topics, and the strength of feeling about different ideas. They can generate a great deal of information, which is likely to be very rich, interesting, and meaningful.

Interviews can be conducted in person, online, and over the phone. It can take some time to organise and arrange this; and the analysis of interviews can be time-consuming. Decisions need to be made about the amount of structure to the questions. Open ended questions give more opportunities for respondents to express themselves, but make analysis more complex and data harder to compare; more structure increases comparability and ensures the same topics are covered, but may miss things of interest to particular respondents and constrain some of their responses. Some interviews might be conducted to explore issues (and therefore be open-ended); others to confirm findings previously found (and therefore include greater structure). Depending on the amount of structure, there may be the

opportunity for the respondent to ask questions, but this is not really a two-way discussion; rather, a way of finding out what matters to the interviewee.

Advantages: Interviews can provide detailed, valuable, and meaningful information, giving a rich insight into the context and the issues that matter. There is the chance to explore things in depth, and to really find out about what matters to respondents. The one-to-one aspect may mean respondents feel more comfortable talking than in a public setting. Exploring ideas with someone, asking questions and actively listening to their responses is a way to show respect for their perspective and a willingness to understand and capture it. Interviews provide the opportunity to speak to particular people of interest (key community members or stakeholders).

Issues to consider: Conducting multiple one-to-one interviews can be time-consuming, and will generate extensive data that will take time to analyse. It may only be possible, therefore, to interview a limited number of people. Interviewees need to be selected with care, if they are intended to be representative of wider community interests or particular groups or organisations; and multiple interviews may be necessary to generate data from those with different perspectives. There is no chance for interviewees to interact or deliberate with others, or to share ideas; and there may be less transparency about the discussions than with focus groups or at public events.

Use in practice: Research conducted by UCL explored the role of social impact assessment in understanding and addressing key issues in planning in London. Interviews were used with community members to identify the key issues and challenges that they were facing.

Links to further information:

[The UCL report, Social Impact Assessment in London Planning](#)

6.7 Ongoing Advisory Panel

Summary: A group may be formed to work alongside development processes in a development or intervention, and meet at regular intervals to provide input, hear about progress, and feed back their views. Panels are often made up of key stakeholders and representatives from the community, and the key point is the ongoing nature of the involvement.

Recommendations:

- Very useful to provide opportunities to share information and receive feedback at different stages of the development or intervention, and to provide ongoing input and involvement.
- Provides two-way interaction and the chance to share views and perspectives.
- Panel members may not be representative of a wider community, so need to be chosen with care; and the role and responsibilities of the panel should be agreed at the start.

Potential use: One of the key aspects of an advisory panel is to set up governance structures with stakeholders, develop enhancement and mitigation plans to ensure impacts are acceptable, and produce impact management and monitoring plans.

Details of use: An ongoing advisory panel, made up of community members, and key stakeholders, may represent a useful way to provide information, explore issues, and develop ideas. It may have a different scope at different steps of a development or intervention. Early on, a panel can help to establish or shape frameworks for the processes that will follow and establish shared goals. Later, a panel may have a role in considering and evaluating particular impacts and may also be valuable for monitoring and for maintaining contact with a community.

A panel is likely to be a small group of people who provide different perspectives, interests, or expertise, or who represent different local community groupings and organisations. The panel may have a role in both speaking for the community, and in feeding back information about a proposal to the community. They can represent a range of interests and concerns, and explore impacts from different perspectives. There are valuable opportunities for two-way discussions, exploring ideas in depth,

and trying to reach a consensus. These discussions may also mean that panel members share ideas, learn from each other, and develop a fuller understanding of the relevant issues.

The key aspect of such a panel is that it is ongoing, providing a consistent point of contact and source through which to discuss developments and progress. Such a process values the input of the members, and the interests they represent, and seeks to develop productive relationships with them.

Advantages: A panel can be very useful as an ongoing process to keep community members in touch with progress. They should be relatively easy to convene, and use familiar procedures. A panel can help participants to understand the development or intervention, and elicit their views at different stages, and can help to build trust with members and credibility for the development or intervention and the decision-making processes.

Issues to consider: A panel usually involves a small number of members, so care needs to be taken in selecting the membership, to try to ensure representativeness for the larger community. Ideally, a panel would include spokespeople for all groups who might consider themselves affected by a development or intervention. The ongoing nature of a panel is its greatest asset, but some community members may not be able to participate on an ongoing basis due to time commitment. The role of the panel, how and when it will have input, and the responsibilities of those involved, needs to be clearly set out and agreed at the start, so that appropriate expectations (for both members, and the wider community) are in place about the part that the panel will play. There will be some logistical and organisational effort required to keep the panel going, and some cost involved in this. It is also important that members are representing fairly their wider communities or organisations, and that regular contact and feedback is maintained; with discussions and decisions open and visible where possible.

Use in practice: An example of using a group of local people throughout a development is the Middelgrunden offshore wind farm in Copenhagen Harbour. This was a high profile project, and the largest in the world at the time of construction.

Links to further information:

[The report on the Middlegrunden Offshore Wind Farm](#)

[A report on different approaches to community engagement methods, including advisory panels](#)

6.8 Participatory Appraisal

Summary: This focuses on the participants and allows them to express themselves in ways which are meaningful to them. It generates rich, meaningful data, and treats participants as experts in explaining and understanding the lived experience of their communities.

Recommendations:

- Can be used for the different stages of an SEIA, but particularly appropriate at early stages when gathering contextual and baseline data.
- The responses generated can be very full and rich, and it may be useful to identify which are most important through other methods (such as a survey based on the data generated).
- Extensive data may be time-consuming to generate, and may not easily translate into decision-making.

Potential use: Participatory appraisal can be used when it is valuable to explore issues in depth, but is also appropriate at other times (for example, when exploring options for mitigation). It can therefore be used for reducing a stakeholder map, identifying and/or predicting potential impacts, and developing enhancement and mitigation plans to ensure impacts are acceptable.

Details of use: Rather than starting with expert definitions of the issues that matter, participatory appraisal uses consultation with community members to determine this. This approach is focused on exploring peoples' perceptions, values and beliefs, and designed to allow participants to express these in their own words. Emphasis is placed on the use of tools and techniques that are highly visual, and potentially more inclusive than approaches that rely solely on use of the written (or even spoken) word. Non-directive questions are used to encourage discussion in ways that do not impose external opinions, but allow participants to say what, how, and why matters to them and their communities. Analysis tends to be minimal because there is desire to 'give voice' to the participants and allow their views to be heard without too much interpretation and synthesis by others.

The aim of this approach is to eliminate barriers in participation, where potential respondents may not feel able to respond in appropriate ways, and include the views of as many different people as possible.

Advantages: Rich, meaningful data, which focuses on the understandings of community members. This focus on them is a key part of respecting communities, attempts to build trust, and genuine and meaningful engagement.

Issues to consider: Participatory appraisal can be time-consuming to conduct: sessions can last all day, although certainly can be shorter, and require expert facilitation to guide respondents through the process. Sessions are likely only to involve small numbers of people. They are intended to be accessible for those who do attend, but responses may have to be verified with other community members. Some data may not be easy to translate into feedback which is useful for understanding impacts of a development or intervention.

Use in practice: A series of projects on Mapping Tranquillity explored what the concept of tranquillity is, what it meant to people, and where it can be found. This research used participatory appraisal to explore value and meaning with participants, and then translated it into a series of maps showing areas that were more or less tranquil that other places. The Participatory Appraisal approach allowed the exploration of a complex concept in way that was accessible and engaging for participants.

Similar approaches have been used for a range of projects exploring community views and values such as research on communities and neighbourhoods.

Links to further information:

[Information about Participatory Appraisal from Involve, a UK public participation charity](#)

[Information about the Tranquillity Mapping development or intervention](#)

[A project using Participatory Appraisal with communities in North East England](#)

6.9 Public Dialogues

Summary: Public dialogues create opportunities for face-to-face (in-person or online) conversations between community members, experts, and key stakeholders. Sessions can use a range of tools to exchange and explore issues in depth, allowing time for discussion and reflection. For SEIA, they can be used to provide information, share ideas, explain values, and how these influence perceptions of impacts.

Recommendations:

- Very valuable for in-depth exploration and discussion of issues.
- Present an opportunity for a variety of experts, stakeholders and community members to meet and share ideas and deliberate.
- Time-consuming and intensive, requiring facilitation and management.
- For SEIA, they may present a good opportunity to thoroughly explore a range of issues which relate to impact; and would work best if used early on in the process.

Potential use: Public dialogues can be useful to identify and/or predict potential impacts, develop enhancement and mitigation plans to ensure impacts are acceptable, and as part of impact management and monitoring plans.

Details of use: Public dialogues can be a form of open policy making, allowing community members to become involved in the processes of decision-making. All contributions are valued and respected, and there is the opportunity to discuss the things that matter to people. The notion of a 'dialogue' is that there is two-way discussion and engagement: decision-makers and the public can listen to and learn from each other.

There is a range of tools and prompts that can be used to generate discussion, for example using maps of the places under discussion, photographs, and photo-montages of proposed developments. These can be used to explore the types of things that matter, and the way in which changes might be experienced. The responses collected can be analysed and interpreted to inform decision-making, with great understanding of the factors and issues that matter most.

Advantages: The rich data generated can be very valuable in understanding the impact of development or change on things people value and factors that contribute to this impact. There is an opportunity for mutual learning; community members can interact with key stakeholders and designated experts; who may themselves gain a greater understanding of the context on the ground.

Conducting a public dialogue is about process as well as the outcome (data generated). The respect for different views, and providing the opportunity for them to be heard is about valuing local people in decision-making about developments or interventions that may impact upon them and their community.

Issues to consider: It is important to try and ensure that there is a good balance of community members, in terms of demographics, roles, and views; ensure that there is the opportunity for a diverse range of community members to participate (this may include payment to try to remove barriers to participation). Dialogues will involve small numbers of people and so cannot be assumed to be representative of the population as a whole. Dialogues need to be structured and run in ways that allow a broad range of perspectives to be heard, using tools that encourage discussion, and which manage any contradictory or strongly held views. Appropriate questions need to be asked, and participants need to feel valued. There are time commitments involved for those attending, and in structuring and managing the dialogues. The very rich data which is likely to be generated can be complex to feed into decision-making.

Use in practice: The Sciencewise project for Marine Scotland, 'A Two-Way Conversation with the People of Scotland on the Social Impact of Offshore Renewables' used extensive public dialogues, over an extended period of time, and using a variety of different tools. The project demonstrated the value of engaging community members in open discussions and generated important data about the social values that people use when consider positive and negative impacts from new developments.

Links to further information:

[A Two-Way Conversation with the People of Scotland on the Social Impact of Offshore Renewables. Collingwood Environmental Planning and Sciencewise](#)

6.10 Public Meetings

Summary: A meeting for a large group of people, usually with presentations from a panel, with the opportunity for community members to listen, ask questions and give comments. A public meeting may be useful to share information, and to have a public and visible presence in the community. Decision-makers can hear directly from members of the community.

Recommendations:

- Useful early on, to provide information, and to establish a visible presence in a community.
- Best applied as part of a series of methods, as unlikely to capture detailed information about potential impacts.
- Needs strong facilitation and structure to avoid getting off track or being dominated by particular speakers.

Potential use: Useful to engage with stakeholders and community members early on, to inform them about a development or intervention, and how they can be involved in the assessment process. Useful as part of ongoing engagement and periodic review, to maintain a connection with the community and continue to listen to local knowledge and experience.

Details of use: Public meetings are a well-used and familiar forum through which to deliver information and invite comment. The event can be widely advertised, and can be open to all who are able to attend. The meetings can be a visible way of having a presence in a community, and to that extent can be used to show respect for that community, but they are unlikely to generate rich or detailed data, or be collaborative. The visibility of a public meeting is perhaps its strongest asset; and they are more transparent than other methods (such as data collection with individuals or small groups of people only), and minutes or notes of the proceedings can be captured for those not able to attend and for future reference.

Advantages: A public meeting can be open to all, and even those who do not wish to speak can come along and listen. The procedures and format are familiar. Meetings are a good opportunity for a large number of people to engage and participate at the same time, and everyone can hear what everyone else has to say.

There is an opportunity to provide information, and to be seen to be doing so, actively and visibly engaging in the host community. Members of the community can see and meet key stakeholders, and learn about proposals and a range of potential impacts. They can then deliver opinions directly to those stakeholders, ask questions; and learn from the questions asked by other community members.

Issues to consider: Information can be given, but there is little opportunity for two-way discussion, debate or building consensus, and there is limited chance of creating a constructive dialogue. Strong facilitation may be required to create an open and neutral environment, and to prevent loud voices from dominating. Time limits and clear procedures for speakers may be needed: there is the chance that emotions may be running high, and some participants may feel discouraged from contributing. Meetings are likely to be one-off events, and attendance for participants will be dependent on timing (during the day will exclude many who are working; evenings may be difficult for those with caring responsibilities).

Use in practice: Public meetings regularly form part of a range of methods used by developers when engaging communities about proposed wind farms.

Links to further information: A research study for ClimateXChange documents a range of methods used by wind farm developers, including public meetings

6.11 Scenario Mapping

Summary: Scenario mapping provides the means to discuss and explore different options, giving participants the opportunity to consider how these might affect the things that they value. Scenarios can be used to explore trade-offs between different factors in a range of situations, with various criteria presented to assess the different options presented.

Recommendations:

- Useful for understanding values, priorities, and potential trade-offs between different impacts
- Visual nature makes this method interesting and engaging
- Requires careful planning and facilitation.

Potential use: Scenario mapping is useful for identifying and/or predicting impacts, developing enhancement and mitigation plans to ensure impacts are acceptable, and produce impact management and monitoring plans.

Details of use: Scenario mapping encompasses a range of tools to imagine and explore different options for the future: what a development or intervention might be like, what impacts it might have, how a community might change (both positively and negatively). They often use very visual methods, maps, pictures, photos, and allow participants to annotate, add objects, colour-coding, and other means to visualise and engage with different options. The implications of different scenarios can be discussed, and used as a way to explore what matters to people: what they value, what should remain the same, and what is amenable to change. The principal factors that influence perceptions can be identified, and there is the opportunity for shared learning and discussion between participants, and generating consensus around different options.

Advantages: Scenario mapping provides visual tools which are interesting and engaging; and can be a very useful basis for discussion, exploring why certain scenarios are preferred, and drawing out ideas around meaning and value. The different scenarios and options that are presented can be made to be realistic, allowing participants to envisage changes, and think through their implications. Part

of these discussions will be about trade-offs between different factors, which can be useful to inform planning, and to make participants aware of the constraints and difficulties associated with real world situations. They can involve collaboration between participants, who can bring forward their own ideas, and provide an opportunity for them to have some meaningful input.

Issues to consider: The extent to which the process is collaborative and participatory depends to an extent on the scope of the scenarios. Very limited choices and options can limit discussion, whilst options presented may not feel realistic or include ideas that participants would have valued. Allowing participants to provide their own input into how a community should develop may give richer and more meaningful data. Careful planning is required to develop the scenarios, and skilful facilitation is needed to explore them with participants. It is also important that discussions about scenarios are well managed, and that they are not dominated by particular loud voices. Groups of participants can discuss the scenarios together, and so more people can be involved than with, for example, one-to-one interviews; but care is needed in selecting participants to ensure a balance of views and representation.

Use in practice: The Sciencewise project for Marine Scotland, exploring community responses to marine renewable energy developments used scenario mapping as part of the discussions. The scenarios were detailed and allowed participants to engage with them, generating data about the key values that matter when a change is proposed in a community.

The community consultation for the Tiree offshore wind farm used scenario mapping to explore different options. Four potential scenarios relating to the operations and maintenance activity were developed, each of which had varying implications for any associated onshore development. These were discussed to identify and explore the potential environmental, socio-economic and health/wellbeing impacts.

Links to further information:

A Two-Way Conversation with the People of Scotland on the Social Impact of Offshore Renewables. Collingwood Environmental Planning and Sciencewise

 Tiree Onshore Scenario Mapping

6.12 Secondary data analysis

Summary: Secondary data analysis broadly refers to the re-use or further analysis of existing data, as a means of gaining insight into a topic by making use of research and data collection that has already been undertaken. Secondary data analysis can refer to quantitative data (e.g., censuses, surveys) as well as qualitative (e.g., interview transcripts).

Recommendations:

- There may well already be a wealth of data on a community from governmental and research organisation sources;

- Drawing on this data can give insight into the contours of a community, and potential socio-economic impacts, without subjecting the community to additional intrusion or fatigue;

- However, it is important to recognise that data collected for a different purpose may not answer all the questions needed for a SEIA, and/or may be out of date.

Potential use: Secondary data analysis can be used for stakeholder mapping, gathering contextual information, baseline analysis of impacts, and identifying and/or predicting potential impacts.

Details of use: It may well be the case that a socio-economic impact assessment is not the first piece of social research that has been done in or about a community. Official data, e.g., from censuses, can give insight into trends such as employment, deprivation, ageing, housing; whereas research projects on renewable energy or on related developments might also exist. SEIA practitioners may be able to access this data and undertake further analysis, over and above the purposes the data was originally collected for, to understand potential impacts from an offshore renewables development. To undertake secondary data analysis, it is necessary to (a) work out what is available (e.g., online government and socio-economic data portals; inventories of existing/completed research projects on university websites); and (b) work out what you want to know from this data. This can often be an iterative process, i.e., sometimes we need to see the data itself in order to get a sense of what we might be able to learn from it.

Advantages: Making further use of existing data can give insights into trends and potential issues within a community, without placing additional burden on the community to provide additional information. The risk of 'research fatigue', or of inducing concern about the possible impacts of the development or intervention, can therefore be reduced. This may be especially valuable at early stages of project development, as it can identify possible messages and engagement strategies that are likely to be effective, and/or issues that the community may be concerned with.

Issues to consider: It may be difficult to access existing data if it contains personally-identifiable information (e.g., addresses, dates of birth etc.) due to data protection legislation. It may be even more difficult to access qualitative data, such as interviews and focus groups, if they contain personal opinions or similarly sensitive content. It is likely that the conditions of use will have been set out at the time the data was collected, and data collected by universities and research organisations will also be bound by research ethics. If access is required to specific types of data, it is preferable, if possible, to negotiate and agree this before the data is collected, so that information about data-sharing can be built into privacy notices and participant consent forms.

Use in practice: A good example of how existing data sets can be re-used to give further insight is the Scottish Government's work in 'Mapping Flood Disadvantage' (2015), which connected indicators of deprivation (income, education, health, employment etc.) collected by Scottish Neighbourhood Statistics with flood hazard maps produced by the Scottish Environmental Protection Agency. By linking neighbourhood assessments of what might make a community less able to respond to stresses and pressures from one dataset, with physical risk assessments from another dataset, the project was able to create a fuller and richer insight into how flooding under climate change will affect society than may otherwise have been available.

Links to further information:

[Scottish Index of Multiple Deprivation – social and economic data indicators for Scotland at neighbourhood level](#)

[Economic and Social Research Council UK Data Service – repository of social data available from publicly-funded research projects](#)

[Scottish Government (2015) Mapping Flood Disadvantage](#)

6.13 Social media analysis

Summary: Social media platforms, such as Twitter and Facebook, offer publicly available insight into emerging issues of concern, and the key people involved, as a new development emerges, and can be monitored in real-time to track a debate. Social media can also give insight into the sense of place and identity more generally, and help to identify socially and culturally meaningful landscapes.

Recommendations:

- Given the digitisation of communication and society more generally, a socio-economic impact assessment ought to consider how digital platforms can inform public and stakeholder opinion;
- Social media platforms may provide early warning signs of arising issues and can allow responses to the development or intervention to be monitored post-deployment;
- It must not be assumed that visible opposition online translates into real-world opposition, or that those with most influence and visibility online carry the same visibility offline.

Potential use: Social media analysis can be used in stakeholder mapping, gathering contextual information, and identifying and/or predicting potential impacts.

Details of use: Digital forms of communication are taking increasing prominence in daily life. Accordingly, social media is becoming a platform through which communities and affected stakeholders both learn about – and express their views towards – new developments in a locality. Opinion-shapers such as environmental NGOs are also very adept at utilising social media platforms to draw national (or in cases global) attention towards localised developments. A good example of how social media can affect public perception of new offshore energy developments is the Eastern Iburi Earthquakes in northern Japan in late 2018 and early 2019, where a former Japanese Prime Minister claimed on Twitter – without an evidence base – that subsea carbon capture and storage projects in Japan were responsible for earthquakes.

It is important to understand the different kinds of data that can be gleaned from different platforms (see Table 6).

Table 6: Data gathered through social platforms

Platform	Types of public data available	Target audience	Insights gained
Facebook	Comments, opinions, photographs	Local residents or locally affected stakeholders, usually in 30+ age bracket.	Understand local opinions, reactions and points of contention.
Twitter	Opinions, reach, reaction	National and global (also local), usually with interest in overarching issues e.g., climate change, sustainability, social justice.	Understand regional/national stakeholders who may have interest in issue.
Instagram	Photographs	Local residents and visitors.	Socially and culturally meaningful land- and seascapes, community relations with coast and sea.

Social media can lend itself to both qualitative and quantitative analysis. At the very early stages of a development or intervention, it is possible to qualitatively note and group comments posted to gauge initial reactions and emerging themes; or identify key opinion-shapers in a community. Twitter posts and Instagram images may be coded for content or tone, and the number of posts/number of 'likes' and 'retweets' can be counted to give descriptive statistical trends to show attention in an issue over time or to identify arguments/people who are able to gain the most traction. Simple analysis of this nature can be a powerful tool, and can be undertaken via standard statistical packages such as Microsoft Excel. For larger data sets and/or more complex analysis, programmes such as NodeXL can offer deeper insight into networks between posters and trends in data over time.

Advantages: As above, digital forms of communication are becoming ever more prominent in shaping societal relations, and are also a source of information for communities and stakeholders. As such, social media analysis is likely to be an important component of understanding how communities respond to issues, and

thus of carrying out a socio-economic impact assessment, in a digitised world. Additionally, viewing debates on social media that are in the public domain offers a non-intrusive way to make sense of how an issue is discussed within a community, as well as to identify potential opinion-shapers across multiple scales. Tracking reactions in real-time can also be done remotely, at low cost, across the course of a development or intervention.

Issues to consider: Issues will play out on different platforms depending on the audience and the characteristics of the local community. For each development or intervention it is therefore vital to identify early on where (if at all) the key debates are happening, bearing in mind that different audiences may be engaging on different platforms (e.g. Facebook tends to attract a more local audience in upper age groups; whereas Twitter is favoured by NGOs seeking to exert national or global influence).

Whilst social media can give a valuable insight into how a development or intervention is affecting a locality, it is important to remember that the most prominent voices online may not necessarily represent the views of the majority. Moreover, coordinated campaigning can give the impression of large-scale opposition, which may not be matched by the reality. It is also important to consider ethical issues around viewing public comments which, even though they are made in the public domain, may not have been intended for widespread readership. Caution ought to be exercised when re-presenting or passing on comments in reports and presentations so as to preserve posters' anonymity.

Use in practice: Beedasy et al (2020) (see link below) used Twitter data to analyse publics' responses to the Deepwater Horizon oil spill. They used this analysis, which involved a mix of manual qualitative analysis, machine learning and social network analysis, to make sense of the themes that were being discussed and also who was accessing the information. Their findings suggested strategies for helping communities to access information and stay informed in response to environmental changes.

Links to further information:

Merry MK (2014) 'Broadcast Versus Interaction: Environmental Groups' Use of Twitter' Journal of Information Technology & Politics

Ahmed W (2019) 'Using Twitter as a data source: an overview of social media research tools (2019)'

Beedasy, J., Samur Zúñiga, A. F., Chandler, T., & Slack, T. (2020). Online community discourse during the Deepwater Horizon oil spill: an analysis of Twitter interactions. International Journal of Disaster Risk Reduction, 51, 101870.

6.14 Structured Consensus-building processes

Summary: Structured consensus-building processes is an overarching term for a range of techniques which can be used to elaborate consensus between stakeholders, including communities, on priority issues. Typically, these approaches have the aim of aggregating opinions across a group of participants, and may produce numerical or narrative outcomes. Structured deliberative processes, such as Q-Methodology, Delphi and focus conferences, may involve respondents completing ranking or scoring exercises individually, and/or working collaboratively to deliberatively come to understanding and consensus on the priority aspects of an issue. During the process, participants may receive information from expert sources or from people from different positions in order to inform their judgements.

Recommendations:

- Structured consensus-building provides a useful means of identifying potential common ground for issues where a number of divergent perspectives exist;
- Structured consensus-building actions may also be helpful in situations where a limited amount of 'baseline' data exists on which to understand social impacts or key issues to the local community;
- Qualitative and narrative insights emerging during the deliberative process may be as valuable to a socio-economic impact assessment as the final consensus or recommendations attained.

Potential use: This method is useful in identifying and/or predicting potential impacts, developing enhancement and mitigation plans to ensure impacts are acceptable, and produce impact management and monitoring plans.

Details of use: Structured consensus-building processes have at their core the aim of identifying areas of consensus or agreement in situations where there may be a number of subjective viewpoints. Whilst different approaches are available, common characteristics are (a) the use of a systematic process to elicit responses; (b) the role of a facilitator in keeping the process moving forwards; and (c) the presence of a final output which reflects the consensus of the group as a whole.

In *Q-Methodology*, participants are asked to rank a number of statements from those they most agree with to those they least agree with, usually using a large template and a series of printed cards. This process may be done individually or collaboratively as a group, with a facilitator asking participants to narrate and justify their choices and (if the sorting is done collectively) to ensure all participants are in agreement on the final sort. If participants undertake their rankings individually, the sorts can be statistically analysed to identify common themes and identify areas of greatest agreement and disagreement.

In *Delphi method*, participants are again asked to score or rank statements individually, and to justify their answers. A facilitator then summarises the answers and justifications, and allows the participants to comment on and discuss each other's anonymised responses. Participants then undertake further scoring and ranking rounds, under the logic that their views will converge towards a consensus as a result of facilitated deliberative interaction.

In a *focus conference*, participants receive information from a range of expert speakers, potentially representing different viewpoints on an issue, and then work collaboratively to discuss the key issues and produce a position paper outlining policy and practice recommendations. A critical part of this process is that all participants agree on the final text and recommendations.

These approaches are generally conducted with smaller groups of respondents (20-30 people) to allow for fuller interaction. Delphi methods tend to involve expert respondents, Q-Methodology may involve either experts or publics, and focus conferences tend to involve a cross-section of people representative of the local or regional population. It is also worth noting that for each of these approaches, the discussions and dialogue which happen during the process can yield insights that are just as valuable, if not more so, than the final outcome.

Advantages: Structured consensus-building processes are especially useful when researchers want to understand the variety of subjective viewpoints on an issue, and identify areas or courses of action of common concern to all participants. These techniques can identify priority actions to be addressed through community benefit agreements, for example, or help to assess the likely social impacts of a development or intervention in the absence of previous analogous developments in

the area or baseline socio-economic data. Looking carefully at the process as well as the outcome may also point to areas of contention or disagreement within the community and/or between stakeholders, and hence give developers an indication of issues where caution may need to be exercised to avoid inflaming existing tensions.

Issues to consider: Structured consensus-building approaches are both time and resource intensive to undertake effectively. Facilitating processes in order to elicit responses and facilitate discussion, without prompting or influencing respondents, requires skill and training. Statements and questions need to be prepared beforehand and tested/piloted to ensure they are understandable and cover the fill range of issues at hand. Recruitment and selection of participants also requires good knowledge of the local context and/or the technology in question to ensure the appropriate range of knowledge and interests is covered.

Use in practice: A good example of a consensus conference is the conference held in Moray, Scotland in 2012 for the SiteChar sub-seabed carbon capture and storage research project. Approximately 15 participants from the surrounding area were recruited for two weekend-long events, during which they heard from energy and climate change experts from academia, government and industry and took part in facilitated discussion sessions to evaluate the strengths and weaknesses of CCS as a climate change mitigation technology for their locality. The participants together co-wrote a position paper on CCS, in which, based on their deliberations, they identified a series of questions and recommendations for further research, development and deployment of CCS in Scotland.

Specific to offshore renewables, Ellis et al (2007) conducted a Q-Methodology study with 71 people to understand societal responses to proposed offshore wind developments off the coast of Ireland and Northern Ireland. Through statistical sorting of responses, they were able to identify four idealised discourses representing attitudes towards offshore wind: those willing to rationalise globally and sacrifice locally; those who were aware of climate change but sceptical of developer motives; those who enthusiastically embraced wind energy; and those with a pragmatic stance to energy who prefer to consider each site-specific project on a case-by-case basis.

Links to further information:

Ellis, G., Barry. J., and Robinson, C. (2007) Many ways to say 'no', different ways to say 'yes': Applying Q-Methodology to understand public acceptance of wind farm proposals, Journal of Environmental Planning and Management, 50:4, 517-551

Kaiser, M., Brunsting, S., Mastop, J., Zimmer, R., Shackley, S., Mabon, L., and Howell, R. (2015) 'CCS acceptability: social site characterization and advancing awareness at prospective storage sites in Poland and Scotland' *Oil and Gas Science and Technology* 70 (4): 767-784

6.15 Surveys

Summary: Surveying encompasses a wide range of activities which may be undertaken to get a sense of people's views towards an issue. Surveys generally involve issuing a standard set of questions to a large group of respondents, allowing opinions, attitudes and perceptions to be assessed across a population. Surveys can provide insight into community and stakeholder attitudes at a single point in time, or may be repeated periodically to track changes in attitudes over time.

Recommendations:

- Survey-based approaches are valuable for high-level insight into social impacts right across the span of a development;
- Surveys are a valuable first step in identifying groups of people likely to have concerns over social impacts;
- It is vital not to underestimate the expertise required to set up a survey appropriately; and to follow up survey results with deeper enquiry into *why* certain trends emerge.

Potential use: Different types of survey may be applied right across the span of a development or intervention, especially for carrying out baseline analysis, identifying and/or predicting potential impacts, and developing enhancement and mitigation plans to ensure impacts are acceptable.

Details of use: Surveys can be administered in a number of ways, including: online, via post, via telephone, or face-to-face. They can also solicit both qualitative and quantitative responses. Surveys may ask people to respond to questions across a scale, or ask them to choose between different outcomes/options. Surveys can also ask open-ended questions where respondents can provide free text/spoken responses. Surveys may also include graphical or text-based material to give respondents information about the topic before they provide their answers. This can be a useful way to test how people respond to different communication strategies. There are a number of stages to consider when using surveys:

Step 1: Determine the target sample. Understanding the target sample a critical first step, as it will determine the delivery method and also the kinds of questions which

will be asked. For example, is a sample required that represents the demographics of the local population, or is the survey open to anyone locally who wants to contribute? Is the focus on a specific group of stakeholders (e.g., fishers) or a specific section of the public (e.g., older people)?

Step 2: Understand how to reach the target sample. If a sample that is representative of the local demographics is required, or to target respondents via telephone or post, it may be beneficial to work with a market research company who have access to such information and will be able to help to develop the survey, recruit respondents, and collect the data from them. If trying to reach a group of people who might not be easy to contact directly, then it might be helpful to enlist the help of intermediary organisations (e.g., fisheries cooperatives, community groups) to help disseminate the survey.

Step 3: Understand the delivery method. As above, surveys can be delivered in a number of ways. Depending on the target sample, a different delivery method may be appropriate. Online surveys have the advantage of being relatively cheap to run once set up and will also produce data in digital format which may allow for faster and easier analysis. Dissemination via email and/or social media, as well as publicising links to the survey website, can support good participation across the population. However, online surveys may be less suitable for connecting with harder-to-reach groups, such as elderly people and those on low incomes, who may not have internet connectivity. It is thus important to spend time thinking about who the target sample is, and how best to reach them.

Step 4: Clarify the issues to address and design the survey accordingly. After identifying the target sample and your means of reaching them, it is important to pause and reflect again on what exactly what is required from the survey. This will be dependent on the stage of the SEIA process and will inform the kind of information that is collected and how it is collected. For instance, at an early stage, gaining a broader understanding of the issues that matter to the community and stakeholders may be important, in which case a series of Likert-type questions (e.g. providing responses on a scale of, say, 1-5) supported by some free-form questions where people can input words of their choosing may be more appropriate. At a later stage, it may be more valuable to gain a fuller sense of what the community or affected

stakeholders want to know, and how they want to communicate, in which case including graphical or textual stimuli as prompts can help to identify appropriate engagement strategies. As a development moves closer to deployment, and community benefits agreements and similar become important, then Discrete Choice Experiments, whereby respondents are asked to choose between different scenarios, each of which contains a number of variations or attributes, may help to make sense of communities' preferences.

Step 5: Analyse and interpret the results. Surveys produce a vast amount of numerical and textual data, which can be analysed in a number of ways. It is therefore important again to remain focused on the aims of the survey, and ensure the analysis matches this aim. For example, descriptive statistics might show different preferences by demographic or socio-economic characteristics such as age and income, and these differences can then be tested statistically via correlation analysis. Open-ended comments may be harder to analyse numerically, but can give deeper insight into respondents' viewpoints, especially if the same comments and issues are raised repeatedly. In any case, what is vital is to use the outputs of surveys as a starting point to understand the reasons *why* people may oppose or support a development or intervention.

Advantages: Surveying allows a larger section of the population to be reached in comparison to interview or focus group-based approaches, and hence may give a fuller insight into how the community or stakeholder group feels about the development or intervention. The numerical outputs produced by surveys also allow trends to be more easily identified and visualised, which may help to identify particular demographic or socio-economic groups who might have concerns over, or be disproportionately affected by, a development.

Issues to consider: Although surveys allow a broader sample of the population to be engaged in comparison to interview or focus group-based approaches, this breadth may need to be traded off against depth of insight. In other words, while surveys may help to identify attitudes across the population, they may be less effective in explaining *why* particular groups of people have concerns or feel disproportionately impacted by a development. Moreover, evidence from previous energy research suggests that surveys may not be so effective at gauging social

attitudes towards new and potentially unfamiliar technologies (e.g., carbon capture and storage, hydrogen production, wave and tidal energy), as people may not feel informed enough to be able to form an opinion. Finally, whilst it can be tempting to view surveys as a quick and easy way to gauge public and stakeholder opinion, survey design requires significant thought in order to phrase questions appropriately and extract the right information from respondents. Collaboration with professionals, either from academia/research organisations or market research companies, is therefore strongly advised.

Use in practice: the [Energy Policy Research Group at the University of Cambridge](#) have run annual surveys on public attitudes to energy for a number of years. These allow changes in public attitudes to be tracked over time, and also allow additional topical questions to be inserted in some years in order to collect additional information on relevant issues.

Links to further information:

[US National Renewable Energy Laboratory (2013) Guide to Survey Design and Implementation](#)

[Example of Discrete Choice Experiments for energy issues](#)

6.16 Tours and field trips

Summary: This method encompasses visits to other developments or interventions or communities for citizens, key stakeholders, and other interested parties, and can include opportunities for discussions with those who have experienced similar potential impacts (both positive and negative).

Recommendations:

- Valuable to visualise and experience impacts, and to build connections with other communities.
- Worth considering as part of a suite of methods, as numbers who can participate will be limited.

Potential use: Most useful for identifying and/or predicting potential impacts by seeing and learning about development or interventions in action.

Details of use: Visits by community members to other locations which have a similar development or intervention can be very valuable as a means to actually see new infrastructure in place, rather than trying to imagine it. Being in a place and taking into account the surroundings can help to understand the size and scale of impacts, as well as the potential for negative impacts to be minimised. In addition, being able to meet and discuss the development or intervention and any positive and negative impacts that have been experienced, rather than just imagining, hypothesising, or worrying about them, can be very valuable.

Advantages: Tours and trips can provide a valuable and interesting way to envisage a development or intervention and gain from the experience of other communities. They can reduce concern by making choices more familiar. There is also the opportunity to share and discuss ideas with others on the visit, and foster communication and build rapport with other community members and stakeholders. Such trips may be interactive, with the opportunity to ask questions and explore impacts in depth, and a novel way to think about a development or intervention. Building connections with another community, and sharing ideas and experience, can be very useful and reassuring.

Issues to consider: The number of participants may be limited; host communities may not have capacity to accept many visitors, and only those with the time and resources may be able to attend. There are logistical and organisational issues to consider. It may take a lot of time, effort, and cost to arrange a trip. Visits are likely to be one-off, although ongoing contacts may be formed with community members. Visits need a host community with the time and willingness to share their experience with visitors; and impacts need to be translated into the community in which the development or intervention is being proposed. Some imagination will be required, and some impacts will not be the same.

Use in practice: Research has demonstrated the value of communities sharing experience and knowledge about hosting energy projects about what projects are actually like, what has worked well, and what could be improved. Visits and making connections with people in different communities proved to be valuable when considering large offshore projects, community energy schemes, and partnerships with commercial energy projects. For example, communities on islands off the east coast of the US organised visits to proposed and existing offshore wind farms to understand impacts and the role of community benefits.

Links to further information:

Site visits enabled diverse stakeholders to meet repeatedly and exchange information and experiences. See ['Engaging Communities in Offshore Wind Case Studies and Lessons Learned from New England Islands' (2015)](#)

7. Ethical Considerations

It is vital to consider the ethical implications of undertaking a SEIA. Careful consideration of how the SEIA process itself will affect the communities and stakeholders concerned is important for several reasons.

Firstly, doing an ethics impact assessment is good practice for any type of research or assessment project that will involve and have an impact on people. This is particularly important in this context, where undertaking a SEIA could cause distress or anxiety and may decrease support for (or even lead to opposition to) the development or intervention itself[6].

Secondly, given that the purpose of a SEIA is to ensure communities' and stakeholders views are respected and to minimise the risk of harm from developments or interventions, it is important that the way the SEIA is done itself respects this ethos.

Thirdly, and related to the first point above, undertaking an SEIA sensitively in a way that builds trust among communities and stakeholders may well lead to fuller engagement with and participation in the SEIA by the relevant communities, generating richer insights and giving a fuller picture of how the development or intervention affects, or is likely to affect, communities and stakeholders. An ethics impact assessment should therefore be conducted in the preparatory stages of the SEIA.

What does ethical research look like in practice?

Ethical principles are drawn from three main guidance documents: The Scottish Government's Ethics Guidance for Social Researchers (2015)[7],[89]

There are many ethical protocols and professional codes of practice for different scholarly and professional societies that may provide additional insights.

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[6] For example, Mabon and Shackley (2015) noted in the context of sub-seabed carbon dioxide storage that social site characterisation processes, led jointly by a potential development or intervention developer and regulator, in fact increased residents' scepticism towards the technology because the engagement activities were set up in a way that gave the impression an actual development or intervention was imminent or already decided.
[7] The Scottish Government, _Scottish Government Social Research: Protocols and Guidance_ (2020), accessed 15/09/2021.
[8] British Sociological Association, _Statement of Ethical Practice_ (2017), accessed 15/09/2021
[9] Social Research Association, _Research Ethics Guidance_ (2021), accessed 16/09/2021

In summary, the main themes are:

- Ensure professional integrity and sound application and conduct of research methods, using robust and relevant methods, safe-guarding the interests of those affected by their work and reporting the findings honestly.
- Ensure that relationships with research participants are appropriate and respectful. It is important that:
    - Appropriate methods are selected and applied
    - Participation is voluntary and based on informed consent
    - Barriers to participation are overcome
    - An inclusive approach towards vulnerable people and groups is taken which avoids harm, anxiety or distress
    - Anonymity and confidentiality are respected as much as possible for all those participating
- GDPR must be followed in the handling, storage and archiving of personal data
- Ensure that research findings are reported accurately and in full and are published.

Assessing Ethical Sensitivity

It may be helpful in conducting the ethics assessment to consider levels of sensitivity for each issue that is identified. An approach to this is suggested in The Scottish Government's Ethics Guidance for Social Researchers (2015)[10].

How can research ethics be embedded within a SEIA?

If the SEIA is being undertaken in collaboration with a university or research institute, then it is likely that academic partners in the project will have to gain ethical approval from their institution's research ethics committee prior to the commencement of their involvement in the SEIA process. This process can take several months, so it is worth planning ahead to ensure that critical activities are not delayed. Equally, however, as well as being a critical component of professional practice, institutional

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[10] Op.cit

ethical approval can act as external quality assurance of the SEIA methods being proposed, and may identify issues of which the developer had not thought.

8. Limitations and open issues

A critical point to reiterate is that a core function of SEIA techniques is to involve communities in the planning and policy making process, giving them a voice, and understanding how a development or intervention may impact upon the locality. In other words, the aim of SEIA techniques is to understand the community and stakeholder context, and not to convince them of the merits of a development or intervention. Whilst thorough and early SEIA can help to inform engagement, communication and governance strategies in a way that can enhance the likelihood of getting community support, it should be remembered that sometimes the most appropriate outcome from an SEIA process is that a development or intervention does *not* go ahead if it transpires that the negative impacts on the communities or stakeholders will be too great.

Furthermore, a number of the SEIA techniques discussed in this Toolkit have their foundations in land-based energy projects or infrastructure. In a coastal and marine context, it may be harder to define 'the community' or 'affected stakeholders' because geographical distance and processes such as ocean currents, locations of fishing grounds, and connectivity between ports/settlements can make a sense of place and of 'ownership' harder to delineate on a map. When conducting SEIA for offshore renewables, for example, additional consideration hence ought to be given to who counts as 'the community,' and to ensuring that an appropriate range of affected places and stakeholders are engaged. Research for ClimateXChange by Rudolph et al (2015) explores how to do this. As outlined earlier, whilst social science has long been interested in questions of the sea and coasts, understandings of systematic methodologies for the specificities of a marine context are still emerging.

It should also be recognised that knowledge of methods for monitoring impacts post-consent and post-implementation is less well-developed. It is especially challenging to find best practices for monitoring socio-economic impacts for offshore renewable projects, given that technologies are only starting to reach large-scale deployment

globally. It will thus be vital to elaborate techniques for ongoing monitoring of social impacts from early deployments in Scotland such as Beatrice and the EOWDC (European Offshore Wind Deployment Centre) in Aberdeen.

9. References and Resources

Ahmed, W (2019) Using Twitter as a data source: an overview of social media research tools, available: https://blogs.lse.ac.uk/impactofsocialsciences/2019/06/18/using-twitter-as-a-data-source-an-overview-of-social-media-research-tools-2019/

Aitken, M, Haggett, C, Rudolph, D (2014) *Wind Farms Community Engagement Good Practice Review: Executive Summary*, available: https://www.climatexchange.org.uk/research/projects/what-is-good-community-engagement-on-wind-farm-developments/

World Meteorological Organisation (2016) *Integrated Flood Management Tools,* Series No.25 version 1.0, available: http://www.floodmanagement.info/publications/tools/Tool_25_Public_Perception_of_Flood_Risk_and_Social_Impact_Assessment.pdf

Beedasy, J, Samur Zúñiga, A F, Chandler, T, & Slack, T. (2020). Online community discourse during the Deepwater Horizon oil spill: an analysis of Twitter interactions. *International Journal of Disaster Risk Reduction*, 51, 101870. https://doi.org/10.1016/j.ijdrr.2020.101870

British Sociological Association (2017) *Statement of Ethical Practice*, available from: https://www.britsoc.co.uk/media/24310/bsa_statement_of_ethical_practice.pdf

Broecks, K P F, van Egmond, S, van Rijnsoever, F J, Verlinde-van den Berg, M, & Hekkert, M P (2016). Persuasiveness, importance and novelty of arguments about Carbon Capture and Storage. *Environmental Science and Policy*, *59*, 58–66. https://doi.org/10.1016/j.envsci.2016.02.004

Copenhagen Environment and Energy Office (2003) *The Middelgrunden Offshore Windfarm*, available: https://base.socioeco.org/docs/a118_doc1.pdf

Ellis G, Barry J & Robinson C (2007) Many ways to say 'no', different ways to say 'yes': Applying Q-Methodology to understand public acceptance of wind farm proposals, *Journal of Environmental Planning and Management*, 50:4, 517-551, DOI: 10.1080/09640560701402075

Escobar, O (2015) *Citizens' juries on wind farm development in Scotland*, available: https://www.climatexchange.org.uk/research/projects/citizens-juries-on-wind-farm-development-in-scotland/

European Commission (2023) *Tiree Onshore Scenario Mapping for the Proposed Argyll Array Offshore Windfarm*, available: Tiree Onshore Scenario Mapping for the proposed Argyll Array Offshore Windfarm | The European Maritime Spatial Planning Platform (europa.eu)

Haggett, C, Coleman, R, and Hodges, J (2015) 'Environment, Imagination and Aesthetics: a new environmental impact assessment for natural Scotland' in Griffith, D. (ed) *Imagining Natural Scotland,* published by Creative Scotland and Scottish Natural Heritage

Kaiser, M, Brunsting, S, Mastop, J, Zimmer, R, Shackley, S, Mabon, L, and Howell, R (2015) CCS acceptability: social site characterization and advancing awareness at prospective storage sites in Poland and Scotland' *Oil and Gas Science and Technology* 70 (4): 767-784: https://doi.org/10.2516/ogst/2014024

Klein, S, MacDonald, S, Battista, N (2015) *Engaging Communities in Offshore Wind Case Studies and Lessons Learned from New England Islands* (2015) available: https://www.islandinstitute.org/wp-content/uploads/2020/09/Offshore-Wind-Report_v70918.pdf

Lipietz, B, Wickson, T, Diaconescu, I, Lee, R (2018) *Social Impact Assessment in London Planning MSc Urban Development Planning Practice Module Report,* available: https://www.ucl.ac.uk/bartlett/development/sites/bartlett/files/social_impact_assessment_in_london_planning.pdf

Local Government Association (2012) *Participatory appraisal in South Tyneside neighbourhoods*, available: https://www.local.gov.uk/case-studies/participatory-appraisal-south-tyneside-neighbourhoods

IAP2, International Association of Public Participation (2014) Public Participation Spectrum, available: https://www.iap2.org/page/pillars

International Association for Impact Assessment (2015) *Social Impact Assessment: guide for assessing and managing the social impacts of projects*, available: SIA_Guidance_Document_IAIA.pdf

Mabon, L, & Shackley, S (2015). Meeting the targets or re-imagining society? An empirical study into the ethical landscape of carbon dioxide capture and storage in Scotland. *Environmental Values*, *24*(4). https://doi.org/10.3197/096327115X14345368709907

Mabon, L, Shackley, S, Blackford, J, Stahl, H and Miller, A (2015) 'Local perceptions of the QICS experimental offshore CO_2 release: results from social science research' *International Journal of Greenhouse Gas Control* 38: 18-25: DOI: https://doi.org/10.1016/j.ijggc.2014.10.022

Mabon, L, Kita, J and Xue Z (2017) 'Challenges for social impact assessment in coastal regions: a case study of the Tomakomai CCS Demonstration Project' *Marine Policy* 83: 243-251

Merry M K (2014) Broadcast Versus Interaction: Environmental Groups' Use of Twitter, *Journal of Information Technology & Politics* DOI: 10.1080/19331681.2014.933723

Roberts, J, and Escobar, O (2015) *Involving communities in deliberation: A study of 3 citizens' juries on onshore wind farms in Scotland*; ClimateXchange

https://www.climatexchange.org.uk/media/1438/citizens_juries_-_full_report.pdf

Rudolph, D, Haggett, C, and Aitken, M (2015) *Community Benefits From Offshore Renewables: Good Practice Review,* Research commissioned for ClimateXChange for the Scottish Government, available: http://www.climatexchange.org.uk/reducing-emissions/community-benefits-offshore-renewables-good-practice-review/

Scottish Government (2015) *Mapping Flood Disadvantage*, available: https://www.gov.scot/publications/mapping-flood-disadvantage-scotland-2015-main-report/

Scottish Government (2022) *Scotland's Climate Assembly – process, impact and assembly member experience: research report,* available: [Scotland's Climate Assembly - process, impact and assembly member experience: research report - gov.scot (www.gov.scot)](#)

Terwel, B W, & ter Mors, E (2015). Host community compensation in a carbon dioxide capture and storage (CCS) context: Comparing the preferences of Dutch citizens and local government authorities. *Environmental Science and Policy*, 50, 15–23.

The Countryside Charity (2005) *Mapping Tranquillity*, available: https://www.cpre.org.uk/resources/mapping-tranquility/

US National Renewable Energy Laboratory (2013) Guide to Survey Design and Implementation: https://www.energy.gov/sites/prod/files/2013/05/f0/53827-12.pdf

Vanclay, F (2012) The potential application of social impact assessment in integrated coastal zone management. *Ocean and Coastal Management*, *68*, 149–156. https://doi.org/10.1016/j.ocecoaman.2012.05.016

Wilsdon, J & Willis, R, (2004) See-Through Science: Why public engagement needs to move upstream, available: www.demos.co.uk

Annex A

Using participatory methods when face to face methods are not possible

The COVID pandemic limited the use of face to face and group methodologies for a period of time. Alternative options such as online meetings were often necessary, as they were in line with rules and regulations that were in place at the time. It is possible that other events or circumstances in the future also limit the use of face-to-face research. Contractors or researchers should follow whatever rules are in place when designing and delivering methodologies for SEIA.

Key aspects of participatory methods are the building of trust and rapport, encouraging openness, discussion, and collaboration; and the sharing of knowledge, ideas, and lived experience. Restrictions may mean that it is not possible to use methods in-person, but this does not mean that the opportunities to use participatory methods, and the benefits from doing so, are necessarily lost.

Firstly, some methods are already commonly used online or at a distance, for example, surveys and interviews are frequently administered online or by telephone whilst social media analysis, archival research, and secondary data analysis may all be unaffected by face-to-face restrictions.

Secondly, the COVID pandemic has normalised the use of online methods of communication and interaction for many people, for work, schooling, keeping in touch with family and friends, as well as community meetings and interactions. Inviting people to participate in activities online is more likely to be acceptable and familiar for many than before the pandemic.

Thirdly, there may be greater opportunity for participation if methods are being used online, for example, parents with child-care responsibilities do not have to leave the house to attend an online evening meeting, and it may be possible to reach people in dispersed locations who could not have travelled to attend in-person events.

However, using participatory methods during times of restrictions may take more effort. There are a range of online techniques, tools, and software packages available to share images and resources and allow participants to comment or annotate them, but these may be costly, complex to operate, and difficult to understand and interact with for some participants. It may be harder to build rapport

through a screen than in-person and take more effort to enthusiastically engage participants.

It is also vital to consider who may be precluded from participating: people in marginalised or vulnerable groups; those who do not have access to reliable Wi-Fi or technology, or who are not sufficiently IT-literate; or those with visual or hearing difficulties, who may struggle to engage in online discussions. It is also important to consider privacy and safety issues for those participating in their homes or places where they may be overheard; and the difficulties that anyone may be facing during times of significant disruption, uncertainty, and upset.

Adaptation and multiple methods

One of the key points in this Toolkit is about the benefits of using multiple methods. Where in-person interactions cannot take place, this may be even more important, using different ways to try and encourage participation, and to generate engagement with the key issues. It is also the case that many participatory methods can be adapted. A significant example of this is Scotland's Climate Assembly, a citizen's jury exploring how to address climate change, which was conducted entirely online[11].

A useful review of the way in which participatory methods have been adapted in a pandemic is by Hall et al (2021)[12]; and Lupton (2021)[13] covers a number of important considerations. The ways in which all the methods in this toolkit can be adapted for times when in-person interactions are restricted has been set out in Table A.

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[11] Scottish Government (2022) Scotland's Climate Assembly – process, impact and assembly member experience: research report, available: Scotland's Climate Assembly - process, impact and assembly member experience: research report - gov.scot (www.gov.scot)

[12] Hall, J., Gaved, M., and Sargent, J. (2021) Participatory Research Approaches in Times of Covid-19: A Narrative Literature Review, *International Journal of Qualitative Methods,*

[13] Lupton, D. (editor) (2021) Doing fieldwork in a pandemic (crowd-sourced document), revised version. Available at: Doing Fieldwork in a Pandemic

Table A Implications of using methods during social restrictions

Method	Implications of use during social restrictions
Archival research	Most/all resources are likely to be available online; access to libraries and data archives may be limited (but should not involve interactions with others, and social distancing and <u>any</u> hygiene measures can be followed if required)
Citizens' Juries	Can be conducted entirely online; requires effort to make digital resources, although can be prepared in advance. Participation easier for some participants, harder for others.
Community events	Many in-person events (either set up for the SEIA, or existing events at which the SEIA is conducted) will not be possible if there are restrictions. Events could take place outdoors if allowed. Difficult to hold 'drop-in' events online.
Focus groups	Possible to hold online; some interactive tools are more difficult to use, and harder to build rapport than in-person.
Landscape immersion	Participants can still undertake this method, if there are restrictions prohibiting indoor social activities, as locations are outdoors and local to them. Instructions can be **given, and feedback delivered online/by telephone.**
One-to-one interviews	Often undertaken online/by telephone. Harder to interpret non-verbal cues or build rapport.
Ongoing advisory panel	Can be conducted online, if all participants have IT access. Updates can be shared online.
Participatory appraisal	Possible to conduct sessions online; some interactive tools are more difficult to use, and harder to develop group discussion and build rapport than in-person.

Public dialogues	Possible to conduct sessions online; some interactive tools are more difficult to use, and harder to develop group discussion and build rapport than in-person
Public meetings	Possible to conduct sessions online; may encourage some attendees who only want to listen; facilitation may be harder online.
Scenario mapping	Possible to conduct sessions online; some interactive tools are more difficult to use, and harder to develop group discussion and build rapport than in-person
Secondary data analysis	Most/all resources are likely to be available online; access to libraries and data archives may be limited (but should not involve interactions with others, and <u>any </u>social distancing and hygiene measures can be followed if required)
Social media analysis	All available online.
Structured consensus-building	Possible to conduct sessions online; some interactive tools are more difficult to use, and harder to develop group discussion and build rapport than in-person
Surveying	Often already conducted online or by telephone. Face-to-face surveys can be useful in particular locations; information could be given in those places as to how to participate in online versions.
Tours and field trips	May be difficult to use; possibility that small groups/bubbles may be able to attend during certain restrictions. Otherwise, trying to put communities in touch with each other through other means (sharing information online, chat groups and so on) is still valuable.

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