

Evaluation of the Sustainable Development Commission's public and stakeholder engagement programme on tidal power

Final report

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1 Introduction

In 2006, the Sustainable Development Commission (SDC) launched a research project on tidal power in the UK. The project comprised a detailed initial desk research exercise (from November 2006), followed by a public and stakeholder engagement programme (from March to April 2007). The SDC published the report of the findings of the engagement programme, and its own policy position report, in October 2007.

This report presents an evaluation of the public and stakeholder engagement programme. In particular, the evaluation focuses on the deliberative public engagement elements of the consultation, and the stakeholder workshops, as these were the elements of the process that potentially had the most lessons for future SDC public and stakeholder engagement work.

The report summarises the methodology of the evaluation, the purpose and objectives of the engagement programme, and feedback on the main activities within the engagement programme. It also considers the extent to which the objectives have been achieved, identifies the elements of the process that worked particularly well and less well, and identifies some lessons for future practice in the light of these findings. The final section concludes the report by identifying the particular value the process provided for public participants, stakeholders and SDC policy makers.

2 The evaluation study

2.1 Introduction

The Sustainable Development Commission has invested significantly in public and stakeholder engagement programmes in the past, and is known for promoting good practice in the field. It was therefore important for the SDC to review and identify lessons from this major and highly contentious programme on tidal power to inform its own and others' future engagement activities.

The evaluation was designed to focus on the public and stakeholder engagement programme, making only brief reference to the other research activities that provided the scientific and technical background to the SDC's final position on tidal power. In particular, the evaluation focused on the deliberative public engagement elements of the consultation and the stakeholder workshops. The other elements of the engagement programme, such as the opinion poll and the involvement of the SDC stakeholder panel, are covered only briefly.

The evaluation does not assess the policy outputs or implications from the initiative in any detail; it focuses on the engagement processes and assesses the extent to which the activities met the objectives set. Policy issues are touched on throughout this report, but only where relevant to assessing the effectiveness of the engagement.

The evaluation was commissioned in February 2007, and was completed in March 2008. Details on the methodology are given in section 2.4 below.

2.2 Aims and objectives of the evaluation

There were no formally agreed objectives for the evaluation other than to assess the engagement programme by considering the extent to which it met its objectives and provided lessons for the future.

There was particular interest in the SDC on linking public and stakeholder engagement directly to policy development, so the evaluation considered the value of the engagement programme to policy makers as well as the effectiveness and value of the process overall.

2.3 Approach to the evaluation

Evaluations of engagement can range in approach from a mechanistic 'audit' approach, focusing on quantitative assessment of achievement against formal targets or goals, to approaches that focus much more on 'learning' from the experience, focusing on qualitative description and interpretation of more 'subjective' data (e.g. from interviews, stories, observation etc) to explain why and how certain outcomes were achieved.

The audit approach can be summarised as asking questions such as:

- have we done what we said we were going to do?
- have we met our targets (e.g. numbers of participants; reaching a representative sample of the population)?

The learning approach is more likely to ask questions such as:

- were the methods and design appropriate to the objectives, and were the objectives relevant?
- what have the impacts been (e.g. on the participants, participant satisfaction, policy outcomes, decision-making processes, etc?)
- what are the lessons for the future?

The approach to this evaluation has used elements of both approaches. It focuses on a qualitative learning approach, while ensuring that the quantitative and audit elements required were also delivered (e.g. objectives met). The approach therefore required the collection of both qualitative and quantitative data.

The qualitative and quantitative data has been analysed against the stated objectives of the engagement process, as well as considering issues raised in the feedback from participants and those delivering the process. This approach was designed to enable clear lessons to be distilled from the evaluation research as well as measuring the effectiveness and the overall achievements of the process.

The style Shared Practice adopts for evaluation is collaborative. However, the evaluator still has responsibility for ensuring the independence and rigour of the evaluation process, and to reporting findings openly and honestly to appropriate audiences at appropriate times.

2.4 Methodology for the evaluation

The evaluation methodology was made up of the following elements:

- **Detailed design and planning of the evaluation.** This involved work with the SDC to agree the detailed parameters of the evaluation and the programme of work, especially the main themes and questions for the evaluation.
- **Evaluation research.** This included the following:
 - **Observation** of a sample of events, including informal interviews with a range of participants. Evaluators attended, observed and conducted informal interviews with the public at one of the three workshops, and also at one of the two stakeholder workshops.
 - **Development and use of questionnaires at all public events.** Questionnaires were distributed at all the three public and two stakeholder workshops with a response rate of 95% from public events and 94% from stakeholders. Detailed analyses of all these questionnaires has been undertaken and can be found in the annexes to this report.
 - **Interviews.** Interviews were used to complement the data gained from questionnaires, and provide deeper and richer data on some of the key issues. Interviews were carried out with:
 - **Public participants.** It was important to interview public participants to gain qualitative data which would allow the evaluation to assess their satisfaction with the quality of the process as well as the impacts the process had on them. These interviews were undertaken a few months after the workshops, to complement the questionnaire data that gained immediate responses and provided largely quantitative data. Interviews were carried out in August and September 2007 with 11 public participants:
 - 4 from the Cardiff workshop
 - 4 from the Bristol workshop
 - 3 from the Inverness workshop.
 - **Stakeholders.** As with the public participants, interviews were carried out to gain qualitative and more reflective responses on the process overall, some months after the workshops were held. Interviews were carried out in August and September 2007 with 10 stakeholders:
 - 6 from the Cardiff workshop
 - 4 from the Aberdeen workshop.
 - **Policy-makers** using the outputs of the process in their decision-making processes. Interviews were conducted with 5 staff from the various Government departments involved in using the findings from the public engagement

programme, as well as the Sustainable Development Commissioner most involved in the programme. Interviews were carried out in November and December 2007, so that policy makers had completed their contributions to the SDC policy position that was published in October 2007.

- **Those commissioning and delivering the process** (SDC staff, Opinion Leader and The Environment Council). Informal conversations were undertaken with at least one individual in each organisation to more fully understand the approach to the design of the process, what happened in practice, and the lessons identified by those involved for future practice.
- **Analysis of data.** Quantitative and qualitative analysis of questionnaires and interview transcripts has been undertaken to provide statistics, overall qualitative feedback and illustrative quotes from those involved.
- **Final reports.** The final evaluation report was presented to the SDC in draft form in March 2008, and finalised for publication in May 2008.

2.5 Background and context

The issues around tidal power in the UK have been discussed over many decades, but it is only in recent years that it has become a national policy priority.

The Sustainable Development Commission identified the potential for a project on tidal power from a UK-wide perspective in 2006, at the same time as the Department for Business, Enterprise and Regulatory Reform (BERR - formerly the Department of Trade and Industry) was being asked by Government to examine the potential for a tidal barrage in the Severn Estuary. Later in 2006 the Government announced that BERR would work with the SDC and the Welsh Assembly Government, the South West Regional Development Agency and other interested parties "to explore the issues arising on the tidal resource in the UK, including the Severn Estuary, including potential costs and benefits of developments using the range of tidal technologies and their public acceptability". Public acceptability, and the involvement of interested parties (or stakeholders), was always therefore a key element of the SDC's work on tidal power.

The SDC's study on tidal power was undertaken with support and funding from the UK Government (BERR), the Welsh Assembly Government, the South West Regional Development Agency, the Scottish Government, and the Department for Enterprise, Trade and Investment in Northern Ireland. The initial work for the study was a series of five desk-based research projects.

The SDC ran their public and stakeholder engagement programme in March and April 2007, considered the findings in the summer of that year, and released their final position statement on tidal power in October 2007. This final report was based on the findings from the desk research studies and a range of public and stakeholder activities. The main focus for those activities was a detailed engagement programme run on the SDC's behalf by Opinion Leader (OL) and The Environment Council (TEC). The OL and TEC full report on the main engagement programme was published in October 2007 at the same time as the SDC position statement. The SDC also consulted stakeholders through continuing contact with individual stakeholders as well as through their own standing Stakeholder Panel. This timetable and set of activities provides the broad context for the engagement programme and thus also for the evaluation study.

The other contextual issue potentially affecting the stakeholder and public engagement programme is media coverage. While tidal power has not generally been an issue of major importance to the national media, the Severn barrage in particular has raised strong feelings over many years. The evaluation therefore briefly examined the media coverage seen by participants, and the extent to which it affected their views.

3 Aims, objectives and summary of activities

3.1 Introduction

This section provides a brief overview of the aims and objectives of the engagement programme, and an overall picture of the activities that took place. Subsequent sections analyse the public and stakeholder engagement activities in more detail.

3.2 Aims and objectives of the engagement dialogue

Engagement was a key factor in the SDC's study on tidal power. In general, the SDC believes that "effective engagement is essential to the development of truly sustainable policy-making"¹.

The SDC's final report on tidal power also describes the importance of engagement in this instance: "Engagement is particularly important for understanding new technologies such as tidal power, as new technologies represent an unknown quantity to many stakeholders and to the general public. It is also important when considering potential large-scale infrastructure development such as tidal barrages and lagoons, which have significant potential effects on the environment, economy and society at a regional and local level."

The overall objectives for the public and stakeholder engagement programme were to understand:

- attitudes towards tidal power
- attitudes to the sustainable development aspects of tidal power technologies
- attitudes to proposals in the Severn Estuary
- views on financing and decision-making
- the conditions for public and stakeholder acceptability of tidal power.

In order to achieve these objectives, a programme of public and stakeholder engagement activities was established. The objectives for each of these activities were developed in detail by OL and TEC, following a scoping workshop with the key stakeholders (SDC commissioners and members of the SDC secretariat and the project funding partners). Interviews were also conducted with some of the key funders, consultants and other stakeholders. These discussions resulted in agreement on the following objectives for public and stakeholder engagement.

The key objectives of the **public** engagement were:

- To gauge current public attitudes towards tidal power
- To explore the public's views on the economic, social and environmental costs and benefits of tidal power and different tidal power technologies
- To explore the public's views on the financing of any potential tidal power development
- In the South West and Wales, to specifically explore the public's views on proposals for tidal developments in the Severn Estuary
- To understand the public's views on what role the Government and Devolved Administrations should play with regard to tidal power in terms of financial costs and decision making
- To establish the conditions for public acceptability for any tidal power development
- To understand how public attitudes vary across the UK.

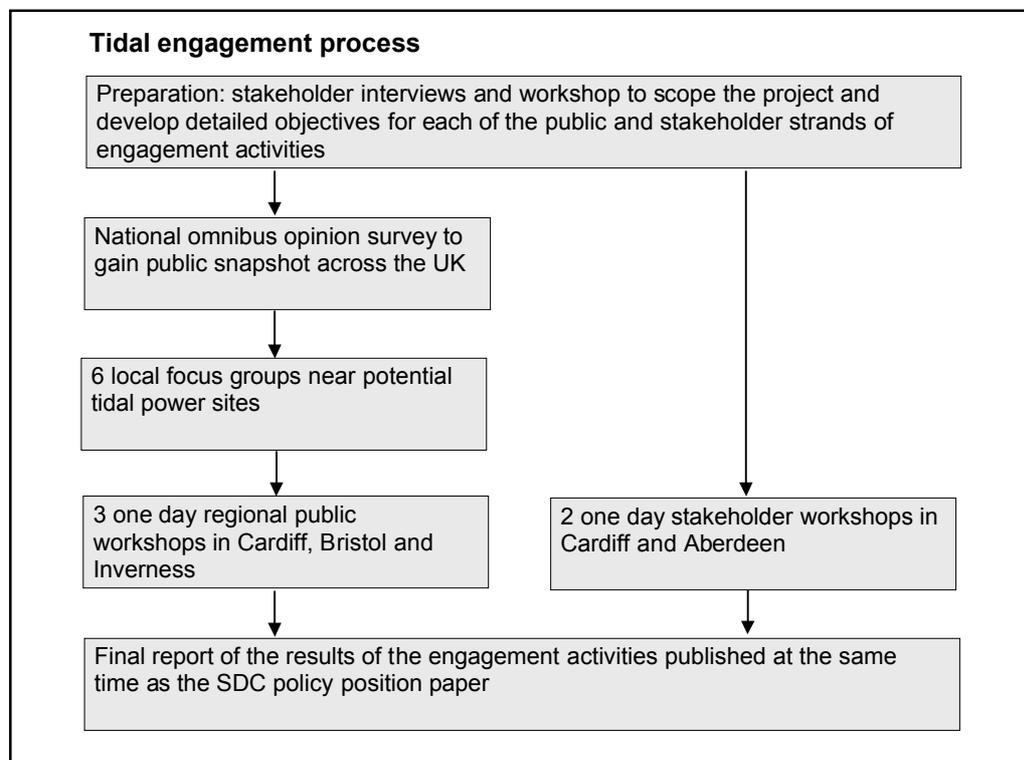
The key objectives of the **stakeholder** engagement were:

¹ *Turning the Tide. Tidal Power in the UK*. SDC final report on their study of tidal power. October 2007.

- To understand which stakeholders are pro and anti tidal power and to establish the conditions for stakeholder acceptability for any tidal power development
- To explore stakeholders' views on the economic, social and environmental costs and benefits of tidal power and different tidal power technologies
- To explore stakeholders' views on the financing of any potential tidal power development
- To specifically explore stakeholders' views on proposals for tidal developments in the Severn Estuary
- To understand stakeholders' views on what role the Government and Devolved Administrations should play with regard to tidal power in terms of financial costs and decision making.

3.3 The main activities of the public and stakeholder engagement

The engagement process overall integrated public and stakeholder engagement, alongside other stakeholder activities. The process was, in summary, as follows:



For the public engagement programme, Opinion Leader conducted a programme of national, regional and local consultations with members of the public. This comprised:

- An omnibus public opinion survey across the UK (i.e. eight questions added to a broad public opinion survey): responses were received from 1,000 people.

The omnibus survey covered:

- The public's current awareness and understanding of tidal power
- The public's views on how tidal power technology should be supported
- The main benefits and disadvantages of a tidal barrage across Severn Estuary
- The public's position on a tidal barrage across the Severn Estuary.

- Six discussion (focus) groups in each of three local communities which could be directly affected by potential tidal power schemes: around the Severn Estuary at Lavernock Point and Brean Down, and in the Orkney Islands. Each group comprised 8 people (a total of 48 participants in this strand of work). In each location there were two groups, one aimed at people under 45 years of age, and the other for people of 45 and over.
- Three regional workshops in areas which are close to sites that may be affected by tidal power developments (Cardiff, Bristol and Inverness): 20 participants at each, making a total of 60 members of the public attending workshops. Some participants from the focus groups went on to attend a workshop in their locality.

The stakeholder engagement comprised:

- Two workshops with key stakeholders from a range of backgrounds. One workshop was conducted in the North (Aberdeen) and one in the South (Cardiff): 146 invitations were sent out; 50 people attended the Cardiff event, and 22 attended the Aberdeen event.

This main programme of engagement activities was supplemented by other stakeholder engagement activities managed directly by the SDC, including:

- Continuing discussions between the SDC and individual stakeholders, and an email circulation of project updates.
- An online debate with the SDC's own Stakeholder Panel (of 1,000 interested parties).
- A workshop with around 30 officers and members representing 18 English and Welsh local authorities from around the Severn, to explore key local and regional issues. This workshop was organised by the SDC with the South West Regional Development Agency, the South West Regional Assembly and the Severn Estuary Partnership.
- A roundtable discussion with 12 participants including tidal stream device and project developers, hosted by the British Wind Energy Association. This was to focus specifically on tidal stream development.

These supplementary activities have been separately reported but the findings have not been published and they are not specifically covered in this evaluation.

4 Public engagement

4.1 The purpose of the public engagement

The three elements of the public engagement activities (opinion poll, focus groups and workshops) were designed to enable the SDC to understand the public attitudes to tidal power, including views on financing and decision-making and conditions for acceptability. The omnibus public opinion poll was not a major engagement activity, and is therefore not considered in this report in any detail; the report focuses on the focus groups and workshops.

4.2 The public workshop process

- **Overall scale.** Six discussion (focus) groups and three workshops were held in March and April 2007. The workshops were attended by 20 public participants each (a total of 60 participants), and the focus groups by 8 participants each (a total of 48 participants). Some of the focus group participants went on to attend a workshop in their locality.
- **Location.** The three regional workshops were held in three different locations, close to sites that may be affected by tidal power developments: two around the Severn Estuary (Cardiff and Bristol), and one in Scotland (Inverness). The six focus groups were held in locations that were considered to be potentially directly impacted by tidal power developments:
 - Lavernock Point and Brean Down which are the points either side of the Cardiff-Weston barrage alignment in the Severn Estuary, which has the greatest concentration of tidal range resource in the UK, and
 - Kirkwall, Orkney which is near prototype wave and tidal power device installations, and an area of significant tidal stream resource in the Pentland Firth.
- **Recruitment.** The participants for the workshops and focus groups were recruited by Opinion Leaders' network of professional recruiters to provide a mix of age groups, gender and socio-economic group to reflect the population profile in each area. In Cardiff and Bristol specific efforts were also made to ensure at least two participants in each workshop were from black and minority ethnic groups. In the focus groups, there were two groups in each location split by age: a younger (under 45) and older (45 and over) group in each location. This was in order to understand whether there were any differences in views and attitudes according to the age of participants.

In order to get a range of opinions on tidal power at a regional level, OL recruited from a radius of 30 miles around the chosen locations, to gain a good spread of proximity to coastal areas in regions of high tidal resource where tidal power might be developed. In addition, recruitment was designed to get a good mix of urban, suburban and rural participants.

The aim in recruitment was to provide a diversity of views rather than a rigorously representative demographic sample of the UK or regional population. This diversity was achieved overall.

- **Incentives.** Participants at the focus groups received an incentive payment of £35, and those at the workshops received £65, including travel expenses. The different amounts reflected the amount of time participants spent at each of the sessions. This is normal practice in deliberative research, and helps ensure that those who cannot afford to attend because of the costs of travelling, child care etc can be encouraged to take part, thus ensuring a greater diversity of views at the event.

- **Process.** The discussion groups and workshops had different objectives and different timetables, as follows. All the information materials provided at the events were developed in collaboration with the SDC.
- The **focus groups** were designed to understand the current awareness and perceptions of the issues, and to gauge reactions to specific proposals for tidal developments in the locations. The groups each ran for 1.5 hours in the evening, and were held at village halls, community centres and sports centres.

The steps in the process were:

- Introductions and warm up
 - Current awareness of tidal power (10 minutes)
 - Current attitudes to tidal power (15 minutes), with initial time for participants to think alone and then discussion led by the facilitator, followed by an exercise to rank the points raised in order of importance
 - Reactions to proposed tidal schemes in their area (50 minutes); fact sheets were handed out on the drivers for considering tidal power (e.g. reducing carbon emissions, energy security etc), and on the possibilities for tidal power in their area. This session provided opportunities for participants to give immediate reactions to the proposals and then to consider the implications for the local community in more detail, including costs and benefits.
 - Consideration of overall issues (10 minutes) to cover the need for future local consultations with the community, how much influence local people should have over any decisions on tidal power, who should own the technology, whether views had changed as a result of the meeting, and whether those present were for or against tidal power, and why.
 - Thanks and close.
- The **workshops** were designed to clearly understand the levels of existing public knowledge about tidal power and public attitudes to tidal power - particularly to a range of specific tidal power options in their region. The workshops ran for a full day (9.45am to 4.30pm) and were held in local community facilities.

The steps in the process were:

- Welcome and basic information. The participants were allocated into one of two groups of 10, each with a facilitator. Each group was mixed in terms of age, gender and backgrounds, to ensure that they could all be exposed to a diverse range of views, behaviours and experiences. There was then time for introductions between participants on each table.
- Discussion in small groups to explore the current awareness of participants of tidal power (20 minutes), including any awareness of press coverage. This was followed by a session to explore current attitudes to tidal power (30 minutes), with initial time for participants to think alone and then discussion led by the facilitator, followed by an exercise to rank the points raised in order of importance.
- Plenary session, with a 5 minute presentation from the SDC on why they were exploring the potential for tidal power (e.g. reducing carbon emissions, energy security etc). Handouts on the presentation were provided. Then the participants returned to working in their groups for 20 minutes to consider the issues raised.
- Plenary session with a 10 minutes presentation providing an overview of tidal power technologies and an introduction to the economic, social and environmental impacts of tidal power. Fact sheets were handed out. Then the participants returned to working in their groups for an hour and 20 minutes to consider the implications of tidal power in more depth; the order in which the groups discussed the issues was determined by the groups according to the importance to them (economic, social and environmental). At the end of the session, there was a 10 minute plenary so that each group could present back their thoughts on the implications for each technology.

- After lunch, the participants returned to working in their groups (for 50 minutes) to consider the possible tidal developments in their own areas (Severn Estuary and Pentland Firth). Handouts were provided on the proposals, and maps were available. Participants considered advantages and disadvantages, preferences for different technologies, who should own it etc. Each group was asked to provide a 5 minute presentation to feedback their views on the advantages and disadvantages of the proposals.
 - A plenary session of 10 minutes heard the presentations from the small groups.
 - Each of the small groups was then split into two, with one considering the case for tidal power and the other the case against. This exercise (25 minutes) was designed to identify the key arguments for and against tidal power from the public viewpoint. Each group then presented to their opposing group.
 - Again within the small groups, information was then handed out on the role of government, and the participants were asked to consider the role of national government, local authorities, the European Union etc, and how tidal power schemes should be financed. Three scenarios were then introduced which were designed to make a stronger case for tidal power (increased effects of carbon emissions e.g. rising sea levels, security of energy supply e.g. gas resources becoming scarce, and rising cost of non-renewable sources making tidal power cheaper than others). Participants were then asked to reflect on the impact on their thinking of these different scenarios.
 - A final session gave each participant two post-its on which they were asked to indicate if they were for or against tidal power - in their area and for the UK as a whole (one post-it for each scale).
 - Thanks and close. Evaluation forms were circulated and completed.
- **Materials to aid discussion.** A series of handouts was provided throughout the process, to introduce information to aid each element of the discussion. These materials were drafted jointly by Opinion Leader and the SDC. A significant investment of time was made in ensuring that the materials were clear and understandable as it was recognised that this was vital to an effective engagement on the complex and quite technical issues within tidal power.
 - **Reporting.** OL and TEC presented the main findings from the engagement programme to the SDC in May 2007. The full draft report was then presented in June 2007 (see below), and published with the SDC's final report on the whole study in October 2007.

The findings from both types of events were presented in a single report by Opinion Leader (with the stakeholder results) to the SDC, although the results from each strand were analysed separately so that different views from different sources could be clearly seen.

The results presented to the SDC showed that, prior to deliberation, the vast majority of the public were either in favour of tidal power (arguments about clean energy, concerns about global warming etc) or neutral (wanting to know more about the environmental impacts, costs and what it looks like). These results drew on discussions in the focus groups and workshops, and also the omnibus opinion poll. Generally, the public had fairly low levels of knowledge and understanding about tidal power.

After deliberation, the majority of the public were in favour of tidal power and preferred the barrage option (mainly because of the scale of energy that could be provided, proven technology and additional social benefits such as tourism). However, for some the negative impacts outweighed the benefits, and many were surprised at the extent of the environmental, economic and social impacts. They did not believe that tidal stream technology was as viable as tidal barrage technology, although they felt the negative impacts were far less severe. Most thought that tidal lagoons did not have many benefits in terms of sustainable development. In addition, the majority of the public were in favour of a barrage

in the Severn Estuary region. Some participants were against, mainly because of the environmental effects on the wildlife in the area and there were also concerns about the social impacts (e.g. construction effects).

The main conditions of acceptability for the public in considering the development tidal power in future were:

- offsetting the negative environmental impacts
- sympathetic design which limits negative visual impacts
- security of supply argument
- significant production of 'clean' energy.

4.3 The effectiveness and value of the public workshops

The assessment that follows is based on observation of one of the workshop groups, analysis of questionnaires that were circulated to all participants at all three workshops, and interviews with a sample of participants from each workshop. A full analysis of the findings from the questionnaires is given in Annex 1, and a summary is given below.

4.3.1 General feedback

The questionnaire analysis shows remarkably positive feedback from participants, who clearly enjoyed and valued the experience, and were more likely to get involved in future such events as a result, which shows a very positive attitude to their involvement here. They clearly learnt a lot and the experience helped clarify their thinking. They could understand and use the information provided and found it fair and balanced. All these issues are explained in more detail below.

Overall:

- 97% of questionnaire respondents were satisfied overall with the event they attended; of these, **65% were very satisfied**. No-one was dissatisfied.

There was quite a sharp distinction between satisfaction with the three different workshops, with those at the Cardiff workshop being the most satisfied (90% were very satisfied), and those in Inverness least satisfied (only 47% very satisfied). Overall, however, satisfaction rates were clearly extremely high.

- 94% agreed that they enjoyed taking part (of these, 54% strongly agreed).

From observation, the positive findings above reflect the enthusiasm and energy that participants invested in the discussions. There was no sense that they were going through the motions for their incentive fee. There was a high quality of discussion, questioning and engagement with the issues as participants worked hard to understand and discuss the issues, and to come to a view that they felt comfortable expressing.

The feedback on several issues varied from workshop to workshop. For example, although the Inverness respondents gave the least enthusiastic feedback on overall satisfaction (fewer 'strongly' agreeing), the Bristol workshop was least enthusiastic on almost all the other issues.

From observation, at the Bristol workshop, the participants were in fact really quite positive about the whole experience, and were fully engaged and interested in the discussions. In addition, the feedback from the Bristol interviews was as positive as from other workshops. It is therefore not entirely clear why the questionnaire feedback from each event differs so significantly.

4.3.2 Impact of participation on people's views

The majority of participants' (58%) questionnaire responses showed that attending the workshops had changed their views on these issues, and less than 20% felt it had not changed their views:

- 30% agreed **strongly** they had changed their views as a result
- 28% agreed that it had changed their views
- 20% neither agreed nor disagreed, or did not know (2%)
- 19% said it had not changed their views (of these 12% strongly disagreed).

This is only an indication of the impact of involvement on people's views, as their views are likely to have been 'affected' even if not fundamentally 'changed'. Nonetheless, 30% agreed strongly that their views had been changed as a result (40% in Cardiff), and another 28% agreed (30% in Cardiff), which means that over half (58%) agreed that their views had been changed (70% in Cardiff).

This is higher than is normal for these processes; research processes of this type usually find it hard to show real shifts in views (and participants are often quite reluctant to say they have changed their views). It is therefore likely that this represents quite a significant shift for it to be shown so clearly.

The evidence from the interviews also showed the impact of the process on participants' views:

- 5 of the 11 interviewees said they had **changed their views on tidal power**; 6 said they had not. 3 said they were already in favour and some people did comment that they had learned about it, and felt more positive about tidal power as a result.

"I'm more positive than previously if anything. Tidal power has been in the doldrums for a while but the technology seems to have developed." (Inverness interviewee)

"It made me feel a lot more should be done with tidal power and it really gave me a greater understanding of the possibilities." (Bristol interviewee)

"It did actually. I felt against it on environmental grounds in the end." (Bristol interviewee)

- 9 of the 11 interviewees had **changed their views on public engagement** as a result of the workshop, with 6 specifically mentioning that they thought it was a good thing. Comments included:

"The fact that they were taking our opinions on board and that the people doing the research were talking to local people outside the meeting too. It was nice to be listened to." (Bristol interviewee)

"I don't think it's made a difference – I have always thought it should happen. Some of the ignorance about some of the issues still astounds me though." (Bristol interviewee)

"Yes. As long as the public are consulted and their views are taken on board and they don't do too much to make local people unhappy then I think it is a good thing." (Bristol interviewee)

"I have never been convinced about public consultation – inevitably they are only based around what the government wants to talk about. But in this case we got both sides of the argument – it was good." (Inverness interviewee)

"It's a good idea to get a cross-section of people's views." (Inverness interviewee)

"I enjoyed learning the facts and I think it would do other people good to hear about it." (Inverness interviewee)

"It left a positive impression – we were a good cross-section of people and it was treated seriously." (Cardiff interviewee)

"I was pleased the consultation was taking place. I also heard it mentioned that the Isle of Wight was proposed for the underwater stuff, which I'm glad about. I'm glad people are being consulted." (Cardiff interviewee)

"I would have assumed that the public weren't involved in the decision-making, simply presented with the decisions." (Cardiff interviewee)

4.3.3 Feedback on the design and delivery of the process

Feedback from the questionnaires completed at the events and from interviews on the design and delivery of the process overall are given below.

- **Having a say.** 81% of questionnaire respondents agreed that they had been able to discuss the issues that concerned them (of these, 32% strongly agreed).

In addition, all 11 interviewees agreed that they were able to have their say at the workshop, that everyone had an equal chance to speak and no single voice was allowed to dominate. Comments included:

"If people were silent it was because they wanted to be. Everyone had more than their fair chance." (Cardiff interviewee)

"Some people are more prone to speak than others, but there were only a very few who didn't say anything at all." (Cardiff interviewee)

"Everyone joined in with the discussions, and seemed to voice their opinions freely." (Cardiff interviewee)

"There were no really strong characters that took over the conversations." (Bristol interviewee)

"Yes, definitely. Everyone was given an opportunity – whether they took it was a different matter." (Bristol interviewee)

From observation, everyone at the workshop observed did seem easily able to take part and participants clearly gained confidence as the day progressed. Initially there seemed to be a slight tendency for some participants to follow any strong views expressed, but that did change over the day. It would therefore be important for this development of participants' confidence in their own views during the course of an event to be reflected in the design and reporting of future consultation events.

- **Diversity and scale.** All 11 interviewees agreed that there was a good mix of participants, and questionnaire respondents agreed. Comments included:

"It was a fair cross-section" (Inverness interviewee)

"There was a good mix of ages, but I was the only ethnic minority there apart from an Asian chap." (Cardiff interviewee)

"There was a good mix of ages, and several different viewpoints, concerns." (Cardiff interviewee)

"It was good to have a number of viewpoints and good to see that the majority (a clear majority) were in favour of tidal power" (Cardiff questionnaire)

From observation, it did seem that the men and women present did have quite markedly different perspectives, with women being more cautious about new developments and worried about negative impacts on wildlife and the environment, and men being more positive about the 'big technical fix' of a major development.

This may just have been the specific views of the specific participants, but it may be worth exploring potential gender differences in views if future public consultation on tidal power is undertaken.

It was also noted that the sample was actually quite small, which was commented on by a few interviewees (quotes elsewhere): 20 in each workshop. Although it is recognised that qualitative research does not require a large sample, a larger group of people can sometimes be seen to be generating a greater sense of legitimacy and status for the process, both for those taking part and those observing in order to gain input to policy. From observation, it may have been possible to have had 30 - 40 participants involved in each event with little extra cost. This is not to suggest that there were not enough participants for a valid and diverse discussion in this case - that was achieved; just that it may have been possible to have more people involved at relatively small additional cost, and thus to have generated more of a sense of occasion.

- **Enough time.** 87% of questionnaire respondents felt there was enough time to fully discuss the issues properly (of these, 47% strongly agreed)
In addition, 10 out of 11 interviewees felt there was enough time for a good discussion although there were some mixed comments including:

"Possibly with some of the issues I remember thinking that we just touched the surface. With the lagoon issue I don't think there was enough information available and therefore we couldn't discuss it in that much detail." (Bristol interviewee)

"I think it was a bit long and drawn out – you could have easily cut an hour or so out." (Bristol interviewee)

"Might have benefited from having another day to think about it before coming back to it to discuss." (Bristol interviewee)

- **Process design and management.** Although there was no specific question on this, comments from interviewees included:

"I was impressed with the way it was handled. Those running it were very accessible." (Cardiff interviewee)

"It was very well run. The market research people got a really good cross-section involved, everyone had an opportunity to speak and it was very well organised." (Bristol interviewee)

- **Other comments** at the end of interviews and the questionnaires included:

"I found it very interesting. There was a good cross-section of people and it was put across very well." (Inverness interviewee)

"I think we need a feedback forum on what has happened since the workshop and how the input has been used. Were there any good points from the workshop that have been taken in?" (Cardiff interviewee)

"Several people found the workshop hard, and struggled to understand the subject. Despite this, everyone took part in the discussions and contributed to the work." (Cardiff interviewee)

"It was a good day and very informative – well done." (Bristol interviewee)

"I think it's great you have done a follow up call. I have been thinking about it more and looking out for it in the news." (Bristol interviewee)

"It was an interesting topic to take part in. I hope we will do some good for the outcome." (Cardiff questionnaire)

4.3.4 Feedback on the provision of information

The feedback from questionnaire respondents was that 87% agreed that the information provided was fair and balanced (of these, 37% strongly agreed)

In addition, all 11 interviewees felt there had been enough information, and that the information that was provided was clear and understandable. 10 out of the 11 agreed that the information was clear and balanced (1 felt it was slightly biased in favour of barrage) and covered all the issues, and respondents felt that they were able to ask questions if they did not understand something. Comments included:

"It was straightforward statement of fact" (Inverness interviewee)

"Too much can be overload, but this was fine" (Inverness interviewee)

"We were presented with certain options and none were particularly loaded." (Cardiff interviewee)

"We had a chance to ask but I didn't go away with any big outstanding questions." (Cardiff interviewee)

"We seemed to be given all the facts ... I can't recall feeling that I needed more information. I felt comfortable asking questions throughout the day" (Cardiff interviewee)

"I understood all the information we were given." (Cardiff interviewee)

"There was enough information to formulate an idea. It was an overview – you have to be wary of overload with these things, but it was good." (Cardiff interviewee)

"I think it was slightly biased in favour of the barrage going ahead. Although the way it was presented (taking the argument from sustainable energy then moving forward with that) meant that you weren't sold on one thing." (Bristol interviewee)

Only one or two interviewees said there was information missing that they would have liked to have known. For example:

"The barrage idea is all well and good but there are infrastructure issues such as joining the road to the surrounding area. Benefits could be good in terms of leisure activity north of the barrage. But the studies may not show this – it would have been good to have more information on the wider implications such as the estimated costs and benefits or someone who could tell us that." (Cardiff interviewee)

Interviewees were asked whether they remember any specific piece of information from the workshop, and 10 out of 11 said they did. Specific examples included:

"The fact that there is one place where they have already done it and the rest is all experimental." (Inverness interviewee)

"I think the idea that this single development could have such a big impact – they were talking about 7.5 million tonnes of carbon being saved." (Cardiff interviewee)

"The proposed siting of the barrage and the lagoon things ... there's been a bit of shock about how far down the river the barrage is proposed to be." (Bristol interviewee)

"The amount of habitat destruction that will occur if the barrage goes ahead." (Bristol interviewee)

"The money it would cost and the time it would take, and how it would affect people around the Severn area if the barrage went ahead." (Bristol interviewee)

"What they wanted to do at Avonmouth. It's a colossal plan and further down the river than I thought." (Bristol interviewee)

"Seeing the location of the proposed barrage and effects on the environment" (Cardiff interviewee)

Generally, there was very positive feedback on the information, which reflects the care that was put into the content and use of the information provided. Comments included several (5) requests from interviewees for more information before the event: participants knew nothing about the event before they arrived, as is common in market research processes, and this was identified as an issue by some participants (see quotes below). A couple asked for more diagrams / visual aids. Comments included:

"I always think that some advance information is useful, but I guess that would have the danger of us coming in with fixed ideas." (Inverness interviewee)

"When we went in I didn't really know anything about it – it would have been nice to know a bit beforehand." (Inverness interviewee)

"I always believe that a bit more interaction is good, for example a hands on model like the Bay Exhibition Centre has. Something with a more visual view of before and after ... more diagrammatic stuff would have been useful " (Cardiff interviewee)

"If we had been given information beforehand that may have helped, but then I suppose we might have talked to people about it and that would have altered our opinions." (Bristol interviewee)

Participants taking part in discussions on issues such as tidal power tend not to have as much personal experience and clear values related to the issues that they can draw on in the way they can when discussing issues such as health or pensions. The information provided to the public is therefore vitally important in briefing them on the issues, without overwhelming them with a sense of their lack of knowledge.

From observation, the handouts and the way information was introduced worked very well in this case. There was a lot of sometimes complex information for people to take in, but the handouts were short and clear and the participants understood it relatively quickly and seemed to have no difficulty in asking questions if there was anything they did not understand. In particular, at the workshop observed, the use of a large map created a major advance in people's understanding of the proposals for the Severn Estuary, both in terms of scale and location. Participants found that particularly useful.

4.3.5 Feedback on clarity and transparency

The feedback from questionnaire respondents suggests that participants were generally very clear about the objectives of the process, and how the results would be used, and that the results of the debate did genuinely reflect their discussions:

- 90% agreed that they understood the objectives of the event (of these, 53% strongly agreed)
- 81% agreed that they understood how the results of the process were to be used (of these, 39% agreed strongly)
- 86% agreed that the results of the debate genuinely reflected the discussions they had (of these, 42% strongly agreed)

Similarly, 10 out of 11 interviewees were clear about the purpose of the event, although only 6 were clear how the information collected at the event would be used. 9 out of 11 were clear how the event they attended fitted into the general SDC work on tidal power. These are high levels of clarity and transparency, especially in a process which is quite complex. Comments included:

"The speakers were very good and succinct, with no hidden agenda"
(Inverness interviewee)

Not everyone was entirely clear and did want to know more. Comments included:

"I want to know how it is being used and what they are going to actually do."
(Inverness interviewee)

"Not 100% clear. They said there were other workshops, but I am wondering how that was all compiled and would politicians see it? What level will it go up to?"
(Cardiff interviewee)

"I don't know how it has been used specifically, but I presume it is at government level to inform their decisions." (Cardiff interviewee)

"Not entirely – I would be interested to know how these small meetings feed into the process and how much weight will be attached to them." (Bristol interviewee)

4.3.6 Feedback on expected influence

7 out of the 11 interviewees did feel that the SDC would listen to the points made by the public, which is a good level of trust in the process; 2 did not know and only 1 felt the SDC would not listen. Comments included:

"It depends on whether there's an overwhelming view or not – it takes a lot for a public organisation to be swayed by the public. I think there will be a fairly neutral view from the public at large; generally I think it will be well accepted. People may not appreciate that there are only specific sites that are appropriate for tidal power." (Inverness interviewee)

"People would make points about issues but whether it gets acted on remains to be seen. It depends on funding. I'll abstain from completely answering that one. It depends how much you trust people at the end of the day." (Cardiff interviewee)

"They are looking for direction and I'm sure what we said will point the way." (Cardiff interviewee)

"I sincerely hope that our opinions would inform any decisions made." (Cardiff interviewee)

"Part of me is sceptical and thinks the government will do what they want anyway and won't use people's views as much as they could." (Bristol interviewee)

"I suspect probably not – you don't know until you see it." (Bristol interviewee)

"I'm sure they will listen but I'm sure they will go ahead and do it anyway. That's what tends to happen I think." (Bristol interviewee)

4.3.7 Feedback on media coverage

Only 3 of the 11 interviewees said they had seen anything in the media since the event. However, 8 said the event had changed their attitude to the media; all of them arguing that there should be more coverage. Comments included:

"There has not been a lot of it and I was expecting a bit more." (Cardiff interviewee)

"There definitely needs to be more." (Cardiff interviewee)

"The problem is that the media doesn't cover tidal power. So yeah, I suppose from that point of view it has changed my attitude. They only print bad news. There is no real bad news about tidal power – it is not controversial like wind power or high voltage power lines. Tidal power is not sexy." (Inverness interviewee)

"I think there should be more about it if anything." (Bristol interviewee)

4.3.8 Feedback on value for money

10 of the 11 interviewees felt that public engagement in public policy is important and generally money well spent². Only 1 disagreed. Comments included:

"It is difficult for me to say. If it's important to an organisation that public perception and understanding is increased then yes. But this was a very small group – it could be useful to get a random sample. It is good to know the potential positives and negatives from the public, so in that sense it could be more for your benefit than for that of the public." (Inverness interviewee)

"It is important and yes, money well spent." (Inverness interviewee)

"I think it is. People need to know about this kind of thing." (Inverness interviewee)

"Yes. I don't think it's right if engineers and surveyors just go out and build without the say-so of those who will have to live with the changes." (Cardiff interviewee)

"I think it is, but I wonder why they haven't done something earlier – they've been talking about this kind of thing for years. But I suppose this time it's more pertinent and perhaps there are more relevant opinions." (Cardiff interviewee)

"Yes it is important. We hopefully represent the views of the public, and perhaps raise questions that might not be considered." (Cardiff interviewee)

"Yes, but it very much depends on how things are presented. If it is an unbiased presentation then yes; if the decision has already been made then no." (Bristol interviewee)

"Overall yes, I do. It was very cost effective as far as I know." (Bristol interviewee)

"This is difficult. It probably isn't because people don't know enough to contribute usefully. Do it on a bigger scale – I don't think a few people here and there will have put sufficient thought into it." (Bristol interviewee).

4.3.9 Feedback on learning

The feedback from the questionnaires was very positive on the benefits for participants in terms of learning as a result of being involved in the event:

- 95% agreed that they learnt something they did not know before (of these, 58% strongly agreed)
- 94% agreed that the event had helped them think more clearly about the issues (of these, 54% strongly agreed)

In addition 10 out of 11 interviewees said they had learnt something new as a result of the workshop. Comments from questionnaires and interviewees included:

"I didn't know anything about tidal power before so it was good just to learn about that in general." (Inverness interviewee)

"Yes definitely – about the barrage and other ideas. The lagoons – I had never heard of them before." (Cardiff interviewee)

"I guess I didn't realise what the options were, such as the propeller and lagoon schemes." (Cardiff interviewee)

"Definitely yes – across the board – I learned a lot I didn't know before." (Bristol interviewee)

² The question was: *Public engagement obviously has financial costs. Do you think public engagement in public policy issues is important and it is generally money well spent, or not? If not, why not? What do you think would make these sorts of events really good value for money?*

"I found out more about tidal power. I found out how things could change – the transport, environment, how it would affect people's lives." (Bristol interviewee)

"I learnt a lot about renewable energy sources and the awful state that the world could eventually be in" (Cardiff questionnaire)

"Learning about the environment and that we should act now to save what we have left. There's all the evidence that we need in front of us and on TV yet no-one is doing one thing. This is a brilliant idea. Go for it. You have my support" (Cardiff questionnaire)

"Learning about renewable energy sources and how this could affect me on a personal level" (Bristol questionnaire)

"I feel quite well informed now about the pros and cons of tidal energy" (Bristol questionnaire)

"Knowing not a thing about it, and hearing so much. And to know that electricity could be generated in this way" (Bristol questionnaire)

"The best aspect of the event was learning about tidal power which I had no idea about before today" (Inverness questionnaire).

9 out of 11 interviewees said they had thought about the issues discussed in the workshop since the event. 2 said they had always been interested and 2 said they had become more aware. 3 had actually made efforts to find out more information since the workshop. Comments included:

"If I've gone to the bay I have tried to imagine what it might look like, what the impact might be, that kind of thing." (Cardiff interviewee)

"Most definitely it's made me more aware of it generally." (Bristol interviewee)

"Yes I have because of living in the local area and trying to do more about energy conservation." (Bristol interviewee)

"I have been thinking about it more and looking out for stuff in the news, local issues that kind of thing." (Bristol interviewee)

8 out of 11 interviewees said they had been affected by the workshop, and it is clear that the effects were in relation to learning: 5 of these 8 said they had learnt new information and 3 said taking part had increased their awareness of the issues. Comments included:

"It enlightened me." (Cardiff interviewee)

"I feel better informed. I have kept the information pack and will continue to do so – it is very valuable." (Cardiff interviewee)

"It has given me a better understanding of the issues and the options." (Bristol interviewee)

"Yes. I will certainly be on the look out for things going on in this area." (Bristol interviewee)

"I wouldn't have thought about any of the detail before." (Bristol interviewee)

Only 3 out of 11 interviewees said the workshop had **affected what they personally think and do about climate change**; although 6 said they were already concerned and took action. The 3 that had been affected said it had increased their awareness of the need to do something. Comments included:

"I feel it is beneficial to have input from members of the public on climate change ... it was good in that respect." (Cardiff interviewee)

"I suppose I would be doing these things now anyway – recycling, low energy bulbs. It was already happening – it's good practice and it saves money." (Cardiff interviewee)

"No [change]. I think I'm all for anything that's green." (Cardiff interviewee)

" We recycle anyway and always have done." (Inverness interviewee)

"It has increased my awareness of it as an issue and the need to do something." (Bristol interviewee)

"I am aware of these kind of things anyway." (Bristol interviewee)

10 of the 11 interviewees said they had **talked to other people about the issues** after the event; only one had not. 6 of these people had talked to between 5 - 10 people, and 3 had talked to over 10 people. 1 person said they had only talked to 2 - 3 people. A rough calculation of these figures suggests that these 10 people had talked to about 80 others.

In terms of public education on tidal power, this is quite a remarkable circle of dissemination - even if only judged on increasing levels of interest and awareness rather than assuming that a great deal of useful information was passed on. The issues most talked about were overall plans for the barrage, and impacts on the local area, including extra roads.

4.3.10 Feedback on potential future involvement

All 11 interviewees said they were **more likely to want to get involved in future** in discussions on these sorts of issues. This is a very good indication of their satisfaction with the process, and of the impact of the process on their future willingness to act as 'active citizens' by getting involved in future debates on public policy issues. Their comments also indicate that they were very satisfied with the workshop model and would like to be involved in the same way in future.

9 of these people said they would like to be involved in similar workshop events. 5 said they would rather be involved locally, 1 nationally, and 5 at both levels. Comments included:

"The workshop format was very good. I was asked to sell the opposite of what I believed, which was a good thing I think." (Inverness interviewee)

"This was good – the smaller groups were good to get the discussions going." (Inverness interviewee)

"The workshop was a good idea as everyone gets an opportunity, even the weaker members of the group. There was a good cross-section and people were drawn into the conversation." (Bristol interviewee)

"It needs to have the structure of the workshop format to allow everyone the opportunity to speak and to keep it interesting." (Bristol interviewee)

"All workshops are a good, effective way of listening to what people think as long as you get a good cross-section and range of views." (Bristol interviewee)

"I think anything where you hear other people's ideas is interesting – this event was good." (Bristol interviewee)

4.4 What worked best

Participants were asked in open questions on questionnaires and during interviews what they felt were the best / most successful elements of the workshop. There were three main aspects that were identified: learning, having a say and being listened to, and sharing views with others. These are all described in more detail below.

- **Learning.** 25% of respondents from Cardiff, 60% from Bristol (including 10% who specifically mentioned learning about renewable energy) and 24% from Inverness identified learning as the **best aspect** of the workshop.

Similarly, questionnaire respondents also stressed that learning was the **most important aspect** of the event for participants: 35% of Cardiff respondents, 45% of Bristol respondents and 30% of Inverness respondents said that learning, knowledge and getting information were the most important aspects for them from taking part.

In addition, the main **benefit** to interviewees was learning, knowledge and information (including about tidal power), mentioned by 7 of the 11 interviewees. Comments included:

"[I gained] A better understanding of tidal power and what alternative green power is available. I'm a nuclear power person so I probably learnt a lot more than I expected." (Inverness interviewee)

"Learning more about the environment and what can be done." (Inverness interviewee)

"It was very informative and enjoyable." (Cardiff interviewee)

"I am better informed on tidal power." (Cardiff interviewee)

"A lot more knowledge about tidal power and the Severn barrage. I would feel a lot more confident in a discussion on the issues around the dinner table." (Bristol interviewee)

"Increased knowledge of the issues, taking part in energy conservation and wider knowledge of sustainable energy issues." (Bristol interviewee)

"I think I'm more alert now to things that could be happening throughout the world." (Bristol interviewee)

- **Having a say and being listened to.** 3 interviewees and some questionnaire respondents said that the main benefit was being able to have their say and being listened to. Comments included:

"An opportunity to have my say." (Cardiff interviewee)

"Being able to present an argument which was based on the information we had been given" (Bristol questionnaire)

"A sense that my opinions were taken seriously." (Cardiff interviewee)

"Really, it was just nice to be consulted." (Cardiff interviewee)

"Open discussion with civil servants who are directly involved in advising government" (Cardiff questionnaire)

"Knowledge that our opinions count" (Bristol questionnaire)

- **Sharing views with others.** 20% of respondents from Cardiff identified the discussions as the best aspect of the workshop, and another 20% identified hearing others' views as the best aspect of the event. 10% of respondents in Bristol also identified hearing the views of others from different backgrounds as the best aspect. In Inverness, 12% identified the debates in the groups as the best aspect. All this feedback shows the value that participants put on to talking with and listening to each other in these events.

4.5 What worked least well

Participants were also asked on questionnaires (completed at the end of the event) what they felt were the **worst or least successful** elements of the event. There were three main categories of response: nothing, the need for more information (especially before the event), and reporting back to participants. All these issues are covered in more detail below.

- **Nothing.** 25% of Cardiff, 15% of Bristol and 24% of Inverness questionnaire respondents all said 'nothing' was not successful. These figures are based only on those who actually said 'nothing'; not those who left the question blank. This lack of negativity supports the positive feedback received on other questions.
- **Information provision.** Comments included:
 - "Insufficient information on tidal stream and tidal lagoon technologies" (Cardiff questionnaire)
 - "Slight repetition of information" (Bristol questionnaire)
 - "I would like more information on tidal energy and other sustainable energy resources" (Bristol questionnaire)
 - "Not enough information to compare like with like in certain areas" (Bristol questionnaire)
 - "Understanding what infrastructure is required to support tidal power" (Inverness questionnaire)
 - "[Wanted] more information about a tidal barrage that is already in production - the effects it had, how much it did cost and the effects on environment" (Bristol questionnaire)
 - "[Wanted] More info on the other two tidal energy projects" (Bristol questionnaire)
 - "Forward background materials to group members prior to meeting" (Inverness questionnaire)
 - "It [could] be improved if they told us what it was all about first" (Inverness questionnaire)
- **Reporting back to participants.** Several interviewees said they wanted to know what had happened as a result of their involvement. There has unfortunately been no communication with public participants on the SDC's final conclusions on tidal power, and this is clearly an important omission in the engagement process.

4.6 Overall conclusions on the public workshops

Overall, the public workshops worked very well - they were well designed and facilitated, the information materials were carefully drafted and were fair and balanced and the groups found them understandable and usable. The way the information was introduced worked very well, with enough time for the participants to grasp the basics and then discuss the implications; although some may have struggled at little, all contributed.

Participants clearly enjoyed the experience and learnt a lot from it, and left the event more enthusiastic to participate again in such events in future. This was a very positive overall response by participants to their involvement in the process.

The only problems identified were some requests for information on some specific issues, and a general request for more information in advance, and the unfortunate failure to provide any feedback to public participants about either the SDC's conclusions on tidal power or the public's influence on those conclusions.

5 Stakeholder engagement

5.1 The purpose of the stakeholder engagement

The stakeholder engagement workshops were designed to bring together a mix of stakeholders with a variety of views to consider the social, economic and environmental costs and benefits of tidal power, the financing and the role of government within future developments, and the conditions for stakeholder acceptability of any tidal power development. In addition, the process was designed to explore stakeholders' views on proposals for tidal developments in the Severn Estuary.

5.2 The stakeholder workshop process

- **Overall scale.** There were two workshops, one in the North (Aberdeen) and one in the South (Cardiff). There were 50 participants in Cardiff and 22 in Aberdeen.
- **Recruitment.** The aim of the stakeholder engagement was to gain a range of views, and so the targeting of stakeholders was a major element in the planning of the process. The SDC and TEC collaborated on drawing together a long list of potential participants from SDC existing contacts and TEC knowledge and experience in the sector.

A full stakeholder analysis was undertaken, with consideration given to ensuring stakeholders covered the spatial range (to consider local, regional, devolved administrations, UK and European interests), and those with economic, environmental, social and/or recreational interests. Efforts were made to include sectors that had not been deeply involved in these debates in the past, such as fishing, shipping and navigation, in order to get a broad cross-section of views and to ensure that a diversity of issues was raised. In addition, an analysis was undertaken to identify those stakeholders with the highest likely influence on decisions on tidal power, and those who would be most greatly impacted.

The analysis and potential lists of invitees were also discussed at the initial SDC scoping workshop, which included the funders of the project, the SDC Commissioner and the SDC secretariat. In addition, TEC undertook further research to identify any other interests that needed to be represented. This included identifying key representatives across the sectors involved and reviewing the long list with them before invitations were sent out, using a gap analysis technique via telephone interview.

The initial target was for around 100 stakeholders - 60 in the South and 40 in the North, and 146 invitations were distributed from January 2007. However, an initial low response rate required TEC to follow up directly with many stakeholders to ensure a balance in attendance across sectors. During this time, additional interests were identified and invited.

- **Process.** The workshops lasted a whole day, from arrival at 9.30am (start at 10am) to 4pm. The main elements of the workshops were:
 - Welcome
 - Presentation by SDC on the tidal power project
 - Overview of the day by TEC
 - Introductions to other stakeholders at tables. Participants had been allocated to tables to ensure a good mix in each discussion group. At this point, participants were also asked to identify and record on flip charts one thing they brought to the day ('gives'), and one thing they would like to take away from the day ('gets').

- Presentation by Entec on tidal technologies, followed by questions for clarification
- In small groups, participants were then asked to consider the sustainable development aspects (environmental, social, economic) of three different tidal technologies - tidal barrages, tidal stream and tidal lagoons. Each participant had the opportunity to consider all three sustainable development aspects of all three technologies by moving round the room to consider each technology in turn (carousel).
- The participants then worked in small groups at tables to consider the role of Government in supporting tidal power development in a sustainable way - particularly the Government role in decision-making, and in financing. Discussions were facilitated by table facilitators and points raised captured on flip charts for each table.
- At this point there were slightly different programmes in Cardiff and Aberdeen:
 - In Cardiff:
 - A presentation by Black & Veatch and AEA Technology on tidal power concepts for the Severn, followed by questions for clarification
 - Discussions in table groups to consider the strengths, weaknesses, opportunities and threats relating to tidal barrages and alternative technologies in the Severn
 - An open space technique was then used to enable participants to add their input on an individual basis (rather than in groups) on the conditions for stakeholder acceptability for tidal power. Here, participants were asked, for each technology, what would make it more acceptable and what would make it less acceptable.
 - In Aberdeen:
 - An open space technique was used to enable participants to add their input on an individual basis (rather than in groups) on the conditions for stakeholder acceptability for tidal power generally. A set of headings was provided to cover acceptability issues (benefits and disbenefits) for the three main technologies, and participants could add as many points to each as they wanted.
- In a final plenary session, there was a chance for participants to make any overall points on the issues raised during the day, and to consider the next steps for SDC work on tidal power following the workshop.
- Closing remarks from the SDC; close and depart.

Participants were seated in tables of 8 -10, each with a table facilitator. The people on the tables were mixed to ensure a diversity of views. In addition to the small group discussions around tables, participants were encouraged to leave messages for the SDC on a designated message board.

- **Materials to aid discussion.** A series of handouts was used to support the points made in the presentations.
- **Recording and reporting.** The comments from participants were collected by table facilitators on flipcharts, and by participants themselves writing up points (e.g. in the open space exercises and on the SDC message board). TEC provided a full transcript of the event, including of all the flip chart notes, which was circulated to participants after the event.

OL and TEC presented the main findings from the engagement programme to the SDC in May 2007. The full draft report was then presented in June 2007 (see below), and completed for publication with the SDC's final report on the whole study in October 2007. All stakeholders were notified by email of the publication of the final reports.

The findings from the events were presented in a single report by Opinion Leader (with the results from the public engagement) to the SDC, although the results from each strand were analysed separately so that different views from different sources could be clearly seen.

The report concludes that stakeholders were aware of the potential for tidal power to become part of the UK's energy mix, although there were varying levels of knowledge about the issues around tidal power and the potential effects of different technologies.

Overall, most stakeholders were positive about tidal power, although in the Southern workshop stakeholders were split between being against or neutral towards Severn Barrage proposals (particularly on environmental and economic grounds) - only a few were positive.

Overall, stakeholders felt that the disadvantages of barrage technologies were more profound than the public had identified. They saw more benefits in tidal stream technology than in tidal barrages, and for tidal lagoons to have greater negative impacts than tidal stream technology. For them, therefore, tidal stream was the most popular technology.

On the Severn Barrage, stakeholders called for more detailed studies (particularly on effects on the ecosystem and the economic costs and benefits). While stakeholders recognised that the Barrage could produce significant amounts of clean renewable energy, they felt that the disadvantages outweighed any potential benefits.

The main conditions of acceptability for stakeholders in considering the development of tidal power in future were:

- full ecological / environmental impact study
- accurate, independent and centrally co-ordinated research and evidence base
- clear government policy on energy, the role of renewables and tidal power
- improved planning and consents systems
- full consultation with marine users
- reduced risk to developers and investors e.g. through a pilot scheme and appropriate market conditions
- proven economic viability.

5.3 The effectiveness and value of the stakeholder workshops

The assessment that follows is based on observation of one of the two workshops, informal interviews with participants, and analysis of a questionnaire that was circulated to all participants at both workshops. Interviews were carried out with 10 participants (6 from Cardiff and 4 from Aberdeen). Informal interviews with those in the SDC, Opinion Leader and The Environment Council responsible for the process also covered these workshops.

5.3.1 General feedback

Questionnaires were distributed to all participants at both stakeholder events, and almost all were returned (58 questionnaires from 62 participants).

A full analysis of the findings is given in Annex 2, but the overall results are outlined below in summary.

This analysis shows that stakeholders had rather different (and rather less positive) responses from those from the public. However, the feedback overall was still very good, given the much greater knowledge of engagement among stakeholders (which can lead to more negative feedback) and a less positive attitude to the proposals for tidal power developments.

Overall:

- 95% of questionnaire respondents agreed that they enjoyed taking part; 17% of these strongly agreed. No-one disagreed.
- 86% were satisfied with the event overall; 24% of these were **very satisfied**. Only 3% were 'quite dissatisfied' and no-one was 'very dissatisfied'.

These are good levels of satisfaction overall, and it is clear that the vast majority of stakeholders did enjoy taking part and were satisfied with the event.

5.3.2 Impact of participation on stakeholders' views

- 24% of questionnaire respondents agreed that attending the event had changed their views; only 3% of these agreed strongly (none in Aberdeen). 41% disagreed, of which 3% strongly disagreed.
- 73% agreed that attending the event had helped them think more clearly about the issues; 26% of these agreed strongly. 5% disagreed.

The relatively low level of impact on stakeholders' views is not surprising. Stakeholders tend to come to events of this sort with clear views, sometimes explicitly representing the views of their constituency, which are unlikely to change as a result of the meeting. It is likely that their views were 'affected' to some degree, but not 'changed' significantly. Two points are worth noting from these figures:

- almost 25% of stakeholder participants did change their views, which is quite a significant proportion
- the process did help clarify the thinking of 73% of stakeholders, which suggests that the event may have helped take the debate on the issues forward.

Feedback from interviewees confirms that attending the workshop had little impact on stakeholder views on tidal power, with 8 out of 10 saying they had not changed their views and only 1 saying they had. The most common comment was that attending had 'strengthened' or 'reinforced' their existing views. Specific comments included:

"Gave me a wider understanding of (e.g.) ports and shipping concerns." (Cardiff interviewee)

"It certainly has developed [my views], but not drastically changed." (Cardiff interviewee)

"There was absolutely no change in our position – we believe the SDC report is under funded and has the wrong terms of reference. The most important issue here is that the SDC is not conducting any new work – that's the main flaw. Without the funds available there is little more they can do." (Cardiff interviewee)

"It reinforced [my views] and gave them a better foundation." (Cardiff interviewee)

"I think it more changed my perceptions of people and the danger of listening too much to people who have no understanding of the technical issues. I don't think it's particularly redirected me – it has condensed my thinking ... it's business as usual really." (Aberdeen interviewee)

"It helped me to understand the potential that tidal power has but didn't really change my views." (Aberdeen interviewee)

"It more confirmed them [my views]. We have a policy statement on marine technologies – the event pretty much confirmed what we think." (Aberdeen interviewee)

Interviewees were also asked specifically about whether their involvement in the workshops had affected their views on stakeholder engagement in these issues. Here opinion was more divided, with some saying that the process had been good and had confirmed the benefits of stakeholder engagement, and some saying it had raised further questions for them. Comments included:

"It made me realise the amount of time stakeholders can put in to this type of process but it is not at all clear (yet) the extent to which their views have influenced the outcome." (Cardiff interviewee)

"It hasn't changed my views, but perhaps confirmed the benefit to me." (Cardiff interviewee)

"I think the format of how it was managed and how the information was brought out of stakeholders was very good. As a consequence the quality of information was very good. But how it is used remains to be seen – if that is actually happening then I have confidence in the way forward." (Cardiff interviewee)

"No – I'm not sure what weighting we are given. Sure they listen, but I'm not sure what they actually do." (Cardiff interviewee)

"One thing I would always say is that you ignore the public at your peril." (Aberdeen interviewee)

"It has reinforced my view that it is always important to get all of the relevant stakeholders involved in these kinds of things." (Aberdeen interviewee)

"I was impressed by the event – it was a worthwhile conversation to have with such a wide range of stakeholders. It was well worth it." (Aberdeen interviewee)

5.3.3 Feedback on the design and delivery of the process

Feedback from the questionnaires completed at the events and from interviews with stakeholders on the process overall is given below.

- **Having a say.** 78% of questionnaire respondents agreed that they were able to discuss the issues that concern them; 12% of these agreed strongly. 5% disagreed, of which 2% strongly disagreed. Interview feedback was that:
 - All 10 interviewees agreed that everyone had an equal chance to have their say and that no single view was allowed to dominate the discussion.
 - 9 out of 10 interviewees also agreed that they were able to make the points they wanted to on tidal power.

Specific comments from interviewees included:

"Some of the barrage promoters were unnecessarily aggressive in the round table discussions." (Cardiff interviewee)

"[In] some of the discussion items at the tables one or two individuals dominated." (Cardiff interviewee)

"It would have been useful if the extreme ends of viewpoints ... had more time to put forward their case for those people not as familiar with all of the arguments." (Cardiff interviewee)

- **Diversity of participants.** All 10 interviewees felt that the relevant interests were completely (7) or mostly (3) represented by the stakeholders at the meetings. Interests identified as missing by participants were fisheries, internal drainage board, shipping and navigation, and riparian authorities. This does not mean that these interests did not attend, but that they were perceived to be missing by other stakeholders.

Specific comments included:

"There were people there who I know are sworn enemies of doing anything in the Estuary and there were proponents of doing further research with the view to exploring the options. There was a wide cross section, yes." (Cardiff interviewee)

- **Enough time.** 55% of questionnaire respondents agreed that there was enough time to fully discuss the issues; although only 5% of these agreed strongly and 22% disagreed (2% of those strongly disagreed). Interviewees were more satisfied, with all 10 agreeing that there was enough time to cover all the main issues.

Some specific points were made on questionnaires:

"30 minute discussion on finance and government should have received more attention" (Aberdeen questionnaire)

"More time needed to talk through role of government." (Aberdeen questionnaire)

"Would have been helpful to pick a few 'key issues' and explore in more depth" (Aberdeen questionnaire)

"More time for group debates around tables" (Cardiff questionnaire)

"More Q + A time" (Cardiff questionnaire)

"More discussion time and chance to feedback after presentations." (Cardiff questionnaire)

Points made by interviewees on this issue included:

"On balance trying to bring everyone to the same level of understanding was done excellently, but I feel the debate was probably handicapped by information issues rather than time. Not enough detail." (Cardiff interviewee)

"Time was ok – a whole day was definitely the way to go." (Cardiff interviewee)

"There was time, but I'm not sure it was profitably used. The repeated sessions where we moved around didn't bring up anything new after the initial round. We could have spent that time going into detail once the main issues were generated rather than trying to think of more issues." (Aberdeen interviewee)

- **Process design and management.** All 10 interviewees agreed that the structure and delivery of the event enabled them to have their say on the issues.

Specific comments included:

"I thought the facilitation and the design was superb." (Cardiff interviewee)

- **Other comments.** Other general comments from interviewees included several arguing for the need for feedback to see how stakeholders' views had been taken on board. Others mentioned the need to ensure that all relevant stakeholders attend these sorts of event, and that it was a good start but that it needed to be built on with further more detailed consultations. One person mentioned the need to consider the ecological footprint of the event itself (especially travel) - although they also recognised the value of face to face meetings.

General comments and suggestions for improvements from questionnaire respondents included:

"It may have been useful to harness the knowledge and expertise held amongst the attendees by grouping discussion among similar stakeholders e.g. development organisations, specific environment / conservation bodies etc" (Aberdeen questionnaire)

"This workshop would be useful at an early stage of this 'tidal' project ... but less clear how it will feed in at this advanced stage of the project" (Aberdeen questionnaire)

"Very good, probably not much room for improvement" (Aberdeen questionnaire)

"Overall a very interesting debate and discussion forum. The final report is eagerly awaited" (Aberdeen questionnaire)

"Many of the 'post-it' notes will contain views and opinions, not facts. There should be a 'health warning' when this information is used, since everybody at the workshop will have a different agenda" (Cardiff questionnaire)

"Concern that lots of resources being put into repeating / copying existing, often outdated, studies - not enough new work" (Cardiff questionnaire)

"Please frame the outputs in the widest possible context: 'what development path is the most sustainable' not simply a cost benefit analysis of different technologies" (Cardiff questionnaire)

"I would like to have seen more joining up of the different strands of the overall SDC tidal energy study being presented today" (Cardiff questionnaire)

"Overall the event was a necessary and important part of a process and generally went well." (Cardiff interviewee)

"It was a fairly bog standard event really." (Aberdeen interviewee)

"I think this is a good model." (Aberdeen interviewee)

From observation, the findings overall from the questionnaires and interviewees on timing, diversity of stakeholders, and the design and delivery of the event do reflect the overall quality and nature of the discussions at the event. Although there were strong feelings and a fairly high level of disagreement within the small groups at the tables, the discussions were largely polite, people listened to each other's opinions and were able to respect those while disagreeing, sometimes with some strong feelings. The professionalism of the facilitation contributed to managing what could have been quite a difficult situation.

5.3.4 Feedback on the provision of information

54% of questionnaire respondents agreed that the information provided was fair and balanced; only 2% of these agreed strongly (none agreed strongly in Aberdeen - although 90% did agree). 19% disagreed, of which 3% disagreed strongly.

In terms of suggestions for improvements, 16% of Cardiff questionnaire respondents said they wanted more information in advance, as did some Aberdeen respondents. Comments included:

"Its always difficult to achieve major steps forward with a meeting / workshop like this. Could have been helped by a better briefing paper for delegates" (Cardiff questionnaire)

"More detailed papers prior to the event" (Cardiff questionnaire)

From observation, the printed information circulated at the meeting worked well to complement the input from the speakers. The participants understood the information relatively quickly and had no hesitation in asking questions if there was anything they did not understand. However, the amount of time taken for presentations did reduce the amount of time for discussion, which may have contributed to the feedback that there was not enough time to discuss the issues fully.

Interviewees largely agreed (8 out of 10) that the information given in the presentations and written materials was fair and balanced, although points were made about needing clearer information in advance, that some of the presentations were linked to barrage developers and that there was too much focus on industry data.

Most interviewees also agreed that there was enough information overall. Gaps identified in the information provided included the need for more on technologies other than barrages and other tidal options in the Severn, and just generally requests for more pre-meeting information. Specific comments included:

"There was too much reliance on industry data and staff of at least one of the consultancies had connections to barrage developers ... It would have been good to have more information presented by developers of other technologies." (Cardiff interviewee)

"There needed to be more info about other tidal options in the Severn and Bristol Channel." (Cardiff interviewee)

"There was not enough [information], and there never will be. If the intent was to identify areas where more information was required, that was achieved. But you need to follow on with more detailed information." (Cardiff interviewee)

"The amount of information was fine, yes. But we had 8-10 people at the table, and 75% of them were not well informed about the subject. They were only given the information that day and had trouble absorbing it all I think." (Cardiff interviewee)

"It would have been better had we been given a bit more pre-meeting information such as recommending reading, that kind of thing." (Cardiff interviewee)

"My initial feeling was that the material advertising the event and my knowledge led me to believe this would be the presentation of a report. But this event was at the issues stage. They could have been clearer over what stage they were involving us in." (Aberdeen interviewee)

"Generally fair and balanced but perhaps lacked some detail. However, this is mainly due to the complex nature of an evolving industry." (Aberdeen interviewee)

In terms of specific pieces of information that stakeholders picked up at the workshop that influenced them, the following comments were made:

"How sceptical most stakeholders were about tidal barrages." (Cardiff interviewee)

"The costs of the different technologies; impacts on navigation and safety." (Cardiff interviewee)

"I don't think there was anything specific, but it was definitely collectively significant." (Cardiff interviewee)

"The seminar helped put new technology like tidal lagoons on the radar." (Aberdeen interviewee)

"I was struck by the strong consensus about the disadvantages of tidal barrage schemes, and the putting of tidal lagoons on the radar." (Aberdeen interviewee).

5.3.5 Feedback on clarity and transparency

- 88% of questionnaire respondents agreed that they understood the objectives of the event; 19% of these agreed strongly and only 2% disagreed.
- 60% agreed that the outputs of the workshop genuinely reflected the discussions they had; of these, 7% agreed strongly. 2% disagreed and 21% said they did not know.
- 41% agreed that they understood how the results of the event would be used; only 7% of these agreed strongly. 12% disagreed, of which 2% strongly disagreed.

From these results it appears that the objectives were very clear, but the way the results would be used was much less clear. Also, there was some lack of clarity (21% didn't know) about the extent to which the outputs of the workshop reflected the discussions that took place.

From observation and feedback from interviewees (see below), the recording and reporting of the participants' comments did work very well. The comments were recorded on flip charts either by facilitators or by participants adding their own comments to the flip chart record directly - one interviewee identified this recording on flip charts as one of the aspects of the event that worked best. This approach to recording meant that the points captured were highly visible and could be challenged by participants if they felt that there was any misunderstanding or misreporting of what was being said.

It is therefore likely that the feedback from questionnaire respondents that the outputs of the workshop did not reflect the discussions was not based on the notes taken and transcripts subsequently circulated, but is more likely to be a comment on the conclusions summarised verbally at the end of the event and what may be done with those by the SDC (hence the high levels who 'didn't know' whether this was true). Feedback from interviewees was:

- 9 out of 10 interviewees were clear about the purpose of the event but were less clear about what difference their contribution would make.
- Most were happy with the transcript of the stakeholder event that they were sent afterwards (describing it as 'fair', 'accurate' and 'good').
- There was less clarity about how the information collected at the workshops would be used, with more interviewees being unclear than were clear. Some felt they were clear in principle about how the information would be used, but less clear on how specific points would be used. Comments from interviewees included:

"I am not clear how this has influenced the SDC report, what weight was given to the views expressed?" (Cardiff interviewee)

"As always with this type of material it is just a listing of views really but the messages that SDC took away to input to their report are not clear." (Cardiff interviewee)

"In the round [clear]. In the specifics of how each bit of information is being used, I'm uncertain." (Cardiff interviewee)

"In general terms I am clear, but it is a very complex subject. It would be good to know exactly how the information is being used." (Cardiff interviewee)

"This isn't clear at all. I would like to know what weight they have given to this event compared to advice from their contractors and other stakeholder engagement. This may be set out in the report but we haven't seen this yet." (Cardiff interviewee)

"I'm not sure how people are going to use it – what gets used where?" (Aberdeen interviewee)

- Most interviewees (7 out of 10) were clear about how the workshop they attended fitted into the SDC's overall development of policy on tidal power.

5.3.6 Feedback on expected influence

There was not much expectation or hope among stakeholder interviewees that the points made at the meetings would be listened to and taken account of by the SDC as they developed their position on tidal power, with less than half of interviewees thinking the SDC would take notice. Points raised here were about expecting to be listened to but unsure of influence (3), any level of influence "remains to be seen", and that there was uncertainty how different opinions would be weighted by the SDC in coming to their conclusions. However, some did say they had confidence and trust in the SDC.

Specific comments included:

"The views of stakeholders were summarised very briefly in the SDC's report, but the majority view (that modular tidal generators should be developed first, and that barrage disbenefits outweigh the advantages) didn't influence the SDC's conclusions." (Cardiff interviewee)

"I think they have listened on the environmental issues but am unsure to what extent this has influenced the report. I am not at all sure that they have listened about shipping/navigation issues – have they had more discussions with this sector and with fisheries after the workshop?" (Cardiff interviewee)

"[Hope] that the points of view we put forward will be given very serious consideration in their deliberations." (Cardiff interviewee)

"That remains to be seen." (Cardiff interviewee)

"The jury is out on that – I'm not sure who has what kind of weighting, for example whether shipping interests will be listened to more than those of the RSPB." (Cardiff interviewee)

"I have confidence in the SDC." (Aberdeen interviewee)

SDC will listen and take account "As far as possible given the diverse nature of parties / individuals involved." (Aberdeen interviewee)

5.3.7 Feedback on value for money

The great majority of interviewees (around 9 out of 10) felt that it was important to involve stakeholders in these sorts of policy issues, and that it was money well spent. The most common point was that the value depended on the outcome, which was allied to the extent to which government / the SDC listened to what stakeholders said. Interviewees also raised points such as that participation is vital and that this process was good. Specific comments included:

"Governments will ignore stakeholder views, or find a way around them, if they have already made their mind up on an issue." (Cardiff interviewee)

"Participation on issues like this is critically important and definitely worth the money." (Cardiff interviewee)

"I thought it was very good. Yes." (Cardiff interviewee)

"It is definitely money well spent, as people need to know their views are being incorporated." (Cardiff interviewee)

"It is important to a degree and it is worth making sure you involve the right people, but it depends on the outcomes." (Cardiff interviewee)

"I don't really know how much money was spent. It's always about the balance. If you can do it at a lower cost and without people travelling (e.g. flying) it might be better, but then face to face is valuable." (Aberdeen interviewee)

"I think it probably is. It depends if you're talking 50% or 5% of the overall project costs. If 5% then yes, but if it is the substantial part then no, as you need technical input too." (Aberdeen interviewee)

"A difficult question! Do feel that we (as a society) spend a lot of time engaging and consulting, which is resource intensive, and means resource is taken away from delivering solutions to sustainable development and climate change!" (Aberdeen interviewee)

5.3.8 Feedback on learning

77% of questionnaire respondents agreed that they learnt something they did not know before; 17% of these agreed strongly. 10% disagreed, of which 3% strongly disagreed.

This questionnaire feedback suggests a quite surprisingly high degree of learning from the event. Normally, stakeholders arrive at engagement processes with a high degree of knowledge of the subject. From informal conversations and interview feedback it seems likely that, in this case, the breadth of subjects covered meant that not everyone knew everything about the topics being discussed, so all had room for more learning on the issues.

Interviewees identified areas where they had learnt something new, including on the views of other stakeholders, the costs of different technologies, impacts on navigation and safety, and the diversity of methods for harnessing power. Specific comments included:

"It was useful to get a wider raft of stakeholder views." (Cardiff interviewee)

"The diversity of methods for harnessing power." (Cardiff interviewee)

"It was generally quite informative, for example around the different types of power generation ... Additional information about the general technology, how it is developed and applied in different parts of the world." (Aberdeen interviewee)

Not all stakeholders felt they had learnt a great deal. For example:

"Probably I did [learn something new], but my feeling was that we were actually slightly disappointed that we didn't learn anything new – we didn't drill down enough into the issues." (Aberdeen interviewee)

At least half the stakeholder interviewees had discussed the issues since they attended the workshop. This is less surprising than for the public participants to discuss the issues as stakeholders tend to attend these sorts of events as part of their day job and are thus discussing similar issues regularly. Several stakeholders mentioned that they were involved in continuing discussions with the SDC on these issues.

5.3.9 Feedback on potential future involvement

Overall interviewees were probably slightly more likely to want to get involved in stakeholder events in future as a result of being involved in this one, although there was not the same enthusiasm for future engagement as was apparent in the feedback from the public workshops. Comments included:

"It has confirmed my enthusiasm." (Cardiff interviewee)

"We do have to be seen to be taking part." (Aberdeen interviewee)

5.4 What worked best

Questionnaire feedback was that the two aspects of the event that worked best were the small group discussions, and making contacts and networking. These are described in more detail below.

- **Small group discussions**, mentioned by 24% of Cardiff respondents plus 10% from Aberdeen - a total of 34%. An additional 5% of Cardiff respondents mentioned the benefits of the non-confrontational exchange of views. Comments included:

"Participation by all the attendants" (Aberdeen questionnaire)

"A good high calibre of participant so the breadth and depth of discussions was good" (Aberdeen questionnaire)

"The brainstorming on the benefits / impacts of each type of tidal generation technology was very useful with interesting exchanges of opinions / views" (Aberdeen questionnaire)

"Brainstorming sessions to do with different options" (Cardiff questionnaire)

"Non-confrontational opportunity to allow many conflicting views to be aired" (Cardiff questionnaire)

"Facilitation of the event and information management (with minimal contention)" (Cardiff questionnaire)

"The interactive nature of the whole session – everyone had their say. It fostered an atmosphere of being open, which was really good." (Aberdeen interviewee)

- **Making contacts and networking** were mentioned as the best aspect of the event by 15% of Aberdeen respondents plus 29% of Cardiff respondents - also total of 34%. An additional 11% of Cardiff respondents mentioned the benefits of bringing a wide range of views together. Comments included:

"Networking and having the opportunity to present our views" (Aberdeen questionnaire)

"Just the act of bringing different stakeholders together - improves awareness of different concerns for different groups - got people talking that otherwise would not have met" (Cardiff questionnaire)

Questionnaire respondents also identified that the most important aspects of the event for them were very similar:

- **Hearing others' views and opinions** was mentioned by 35% of Aberdeen respondents and 16% of Cardiff respondents (total 51%).
- **Meeting others and networking** were mentioned by 10% of Aberdeen respondents and 11% of Cardiff respondents (total 21%).

Comments on the most important aspects for stakeholder respondents included:

"Taking away opinions from a range of stakeholders (e.g. grid, Northern Lighthouse Board) which would otherwise not hear from directly" (Aberdeen questionnaire)

"Learning the latest status of the technology development and getting an appreciation of wider stakeholder issues" (Aberdeen questionnaire)

"Meeting other stakeholders and hearing their views" (Aberdeen questionnaire)

"Realisation of the poor knowledge base of many of the participants. There is a clear need to get information in the public domain in an understandable form" (Cardiff questionnaire)

"Big picture of representatives' views" (Cardiff questionnaire)

"Understanding range of uncertainties / gaps in knowledge" (Cardiff questionnaire)

Feedback on the **main benefits for interviewees** of being involved was very mixed. Points made were about the benefits of hearing a good range of stakeholder views and meeting and listening to others, the interactive nature of the workshop, simply taking part, getting a holistic view and maintaining their profile in the debate. Comments included:

"I think just seeing it carried out. It was carried out very professionally, which is encouraging. It was on a very small scale compared to what is actually needed, but I don't think that's the SDC's fault." (Cardiff interviewee)

"A holistic view of the process." (Cardiff interviewee)

"Making sure we have a profile in the tidal energy debate amongst other stakeholders and being kept up to date with the information and impacts on the recreational waters. Also just being part of the consultation." (Cardiff interviewee)

"Hearing views from different stakeholders, seeing what was important to them and why was very interesting." (Aberdeen interviewee)

"An understanding of the degree of unanimity among stakeholders on the issues." (Aberdeen interviewee)

The main aspects of the process that **worked best for interviewees** was the recording of points on flip charts, the safe environment created within which people could express their views, and a good range of people. Specific comments include:

"The flip charting opportunities – everyone could put their views across." (Cardiff interviewee)

"Creating the atmosphere where there was a freedom to put forward views without the challenge coming back. I think I was surprised that most people took a fairly neutral view, so some felt able to put forward views that were opposite to what their leanings would tend to be, which was very much in the spirit of opening up." (Cardiff interviewee)

"The range of people invited. It was very useful and interesting to meet different stakeholders and listen to their views, concerns, wishes and desires." (Cardiff interviewee)

"The prior briefing and the benefits and disbenefits sheets – the way they were summarised and synthesised." (Aberdeen interviewee)

5.5 What worked least well

Questionnaire feedback was that the two aspects of the event that worked least well were nothing, and not enough time. In more detail:

- **Nothing.** 15% of respondents from Aberdeen said there was nothing that did not work well.
- **Not enough time on certain subjects.** Several respondents said there was not enough time on finance and governance (10% from Aberdeen), on shipping (8% from Cardiff), and not enough time overall (8%).

These are relatively small numbers of complaints, given the range of stakeholders and their views. There were also various points raised by just one or two stakeholders. Specific comments included:

"Not knowing if in the end our opinions will be listened to when the decisions are made" (Aberdeen questionnaire)

"Needed more focus on solutions and delivering results" (Aberdeen questionnaire)

"Over-simplification of issues for the purposes of post-it notes" (Aberdeen questionnaire)

"[Needed] Longer range timetable / overview of where it fits in the process" (Aberdeen questionnaire)

"The 'everyone's opinion counts' method did risk the occasional view going forward that did not reflect discussions (e.g. CHP and marine)" (Aberdeen questionnaire)

"Understanding the next steps - not clear" (Cardiff questionnaire)

"Not much said about impact on shipping using Bristol Channel" (Cardiff questionnaire)

"The emphasis on a barrage" (Cardiff questionnaire)

"Severn technologies presentation - there were too many facts stated that were debatable - as seen by the after lunch discussion" (Cardiff questionnaire)

"Certain presentations contained inaccuracies and references were rarely cited" (Cardiff questionnaire)

"The facilitation of individual group sessions could have been improved. Also there was not a huge amount of time for plenary sessions ... interesting conversations which unfortunately had to be curtailed a bit." (Cardiff interviewee)

Interviewees' main complaints about the process also focused on lack of time for plenary discussions, and also on lack of detail on figures and poor presentation of information, the issues being too amorphous for this sort of project, and facilitation not stopping some contributors who took up more time than others. Specific comments included:

"A bit of wooliness when people started talking about figures and the details. Sometimes the detail that is unsupported leaves worry and uncertainty." (Cardiff interviewee)

5.6 Overall conclusions on the stakeholder workshops

Overall the stakeholder workshops worked very well. They were well-designed and facilitated to provide a safe and non-confrontational atmosphere within which participants felt they could express their views openly. This is very important but difficult with such a contentious topic, so is a clear achievement of the design and delivery of this process.

Participants found the information presented useful and there was a significant degree of learning, which is more unusual in stakeholder events than in public workshops as stakeholders tend to come with considerable background knowledge. This degree of learning perhaps reflects the breadth of coverage of the issues on the day, the range of stakeholders present, and also the willingness of participants to listen to and learn from each other.

Participants were generally satisfied with the event and found it worthwhile, particularly the opportunity to work together with such a wide range of stakeholders, some of whom may rarely meet in other circumstances. Making contacts and networking were key benefits identified by participants, as well as having the opportunity to put forward their own views and being seen to be taking part.

Although few participants changed their views, and that was not the objective of the event, quite a few felt taking part had strengthened or reinforced their views. Also, a significant number (73%) said the process had helped to clarify their thinking on the issues, which may have contributed to taking the debate forward.

The main problems identified were a lack of time to consider some of the key issues, and too much focus on identifying issues rather than solutions and ways forward. There was also some lack of clarity about how the results of the meetings would be used by the SDC, and the extent to which stakeholders' input would influence the SDC's policy conclusions - stakeholders expected to be listened to but were not optimistic about their overall influence.

6 Impacts and outcomes

6.1 Introduction

The overall purpose of the public and stakeholder engagement processes in the SDC's work on tidal power was to provide information and understanding of the views and feelings of the public and stakeholders to feed into the SDC's policy-making processes. This section of the evaluation report considers the evidence for any impacts on the SDC's policy-making processes, as well as the impacts on - and value for - all those who took part: the public, stakeholders and the policy-makers.

6.2 The SDC policy process

The SDC launched its research project on tidal power in the UK in 2006. In summary, the project comprised a detailed initial desk research exercise (from November 2006), followed by the public and stakeholder engagement programme (from March to April 2007). The SDC considered the findings from all the research activities and the engagement programme in the summer of that year, and released their position statement on tidal power in October 2007.

The policy process began in 2006 - 7, when the Sustainable Development Commission identified the potential for a project on tidal power from a UK-wide perspective. At the same time, the Department for Business, Enterprise and Regulatory Reform (BERR - formerly the Department of Trade and Industry) was being asked by Government to conduct a new assessment of the potential for a tidal barrage in the Severn Estuary. The 2006 Government Energy Review³ announced that BERR would work with the SDC and the Welsh Assembly Government, the South West Regional Development Agency and other key interested parties "to explore the issues arising on the tidal resource in the UK, including the Severn Estuary, including potential costs and benefits of developments using the range of tidal technologies and their public acceptability". Public acceptability, and the involvement of interested parties (or stakeholders), was always therefore a key element of the SDC's work on tidal power.

The SDC's study on tidal power was undertaken with support and funding from the UK Government (BERR), the Welsh Assembly Government, the South West Regional Development Agency, the Scottish Government, and the Department for Enterprise, Trade and Investment in Northern Ireland.

The initial work for the study was a series of five desk-based research contracts to draw together existing research evidence to provide a UK tidal resource assessment, an overview of tidal technologies, a summary of the various barrage options for the Severn Estuary, case studies of non-barrage options for the Severn Estuary and a review of case studies and proposals for tidal power development across the UK using various different technologies. The initial findings from these studies fed into the design of the public and stakeholder engagement programme.

The SDC ran their public and stakeholder engagement programme in March and April 2007. The main focus for these activities was a detailed engagement programme run on the SDC's behalf by Opinion Leader (OL) and The Environment Council (TEC). The SDC also consulted stakeholders through continuing contact with individual stakeholders as well as through their own standing Stakeholder Panel. OL and TEC presented the findings from the public and stakeholder engagement programme to an SDC plenary session in May 2007, and produced full draft reports on the process and its findings in June 2007.

³ *The Energy Challenge. Energy Review Report 2006.* HM Government 2006.

During the summer of 2007, the SDC fully considered the findings from the research project as a whole and published its position statement on tidal power in October 2007. The final OL and TEC full report on the engagement programme was also published in October 2007, at the same time as the SDC position statement.

The SDC's role is to advise Government, and its final report on its research study on tidal power concluded that:

- The UK should continue to support tidal stream technologies, including with increased innovation funding and increasing the capacity of the electricity transmission system to accommodate renewables in the long term.
- There is justification for at least one tidal lagoon demonstration project, with incentives provided by Government and the results of any research placed in the public domain. There should also be further investigation of barrages outside the Severn based on rigorous application of the five principles of sustainable development.
- There is a strong case to be made for a sustainable Severn barrage, subject to the conditions [the SDC] outlines in its report (particularly in relation to such a development being within the context of wider and stronger action on climate change, compensatory habitats packages linked to tackling climate change adaptation and that the project should be publicly-led as a project and publicly-owned as an asset), and within the constraints of European environmental legislation.

The SDC's report drew on both the desk research studies and the findings from the public and stakeholder engagement programme. The report specifically includes a section (section 1.5) on the public and stakeholder engagement process and a summary of the top level findings from that programme. This summary accurately reflects the findings provided in detail in the separate report of the process, including the differences between the views and feelings of the public and of stakeholders, particularly in relation to the acceptability of different technologies - with the public more positive towards a barrage than stakeholders, and stakeholders more positive towards tidal stream and tidal lagoon technologies.

The technologies are all relatively new, and the public in particular were often hearing about some technologies for the first time, so the process identified public and stakeholder conditions for acceptability of tidal power technologies in general terms rather than in great detail. The report accurately reflects that the main condition for public acceptability was to deal with the environmental impacts and minimising the visual impact, and summarises in full the stakeholder conditions for acceptability, which were:

- Full ecological / environmental impact study for all options
- Accurate, independent and centrally coordinated research and evidence base
- Clear government policy on energy, the role of renewables and tidal power
- Improved planning and consents systems
- Full consultation with marine users
- Reduced risk to developers and investors e.g. through a pilot scheme
- Proven economic viability.

Discussions on the future of tidal power generally, and the Severn Barrage in particular, are expected to continue for some years. For example, Energy Secretary John Hutton announced the terms of reference for a Government feasibility study for the Severn barrage in January 2008. That study is expected to last roughly two years, and conclude with a full public consultation in early 2010.

In terms of next steps, the SDC report argues that a new approach is needed to decision-making given the scale of the proposals being made. The SDC report says that "Government must avoid a 'decide-and-deliver' approach ... Instead, it must reflect on the wider implications of such a decision and engage widely with stakeholders and public to ensure that their concerns and opinions are taken into account." It also recognises the need for early testing of the feasibility of compliance with European environmental legislation and the cost of achieving that.

The SDC research study, and the public and stakeholder engagement programme that formed part of that study, is clearly only the beginning of a very long term process to increase the role of tidal power in the UK, within the context of increasing the use of renewable energy sources generally as part of the strategy to tackle climate change and increase the security of UK energy supplies. It is also clear that the SDC will continue to be part of these continuing strategic policy developments and will continue to encourage public and stakeholder engagement as part of that development.

6.3 The value for the public

The following analysis draws on the previous sections analysing feedback from public participants' questionnaires, interviews and observation. The main value from the process for the public was as follows:

- **The process worked well for participants.** Overall the participants were very satisfied with the process and the way it was run. The process engaged people effectively overall and the participants felt the process was enjoyable, informative and worthwhile.
- **Positive experience of engagement.** As a result of being involved in this process, participants were more willing to get involved in discussions on policy issues in future. They particularly enjoyed and valued the workshop process, where everyone had a chance to speak in small groups and there was a good mix of participants and a diversity of views.
- **Learning.** Participants clearly learned a great deal and the majority changed their views about tidal power as a result. They found the information provided useful and easy to understand, and felt able to ask questions if needed. Several could remember specific pieces of information that they had picked up during the event (e.g. the scale of potential savings of carbon emissions and the amount of habitat destruction from barrage proposals) and some had sought more information since the workshop. Participants found the use of visual aids, especially maps showing proposed developments, particularly useful and valuable.
- **Having a say and being listened to.** Participants particularly valued having a say and being listened to by Government and policy-makers, and the sense that their views 'count'. There was quite a high level of trust in the SDC, and the extent to which they would take account of the public's views, and a 'hope' that their views would inform decisions.
- **Sharing views with others.** Listening to and learning from other participants in the small group discussions was also important to the public, particularly in the small group discussions which many identified as the best aspect of the event for them.

Although the main feedback from public participants was that there was 'nothing' that did not work well, there were two areas of concern:

- **Information provision.** Although there was generally positive feedback on the information provided, there were some specific issues that participants would have liked more information on (somewhat inevitably). More generally, there were several comments that participants would have liked more information in advance to brief them on what would happen at the workshop and on the main issues.

- **Lack of report back to participants.** There was no report back to public participants about the SDC's final policy position statement, or how the public input had influenced those conclusions. All interviewees said they wanted to see the results so there was a lot of interest in finding out what happened. This was a significant gap in the quality of the engagement process.

6.4 The value for stakeholders

The following analysis draws on the previous sections analysing feedback from stakeholder participants' questionnaires, interviews and observation. The main value from the process for stakeholders was as follows:

- **The process worked well for participants.** Overall the stakeholder participants were satisfied with the process and the way it was run. The process engaged participants effectively overall and they felt the process was enjoyable, informative and worthwhile. Stakeholders felt they could have their say, that there was generally a good mix of participants representing a diversity of views, and that the process was well designed and delivered. Several commented that consulting stakeholders was a necessary step in considering tidal power, and that it had been done well in the circumstances.
- **Recording and reporting.** Overall, the process for recording participant views during the workshops worked well. Everything was recorded on flip charts by facilitators or participants themselves, so the whole recording process was transparent and participants could challenge anything written up they felt did not reflect the points that were being made. A transcript of all notes taken was circulated to the stakeholders soon after the event, and the feedback on that was generally positive. Stakeholders were informed when the SDC's final policy position statement was published, so they knew the final conclusions of the study, and the role their input played.
- **Information provision.** There was generally positive feedback from stakeholders on the information provided, and over half of participants found it useful, fair and balanced (although some challenged the accuracy of some points and that some information was produced by potential developers). Also as with public participants, stakeholders would have liked more information in advance, particularly to set the parameters for the event and to clarify the point in the study at which the engagement process was taking place.
- **Learning.** There was a significant level of learning among participants, with over 75% saying they had learned something, which is unusual for stakeholders who tend to arrive at engagement processes with a good level of background knowledge. It may be that the breadth of coverage of the issues at the event meant that it was unlikely that everyone knew about all the issues in depth. Stakeholders said they learnt about specific technical issues, such as the qualities of different tidal technologies, and also about the views of other stakeholders.
- **Clarified thinking.** Although stakeholder respondents were clear that they had not changed their views as a result of this process, quite a few mentioned that the discussions had 'reinforced' or 'strengthened' their views. A significant number (73%) said the event had helped to clarify their thinking on the issues, which may have helped take the debate forward.
- **Meeting and working with other stakeholders** was seen by many stakeholders as the most valuable aspect of the event they attended. This had several aspects:
 - Listening to the views and opinions of other stakeholders, particularly bringing together stakeholders that may not meet in other circumstances
 - Stakeholders presenting their own views and being seen to take part
 - Small group discussions so everyone could contribute
 - Making contacts and networking, which was a major benefit to quite a few stakeholders.

- **Interactive and non-confrontational atmosphere.** Stakeholders found that the design of the event provided a safe environment in which participants felt comfortable expressing their views. Even though there were clearly disagreements about policy and some strongly held views, these were seen to have been managed well by the facilitators.

There were relatively few complaints from stakeholders about the process, but there were some concerns:

- **Not enough time on certain subjects.** There were some comments that more time was needed on certain particularly contentious subjects such as financing and governance issues.
- **Lack of clarity on likely impact of the stakeholder input.** This had two elements:
 - Stakeholders felt there was a lack of clarity about how the information collected at the workshops would actually be used in SDC policy development. Although there was clarity in principle, that the information would feed into the SDC policy process, there was less clarity about how specific points made by stakeholders would be taken into account.
 - There was a lack of expectation that stakeholders would influence the SDC's position. Stakeholders expected to be listened to but not necessarily to have any influence.

6.5 The value for policy-makers

Interviews were undertaken with 5 policy makers from across Government and the Devolved Administrations, to gain their feedback on the value and effectiveness of the process in terms of their own work, and the value of the outputs to them. This feedback on the wider policy value from the process is summarised below.

- **The engagement process was effectively designed and delivered.** Policy makers felt that the process had been well-designed and delivered by those responsible, and that it had provided the outputs that were expected and needed. In particular, policy makers felt that the interactive and largely non-confrontational atmosphere allowed people with very different views to discuss the issues relatively calmly and politely, although passions were roused at various points. Comments included:

"People were allowed to put forward ideas to a moderator or to write their ideas on post its and stick them up themselves. Some of the ideas on post its were put up directly and this wasn't a problem. No special defence was needed for particular positions, they "got through" to the SDC." (policy interviewee)

"Given the huge challenge of getting different opinions from opinionated people, it was great that there was no bloodshed." (policy interviewee)

"[Stakeholders] were motivated and fought tooth and nail for what they wanted." (policy interviewee)

"It was not a place where ideas could be discussed to the depth necessary to develop views. We were there to provide a spectrum of opinions; those were the opinions of individuals and of organisations. We weren't going to change those views." (policy interviewee)

"This was very different [from other consultations I have been involved in]. Consultations on issues like regulation are very technical. This was about getting people's subjective views, their views and feelings, which was new for me." (policy interviewee)

"I had initial concerns about the programme – I thought people needed factual information before being asked their views, as otherwise we would just get uninformed views. The programme was changed to include some factual information." (policy interviewee)

"[person] from the SDC came across well, as did the TEC facilitator. There were outbursts and people who overstepped – these were handled coolly."
(policy interviewee)

"It was a lot to pack into one day. People do get a bit fatigued towards the end. The organisers got some of the people who were working on the independent studies to facilitate, which meant that participants could ask questions." (policy interviewee)

"We probably knew there wouldn't be a simple answer to some of the questions we were asking. There is a balance to be achieved between giving information in order to get some considered input or giving more time. Perhaps there could have been better pre-event information to get people thinking about the issues?" (policy interviewee)

"... the experts were on hand (not leading) so they could provide clarification and engage with all levels of knowledge among the participants." (policy interviewee)

"[The main lesson for me was that] It was led by an independent body [the SDC]. Although a lot of the engagement was contracted out, the SDC was closely involved. The companies they used were also very good." (policy interviewee)

"Public engagement was a really important part of the project, as important as the technological, environmental and habitats aspects. The process was done well with limited time and budget. It was quite successful from every point of view."
(policy interviewee)

"There were a range of stakeholders there, including industry and others, so this provided a good mix of stakeholder views." (policy interviewee)

"The events ran to schedule, and they were well facilitated: everyone participated, no one was allowed to take over ... everything worked well." (policy interviewee)

"[Motivation and interest] was surprisingly high. There was strong interest, even though this was not a current issue. People were keen to be involved." (policy interviewee)

"I thought it was good. It was useful to see what people were thinking. It helped me to understand what is of concern to the public." (policy interviewee)

"[The lesson for me was] I realise that you need to be as thorough as possible, to involve all, not to leave anyone out. You need to get people there and ensure that they participate." (policy interviewee)

"It was a very well-organised and useful exercise." (policy interviewee)

"We did a variety of things – we made a general survey of about 1000 people. Then we had specific workshops with the general public and stakeholders – this brought out different views and showed the variety and diversity of views." (policy interviewee)

- **Learning about engagement.** The effectiveness of the process did impact on policy makers' view of public and stakeholder engagement, generally encouraging them to consider future engagement more positively.

"My line on public opinion would in the past have been fairly negative and would have highlighted risks. Now I wouldn't be so negative, I would point to the SDC work as evidence of overall positive response. This is evidence-based policy-making."
(policy interviewee)

"I've learnt. Not about how to do stakeholder engagement but that I should include that element in other work and take it a bit further than what we normally do."
(policy interviewee)

"We would have to be thinking of doing this anyway. I would be slightly more positive about engaging as a result of my involvement." (policy interviewee)

"It added richness." (policy interviewee)

"We've become more convinced that this has got to be part of what Government has to do when considering options." (policy interviewee)

- **Quality of outputs.** The feedback on the quality of the outputs from the engagement programme overall was generally positive. The presentation provided by OL and TEC directly to the SDC on the results of the engagement processes was particularly valued, and the report was seen to be essential. There were also some comments about how the outputs could be improved including, for example, a shorter report published sooner after the engagement process. Comments included:

"I attended a briefing on the outcomes, so I have an overview from that briefing. I wasn't sent the final report until recently and I haven't read it – it arrived late in the day, after the launch of the report. Timeliness is an issue. The length of the report is also a problem – it may have a relevant and briefer summary but I would like to read the whole thing." (policy interviewee)

"Reading the final report [from the SDC on the whole project] was the most useful. Even though the conclusions are not perfect the report is a really important step in developing tidal power in the UK." (policy interviewee)

"The difficult thing is turning the huge amount of information from people into something meaningful to give Government the indicators it is looking for. This is the biggest challenge. The report we got was OK, but I recognise it was a really difficult thing to do. The SDC and the contractor need to go back and look at the scope and outline." (policy interviewee)

"I thought that the final report could have been better. It was probably as good as it could have been given the kind of engagement they did, but they could have beefed it up." (policy interviewee)

"Listening directly to the views of the participants and their discussions was the most useful [output to me] along with reading the final report on the whole project. In the groups it was interesting to get a feel for specific stakeholders' positions. The conclusions were pretty much in line with what we already know, but it was useful to hear organisations' viewpoints. These don't necessarily come across in the written report although the report was very useful in providing an evidence base." (policy interviewee)

"The quality [of the outputs] was good: it was useful in that it provided the evidence base on public attitudes and concerns." (policy interviewee)

"I saw all the outputs. The most useful were the live presentations from Opinion Leader Research." (policy interviewee)

- **Enabling policy to move forward.** Some policy makers felt this was a necessary step to enabling policy to move forward - something that could not be avoided; some felt that the results of the work were a useful contribution to future work on tidal power - something that had genuine value to the policy debate. Comments included:

"The outputs did help with policy development – they pushed policy on. The result has enabled us to go ahead with a feasibility study. The results illustrated there were possibilities for addressing the environmental costs associated with the build." (policy interviewee)

"The SDC work has provided a framework on which to base future work." (policy interviewee)

- **Identifying conflict and consensus.** The process clearly helped policy makers identify the areas where there was general agreement, where there was conflict, where there were 'show-stoppers' and what could be done about those. This was partly about identifying the issues of conflict and consensus, and partly about identifying the views and feelings

of specific interest groups. The particular value of the process was in increasing understanding among policy makers of the general acceptability or not of certain policy ideas. Comments include:

"In general it is important to know where consensus lies and where opposition is likely to come from. There is lots of common ground." (policy interviewee)

"It provided some knowledge of the chief arguments. It is good to have the differences documented and assessed." (policy interviewee)

"You can find common ground and deliberative processes help to reach that consensus. Engagement can help to find agreement on the right way to make developments." (policy interviewee)

"Ministers have been pleased with the range of views sought by the SDC, from focus groups to the big stakeholder workshops. This seems to be the best way of collecting views, especially as views are so polarised, and it's important to get that difference." (policy interviewee)

"Polarised views were expressed, noted and set down. But I don't think that there was any attempt to bring them together or look for common views. I'm not criticising this: there are legitimate concerns on either side: the debate on the Severn Estuary is about how much environmental pain we can accept for the climate change gain." (policy interviewee)

"From the Government's perspective, we need to know what all the arguments are and understand both sides of the debate. We need to know where people are coming from. We needed to see if the Government could come to a position on tidal power in the Estuary and have all the arguments – there is a huge variation." (policy interviewee)

"The results were valuable for two reasons: 1) Officers ... got a sense of the range of opinions; and 2) we saw how that range of views fed into the SDC's work and was used by the SDC. Ministers want all the debate as clear as possible. Because of the detail this is always hard to make transparent in short sentences. There is ongoing work to be done on public engagement and I hope that the SDC will continue to be involved. The SDC wants to see how policy development and public opinion change over time on a new subject, in comparison to a more established issue like nuclear power." (policy interviewee)

"The main consensus was that climate change is happening and that something needs to be done." (policy interviewee)

"Having such polarised views, it was not possible to reach a consensus." (policy interviewee)

"It is a difficult subject and people have strong views." (policy interviewee)

"It showed a consensus on tidal stream technology whereas concern was expressed about the environmental costs of other technologies. I didn't get a sense that there were differences between stakeholders." (policy interviewee)

- **Contributing to the evidence base for policy decisions.** The programme and report of the findings has provided an evidence base of public and stakeholder feelings and opinions on tidal power that can be referred to as policy development continues. Clearly, opinions change and will be different as more specific proposals emerge, but the process was seen to provide a useful overview of stakeholder views on these issues at this time.

The findings from the stakeholder and public engagement programme was only one element of the SDC's overall research study on tidal power, and there were issues about how this evidence could easily be integrated into the overall analysis that led to the SDC's final conclusions. This integration is always a creative and difficult process, but there is a sense that progress is being made.

Weighting of the comments from different types of source are an issue, and one that was mentioned by various stakeholders in their feedback (in relation to the weight given to their input), but generally there appear to have been no formal systems for weighting input from different sources in this instance. Comments included:

"I think that policy making is learning to integrate public opinion with other information." (policy interviewee)

"Different input and concerns were taken into account, e.g. in the compensatory measures. Different weights shouldn't be given a priori, for example by adding a percentage." (policy interviewee)

"Deliberative fora, opinion surveys etc all have a role to play, but in the end things are a matter of judgement." (policy interviewee)

"We will be drawing on the outputs for our work. We are planning a feasibility study which will involve further public engagement. We will want to go back and revisit what was done in the SDC process to inform how we deliver our engagement." (policy interviewee)

"It's like comparing apples and oranges. Economics has a lot of weight – costs sway at the end of the day. But sometimes stakeholders' views carry a lot of weight - then you're moving into the political arena." (policy interviewee)

"The SDC did well, as well as anyone could have. It was a very difficult thing to do, and took nine months longer than initially planned." (policy interviewee)

"It was valuable in general to see the evidence: it contributes to an understanding of attitudes. But there were no specific areas in which we drew directly on the outputs." (policy interviewee)

"Tidal power is more a medium-term concern. There is a value in exploring public concerns about this now. There are different levels of public acceptance for different technologies. It is important to know this early on ... The results gave us greater confidence that there is public acceptance for this technology [tidal stream]." (policy interviewee)

"We have a report that includes stakeholder data along with other information ... We looked at all the information and discussed it. ... We came to a consensus view. All views were heard, understood and taken into account. We got a richer final output." (policy interviewee)

- **The SDC role.** The SDC has a particular role in relation to Government, being an independent advisory body but also very close to Ministers and to Government decision-making. The special contribution that the SDC's position brought to this debate was seen as a particular strength. In addition, the SDC was seen not to have made up its mind before the end of the study, so they were seen to be able to assess the feedback from the desk research and the engagement programme in a genuinely open-minded way.

Comments included:

"What impressed me most was the ability [of the SDC/ process used] to keep minds open until the end. There was no pre-judgement. I think it was a model for decision-making." (policy interviewee)

"It was very clear that the SDC was independent and separate from the Government. The SDC's role came across well – DBERR couldn't have got the same input from people. The SDC conducted itself very well while maintaining good relations." (policy interviewee)

In addition, the SDC themselves felt that the process has helped develop relationships between them and stakeholders that they can build on in future.

- **Influence.** There was general feedback from policy makers that the process did provide evidence that did influence the confidence with which the SDC could come to conclusions (and which was of value to other Government departments) - particularly that the public were relatively positive about the Severn barrage, compared to the stakeholders at the workshops and with whom the SDC and other policy makers are usually in contact. Comments included:

"There was genuine debate at the SDC, which was informed by the workshops. The conclusion – the SDC's view that a Severn barrage could be developed to benefit wildlife and habitats – could not have been foreseen, but it was not a resolution of the debate. There was a realisation that climate change will have an important effect on these habitats." (policy interviewee)

"The SDC was listening to members of the public ... There were lots of things happening that influenced this debate. Information from the public engagement was one of a combination of factors" (policy interviewee)

"I was not expecting what happened with the final output. I found myself telling Malcolm Wicks (Minister) that I had the sense that the public were fairly positive – that surprised me. Most of the letters we receive are from people who don't like things, but going out and talking to people reveals quite a lot. Our perceptions inside the Department are wrong and that opens up policy options." (policy interviewee)

"[I was surprised] By the final topline message which said that the overall message from public engagement was positive. Opinions are still quite divided but overall it's positive." (policy interviewee)

"[We have] referred to the engagement exercise and its findings. I'm not aware that anything has been done in terms of integrating those results. But the results have informed policy." (policy interviewee)

"We knew about the differences before, but it helped to refresh our understanding of where different people are coming from. The context of the climate change agenda has also changed, this is an interesting aspect, the arguments for and against the barrage had changed." (policy interviewee)

"The SDC came out with quite a brave set of recommendations. This wasn't expected, but they were able to defend it. If public engagement had shown opposition, it would have affected the SDC recommendation. There are solid arguments on both sides, so the SDC could have gone either way. The stakeholder engagement results probably had a fairly big impact." (policy interviewee)

"We only used it to get a sense of the public acceptability of different technologies. The wider SDC study was more relevant to informing policy development ... I see the [engagement] process as a useful piece of work on the side." (policy interviewee)

"If we had had a different remit from public engagement, for example if it had shown strong opposition, we might have moved to different conclusions. This response meant that the SDC could look in more detail at what kind of support to express." (policy interviewee)

"Ministers were very concerned to know the sorts of views the public had. ... The views of the public was one element among others." (policy interviewee)

- **Confidence in coming to conclusions.** There were no radically new or surprising issues or ideas emerging from the engagement programme, but the findings from the process did allow the SDC to come to conclusions about tidal power with greater confidence that there was public support in some areas, and greater clarity about where there were areas of conflict and disagreement. Comments included:

"The process was predictable [but] It had to be done." (policy interviewee)

"It gave a strong evidence base to the recommendations." (policy interviewee)

- **Greater public awareness.** Although policy makers themselves did not identify this as an issue, it is clear from the feedback from the public (especially in interview responses), that public participants had talked about the issues quite extensively with other people (see section 4.3.9). This sort of dissemination of information about the nature of the issues (rather than specific details) is very valuable to the policy-making process, contributing to a better informed and thus more knowledgeable public in the areas where tidal power developments may be proposed, as well as more generally.

6.6 Conclusions

The analysis above shows that the process had significant impacts on all those involved. The public and stakeholder participants particularly valued the learning from the process (both from information provided and from other participants), from having a say and being listened to in a non-confrontational atmosphere, from sharing views and listening to others, and from meeting others and developing networks and contacts.

There were some problems, particularly around lack of clarity over the precise ways that the information collected from the public and stakeholder workshops would be used by the SDC to develop policy, and the lack of any report back to the public on the SDC's conclusions on tidal power and the influence the public had on those conclusions. However, overall, all participants gained significant value from the process.

For policy makers, the value was in a good well-run process that demonstrated the value of public and stakeholder engagement and made it more likely that they would use engagement methods in future in their work. They found the outputs from the process useful; the most valuable forms of output were the presentation in person by OL and TEC to the SDC, and policy makers listening directly to the public and stakeholder discussions. The final report of the engagement process was also useful, primarily as an evidence base on public and stakeholder views on tidal power.

Policy makers found that the process had enabled the policy process to move forward, partly because engagement was a step that had to be taken and partly because it had provided some genuinely useful input that could be used at later stages of the development of tidal power. They also found it valuable in clearly identifying areas of conflict and consensus.

The SDC's own role had been important, as a body that was independent but close to Government. This allowed the SDC to act as an 'honest broker' on this contentious and complex issue. The SDC's open-mindedness and willingness to fully debate the issue was also noted by policy makers, and seen as of significant value to the process overall.

The major areas of influence on policy were in terms of increased confidence in coming to conclusions, from having an evidence base from a variety of sources that showed public and stakeholder views on the acceptability of tidal power technologies, and that there was clear public acceptance of the value of barrage technologies (a surprise to policy makers). It was also clear that policy makers felt that the process added significant 'richness' to the SDC's final policy conclusions. Policy makers considered that it would have been impossible to go against an overwhelming response from the public, so testing reactions was an essential element of their policy development process.

Finally, there was also value identified in the increased public awareness of climate change issues and the potential of tidal power, among renewable energy sources. Many of the public participants had talked to others (friends, family, colleagues) about what they had learned from the process, and this dissemination of interest and knowledge will provide a valuable foundation for future engagement activities.

7 Assessment of activities against objectives

7.1 Introduction

The overall objectives for the public and stakeholder engagement programme on tidal power were to understand:

- attitudes towards tidal power
- attitudes to the sustainable development aspects of tidal power technologies
- attitudes to proposals in the Severn Estuary
- views on financing and decision-making
- the conditions for public and stakeholder acceptability of tidal power.

The objectives for the specific programme of public and stakeholder engagement activities were developed in detail by OL and TEC, following a scoping workshop with the key stakeholders (SDC commissioners and members of the SDC secretariat and the project funding partners). Interviews were also conducted with some of the key funders, consultants and other stakeholders. These discussions resulted in agreement on detailed objectives for the public and stakeholder engagement activities.

This section provides a summary assessment of the public and stakeholder engagement activities against the agreed objectives, which are given in full in the table below.

7.2 Assessment against objectives

Public engagement	
Objectives	How each objective has been met
To gauge current public attitudes towards tidal power	This was done through the omnibus opinion poll (1,000 members of the public across the UK), and also through the 6 focus groups held in 3 local communities. Each of the 3 regional public workshops also assessed general public attitudes to tidal power at the beginning of their agenda.
To explore the public's views on the economic, social and environmental costs and benefits of tidal power and different tidal power technologies	Each tidal power technology was considered in detail in small group discussions at the regional workshops, with an assessment of the economic, social and environmental implications. Each small group presented their conclusions back to the workshop in plenary. This provided the participants with the opportunity to work together to develop their views, and the presentations back to the whole group helped them articulate their conclusions, and hear the conclusions of other participants. This provided a full exploration of public views on the issues.
To explore the public's views on the financing of any potential tidal power development	There was a specific session in each of the regional workshops to consider the financing and governance (role of Government and others) of any tidal power development. Scenarios were introduced to enable the public to fully consider the implications of different circumstances on financing and governance.

In the South West and Wales, to specifically explore the public's views on proposals for tidal developments in the Severn Estuary	In the Cardiff and Bristol workshops, specific sessions considered the potential tidal developments in the Severn, considering advantages and disadvantages of different technologies. Each group then presented their conclusions back to the whole workshop in plenary. This provided a full exploration of public views on these specific developments. The same process was used in Inverness, focusing on the Pentland Firth.
To understand the public's views on what role the Government and Devolved Administrations should play with regard to tidal power in terms of financial costs and decision making	The report from the process provided policy makers with information on the public's views on these financial and governance issues (also including the EU and local government). The SDC secretariat's understanding of the public's views was also developed through attending the workshops and listening directly to the public deliberations, and also from presentations and reports from Opinion Leader.
To establish the conditions for public acceptability for any tidal power development	The conditions for public acceptability were inferred from the points raised in discussions of the technologies in general and in the specific circumstances in the Severn Estuary and the Pentland Firth. These conditions were clearly identified in the final report on the engagement.
To understand how public attitudes vary across the UK.	The report on the engagement identified the findings on the specific proposals for the Severn Estuary and the Pentland Firth as separate sections, so that feedback could be separately understood. Also, the report identified specific comments by participants by location, so variations in views could be understood. Also, SDC secretariat personnel attended all the workshops and could observe the different attitudes and opinions first hand. This clearly fed into their understanding of public views overall.

Stakeholder engagement	
Objectives	How each objective has been met
To understand which stakeholders are pro and anti tidal power and to establish the conditions for stakeholder acceptability for any tidal power development	In these types of stakeholder dialogue, it would generally not be considered good practice or appropriate to identify the different views of individual stakeholders. The report on the stakeholder engagement process therefore did not specify which stakeholders made which points, although all points were recorded and a full list of participants was produced. Also, stakeholders discussions took place in mixed groups, so it was not possible to identify the views from specific sectors (e.g. environmental NGOs, industry, government). The SDC secretariat attended the two workshops in person so they were able to hear and understand first hand the specific views of different stakeholders. The SDC were, however, party to non-attribution as a working agreement for the day (as shown on the transcripts of the day). The engagement report clearly specifies the conditions for overall stakeholder acceptability for any tidal power development.

<p>To explore stakeholders' views on the economic, social and environmental costs and benefits of tidal power and different tidal power technologies</p>	<p>Each tidal power technology (tidal stream, tidal lagoons and barrages) was considered in turn in detail in small group discussions at the workshops, with an assessment of the economic, social and environmental implications. Each participant had an opportunity to consider each technology in turn through a carousel process. This provided the participants with the opportunity to work together to develop their views and these views were captured on flip charts as discussion progressed, and were reported in the transcripts of the workshops. This provided a full exploration of stakeholders' views on the issues.</p>
<p>To explore stakeholders' views on the financing of any potential tidal power development</p>	<p>A specific session in the workshops allowed stakeholders to work together in small groups to consider the financing of tidal power developments. All views were captured on flip charts and reported in the transcripts of the workshops. This provided a full exploration of stakeholders' views on the issues, although some stakeholders did suggest they would have liked more time to discuss these particular issues.</p>
<p>To specifically explore stakeholders' views on proposals for tidal developments in the Severn Estuary</p>	<p>A specific session in the Cardiff workshop provided a presentation on tidal power concepts for the Severn, followed by questions of clarification. Stakeholder participants then worked in small groups to discuss the strengths, weaknesses, opportunities and threats relating to tidal barrages and other technologies in the Severn. All views were captured on flip charts and reported in the transcripts of the workshops. An open space technology was then used to enable participants to add their comments individually to flip charts under headings on acceptability issues (benefits and disbenefits) for each technology.</p> <p>In Aberdeen, there was no presentation and the session focused on the open space exercise, allowing participants to express their views on the benefits and disbenefits of the three main technologies in general. This provided a full exploration of stakeholders' views on the issues.</p>
<p>To understand stakeholders' views on what role the Government and Devolved Administrations should play with regard to tidal power in terms of financial costs and decision making.</p>	<p>The final report from the process provided information on the overall stakeholder views on these financial and governance issues, and the transcript circulated previously contained full details of all points made. The SDC secretariat's understanding of the public's views was also developed through attending the workshops and listening directly to the stakeholder deliberations.</p>

7.3 Conclusion on achievement of objectives

The objectives are very specific and can thus be relatively easily assessed simply by identifying that the activities were undertaken, as that shows that views were 'explored'. The only slight complication is in the extent to which views were 'understood', and the analysis above therefore proposes that the attendance of the SDC secretariat at the various events, and the SDC's wider acceptance of the reports of the engagement, have led to 'understanding'. That seems a reasonable assumption and thus we can conclude that the objectives were fully met.

8 Overall conclusions

8.1 Introduction

This final section summarises the key outcomes identified in the report, and identifies some lessons for future public and stakeholder engagement. It draws on the analysis within all the previous chapters.

8.2 Summary of key outcomes

The SDC's public and stakeholder engagement programme on tidal power has worked very effectively and provided some significant benefits to all those who have taken part and those who have used the outputs. The key outcomes have been:

- **For public and stakeholder participants:**
 - Satisfaction with the process and a sense of their involvement being worthwhile
 - Learning from the process, both from information provided and from other participants
 - Having a say and being listened to in a non-confrontational atmosphere; for the public there was also a real sense of having some influence, although stakeholders were less positive about the potential for influence
 - Sharing views and listening to others
 - Meeting others and developing networks and contacts.

There were some problems for public and stakeholder participants, particularly around:

- Lack of clarity over the precise ways that the information collected from the public and stakeholder activities would be used by the SDC to develop policy
- Lack of any report back to the public on the SDC's conclusions on tidal power and the influence the public had on those conclusions.

However, overall, all participants gained significant value from the process and found it enjoyable, informative and worthwhile.

- **For policy makers:**
 - This was a good, well-run process that demonstrated the value of public and stakeholder engagement and made it more likely that policy makers would use engagement in their work in future.
 - The outputs from the process were very useful to policy makers. The most valuable forms of output were the presentation made in person by OL and TEC to the SDC, and policy makers listening directly to the public and stakeholder discussions. The final report of the engagement process was also useful, primarily as an evidence base on public and stakeholder views on tidal power.
 - The role of the SDC was important, as a body that was independent but close to Government. This allowed the SDC to act as an 'honest broker' on this contentious and complex issue. The SDC's open-mindedness and willingness to fully debate the issue was also noted by policy makers, and seen as of significant value to the process overall.
 - The process had enabled the policy process to move forward, partly because engagement was a step that had to be taken and partly because it had provided some genuinely useful input that could be used to help shape the SDC conclusions on the subject, and at later stages of the development of tidal power.

- The process had clearly identified areas of conflict and consensus. There was no intention that consensus would be sought, but the exploration and capturing of the public's and stakeholders' views allowed the range of views and areas of conflict and consensus to be better understood.
- The main areas of impact on policy were in terms of:
 - Increased confidence for the SDC in coming to conclusions, as a result of having an evidence base from a variety of sources that showed public and stakeholder views on the acceptability of tidal power technologies
 - Clear public acceptance of the value of barrage technologies (a surprise to some policy makers). Policy makers considered that it would have been impossible to go against an overwhelming response from the public, so testing reactions was an essential element of their policy development process.
 - Adding significant 'richness' to the final policy conclusions of the SDC.

Overall, policy makers thought the process had been effective and valuable in both its process and outputs.

There was also value in the increased public awareness of climate change issues and the potential of tidal power that resulted from public participation in the process. Many of the public participants had talked to others (friends, family, colleagues) about what they had learned from the process, and this dissemination of interest and knowledge may provide a valuable foundation for future engagement activities.

8.3 Lessons for the future

This section summarises some of the main lessons from the evaluation, across the whole consultation process. Each of the preceding sections also identifies lessons from the specific activity covered in that section.

- **Mix of methods.** A mix of engagement methods can be particularly valuable in gaining the maximum diversity of views from different constituencies. In this case, the mix of omnibus opinion polling, focus groups and workshops with the public in different locations, and stakeholder workshops in the North as well as near the Severn, provided a rich mix of data on public and stakeholder views and opinions.
- **Appropriate size.** A diverse range of views can be obtained from a relatively small sample of the public, which can therefore be robust from a deliberative research perspective. However, a slightly larger group can create a greater sense of legitimacy and status among participants as well as for policy makers. In this case it may have been possible to have created a more dynamic atmosphere with a few more public participants (say 30 - 40 rather than 20) at potentially little extra cost.
- **Value of deliberation.** Deliberative public engagement can deliver particular value in terms of public education through engagement even on a complex, technical and controversial topic such as tidal power technologies, as well as outputs on public attitudes and views that are of value to decision-makers. In this case, both public and stakeholder participants felt they had learned from being involved.
- **Good communications.** The design and delivery of good public and stakeholder engagement processes require significant experience and skills to be effective and valuable. In this case, the delivery organisations achieved all the objectives set for the process and delivered a process of considerable value to all those involved. This was only possible through close collaboration and good communication between internal and external staff, and continuous discussions with key stakeholders, project funders and others.

- **Transparent integration of data.** The integration of data from different sources in policy development (e.g. desk research, engagement programmes) is an art rather than a purely technical exercise. In this case, the SDC had to integrate data from technical research reports, and on the views and opinions of the public and stakeholders who did not agree overall on the ways forward. It is important that this process, although complex and creative, is as transparent as possible, so it can be understood by participants and others in order to maximise trust and credibility in the process as well as the policy conclusions.
- **Feedback to participants.** Feedback to public and stakeholder participants is vital and should be done as soon as possible after their involvement. Ideally, feedback should provide a summary of what was provided to the decision makers based on their input, what influence that input had, and what is finally decided at the end of the process. Feedback in this case was provided to stakeholders, both in the form of transcripts of their workshops which were circulated soon after the events, and in informing them of the publication of the final SDC policy statement. However, it is a failure of the process not to have informed the public of these final conclusions to the process, nor to have explained the influence of their input.
- **Appropriate information in advance.** The information provided to support the public and stakeholder discussions is a vital element of the engagement process. In this case, the information provided was easily understood and used by participants, and generally considered fair and balanced. However, there was a demand from public and stakeholder participants for more information to be provided in advance of the event. It is difficult to balance providing enough information to support effective participation, without either overloading participants or influencing them unduly before the event. However, a little more information in advance about the process itself would help people understand what they are being asked to take part in, and thus help them contribute more effectively.
- **Clear evidence of influence.** There should be a clear line from the outputs from public and stakeholder engagement activities to the final decision being made, so that the influence of public and stakeholder views can easily be shown. This evidence of influence is vital to the public and stakeholder assessment of the value of the exercise and to trust in engagement generally. In this case, the final SDC report does explicitly summarise the findings of the public and stakeholder engagement process, and thus provides a clear link between engagement and policy conclusions.

8.4 Final conclusions

Developing an effective public and stakeholder engagement programme on the potentially highly contentious issue of tidal power, especially in the geographical locations most likely to be affected by any new developments, was a major challenge.

It was a flaw in the process not to have provided feedback to public participants on the final SDC policy position, and the influence of the public engagement process. It will be important to ensure better reporting back in future.

Overall, however, this was a very good and effective public engagement programme which met all the objectives set. The process has also provided significant value to the all the public and stakeholder participants involved, and to the policy makers who have used the outputs of the process in coming to policy conclusions. It has increased public awareness of the issues of climate change and the potential for tidal power technologies in the locations where they are most likely to be developed. It has also increased the willingness of public and stakeholder participants, and policy makers, to get involved in public and stakeholder engagement programmes in future. This process can therefore be seen as a significant contribution to the future of public and stakeholder engagement on issues within sustainable development.