Appendix 11.7
The Bauman Institute Report
Towards Community Resilience

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About the Research

This report is informed by primary research carried out between February and October 2013 as part of a wider two-year project entitled “Community Resilience: Investigating Social and Economic Sustainability”. The research fellowship leading this research is funded by Tidal Lagoon Swansea Bay (Ltd), but is an entirely independent project developed by academics at the Bauman Institute in the School of Sociology and Social Policy at the University of Leeds, UK. The research that informs this report has followed the public consultation process for the proposed Tidal Lagoon Swansea Bay (TLSB) development in order to explore a range of issues around community engagement, the availability of community shares as an ethical investment in renewable energy developments, and aims to understand the contribution these might be able to make to an understanding of ‘community resilience’.

This concept emerges within local and national policy documents with some regularity in the context of the Coalition Government’s ‘Big Society’ agenda, either as an extension or attempted re-narration of the idea of empowering local communities through a transfer of social, economic and political power.

The extent to which ‘community resilience’ might become a meaningful concept capable of realising these objectives informs the wider project based at the Bauman Institute.

The Report

This report presents our findings from the first year of the fieldwork, which has involved:

- Review and analysis of relevant policy, official documents, media sources and academic literature relevant to the study
- 15 telephone interviews with stakeholders including third sector representatives; community activists; local elected representatives; and others working in the Swansea Bay area
- Ethnographic research of community consultation events and other public-facing activities carried out by TLSB during the informal and formal consultation periods
- Questionnaire carried out with Hay-on-Wye literary festival goers
- Online survey of investors in the TLSB development

Section One focuses upon the consultation process; Section Two explores attitudes towards the TLSB development in terms of its impact on social, economic and environmental aspects of life in Swansea; Section Three looks at the community share, who invested and perceptions of it. Section Four concludes the report by highlighting some initial reactions to the idea of ‘community resilience’ and outlines some emerging questions that will guide the second year of our research project.
Section One: The Consultation Process

1.1 Overview of events and activities

We observed a number of events over a seven month period, during both the formal and informal consultation phases. This included public events in Swansea, Mumbles, Neath and Port Talbot, as well as visits to local environmental groups such as Transition Swansea. As well as these events staffed by TLSB, at a number of locations across Swansea Bay there were also unmanned stands that provided information about the Tidal Lagoon giving people the opportunity to complete questionnaires, thus recording their views of the proposed development.

The consultation and public-facing events that we observed were mostly well-attended, with steady numbers of visitors. Those attending were from different age groups, including older people, students, and families with children of all ages. Many attended in small groups, or with partners or friends, whilst some came alone. Although there has been variation in the demographic characteristics of visitors, there have been a higher proportion of older people, and a tendency for more males than females to attend events. Many of the people we spoke to said they had a particular interest in environmental issues, or engineering and were interested to know more about the technology, whereas others attended to find out about the potential impact of the development on the local area. As one person put it:

“We thought ‘They’re doing something to the Bay!’ so we thought we’d come and see what it was”.

Some people had even attended spontaneously as they were passing the event to go somewhere else. For example, some people at the Swansea Civic Centre event had dropped in after attending a meeting nearby. Most had heard about the development through the local media, or had seen publicity for a specific event.

According to our participants, consultation events have involved many of the “familiar faces” associated with local branches of international organisations such as Greenpeace and Friends of the Earth, as well as local groups such as Transition Swansea. This reflects a broader trend within all community consultations and participatory activities more widely. Small groups of active participants, often referred to as “the usual suspects”, tend to get involved across a range of activities (Skidmore et al. 2006).

However, one stakeholder suggested that, whilst certain groups or individuals might be expected to turn up, there were always “surprise elements” (Stakeholder 3). The attraction of people from environmental groups to the various public consultation events would seem to reflect particular efforts made by TLSB to target and engage people from such organisations, in particular during the informal consultation stages. Attendees at events also included those with particular expertise in relevant issues, including people working in related fields such as renewable energy and engineering, and academics from local universities. This meant that there were a number of people with a great deal of relevant knowledge and frequently such attendees arrived with very specific, and often complex, questions about the proposals and the environmental impact of the development.

For those without particular expertise, however, there was a great deal of information to absorb and understand before they were able to form
an opinion about the project and reference was made to this by several of the stakeholders. For example, one suggested that local people who had recently attended a residents’ association meeting with TLSB “might not have been able to ask expert questions” (Stakeholder 7). Similarly, one or two of the stakeholders emphasised their own difficulties in fully understanding the proposed development, with one saying “I don’t know all the details; I’m not a technical person” (Stakeholder 9).

Evidence from the questionnaires delivered by TLSB at consultation events demonstrated that sometimes people did not know how to answer a particular question, such as ‘what could be improved about the development’, and at consultation events some people stated that they simply “don’t know what to ask”. Some attendees at the consultation events also found it difficult to grasp the intricacies of the funding structure for the development, and still others arrived with inaccurate information, for example about the geography of the local area.

Hence, TLSB were presented with the considerable challenge of communicating complex information to a broad range of consultees with varying degrees of existing knowledge, and with very different concerns. From the beginning of the informal consultation process, a range of information was made available at public events, as well as a large scale-model of the lagoon, a video showing the company’s vision for the lagoon and the associated developments and how it might look, and questionnaires for the public to complete about their views of the proposals and of the consultation process itself. The information provided was made available in both Welsh and English language formats. TLSB staff were available throughout these events to answer questions from the public and to facilitate their understanding and engagement. Over the informal consultation period, TLSB continued to develop and refine the materials they used to engage the public with the plans for the proposed development and to help them visualise how the lagoon would look, as well as to understand its potential impact on the local environment. Later refinements of these materials included CGI modelling of the development, with which consultees could interact, and information boards that provided more in-depth and detailed information about the existing environmental context (for example, marine water quality, hydrology, land quality, fish and birds). At a number of public events, an interactive tidal power model was provided that allowed participants to pump water into a lagoon and then to see how, when the water was let out through the sluice gates, the tide would generate electricity. This was particularly popular with children.

As more information about the environmental impact of the development became available, as a result of ongoing research by external consultants, this was made available to the public, with the full Environmental Impact Assessment (EIA) launched on October 17th 2013. This provided information about a range of different aspects of the project, from marine archaeology to coastal processes. The event, which was open to the public, involved presentations from independent experts in a number of different fields, who were also on hand to answer questions from the public and interested parties throughout the day.

Throughout the consultation process, TLSB have also made a great deal of information available on their website. As well as the events we observed, TLSB have carried out an extensive education programme with local schools, engaging students in broader
issues around renewable technologies, climate change and energy security. There were clear efforts made to enable people to engage with energy security at a strategic level, with information provided at events to show how the energy supply of the UK was likely to change, and how tidal power might fit within the future ‘energy mix’. This meant that not only were people encouraged to understand the proposed development as a local issue, but also to see it as part of a potential solution to far broader and widely shared challenges.

Figure 1: Model demonstrating how tidal lagoon will generate energy

Figure 2: Unmanned information stand in Port Talbot Civic Centre

Figure 3: Sample of geotube textile at public event
1.2 Perceptions of the consultation

There was generally very positive feedback about the consultation and the ways in which TLSB have engaged with local people. Many people felt that the company was genuinely concerned with engaging local people and understanding and taking on board their views:

*TLSB have done consultation very well, they've certainly brought people on board... we've heard a lot of positive things. People are not scared of it. They understand what it is, what it will look like, and they understand benefits, and how the energy will be generated* (Stakeholder 11)

The publicity materials were felt to be “well-presented” and “persuasive” (comments from fieldnotes). Although some people had clearly arrived with opinions already formed, there was a general sense that those attending consultation events had gone “with an open mind” (consultee at Civic Centre event). One stakeholder suggested that:

*You get three sets of people come to community consultations: those who are pro it, and sometimes just want to tell you that; those who are completely against it and you can't change their minds whatever; but consultations are really targeted at those who haven't made up their minds. What I saw was that the people who had gone there [to the TLSB consultation events] were genuinely interested in finding out more.* (Stakeholder 5)

We only observed a very small number of people making negative comments and sometimes those with negative attitudes changed their minds after seeing the video and asking questions, although some remained sceptical and/or undecided. On occasion, the negative minority were quite vocal and tended to dominate and direct group discussions. At times, it was also clear that they had heard inaccurate information about the proposals, or that they contested the evidence being presented by TLSB. Some stakeholders felt that local people lacked any real influence over private developments, and one in particular expressed uncertainty about the meaningfulness of the opportunity presented by the consultation.
The consultation process was seen to have been important in winning the “hearts and minds” (Stakeholder 5) of local people, however, which is widely acknowledged to be of central importance to obtaining planning permission for the development. Because those attending the consultation events often did so out of a particular interest in renewable energy, environmental issues, or engineering, it might be considered that they would be more inclined to be positive towards the idea of a Tidal Lagoon. Even taking this into account, however, there was little significant opposition observed, nor any mobilisation of people against it:

*They haven’t had any huge public groups turning up to protest: there’s no “stop the lagoon” campaign* (Stakeholder 1).

This would seem to be very positive for TLSB because, as one stakeholder put it:

“You don’t want an anti-campaign; you want to fight a pro-campaign” (stakeholder 9)

It was acknowledged that challenging negative opposition could be difficult “if some people get their teeth into it” (Stakeholder 5).

**1.3 Analysis**

TLSB would seem to have been successful in engaging a significant proportion of the public locally and in raising awareness and levels of understanding about the proposed development. To some extent, the consultation has replicated patterns of engagement across a range of different activities within the local area, whereby certain people are more likely to get involved than others. This means that ‘hard-to-reach’ groups have to date not been extensively involved, though this is not due to a lack of effort on the part of TLSB to publicise their consultation or to make active attempts to engage people across a range of different socio-economic groups. Indeed, this problem is commonly experienced in many participatory contexts and has been relevant in the past too (Ravetz 2001). A principal cause of this is that participation amongst particular groups tends to ‘snowball’, in part due to the building of more or less exclusive networks of contacts and the tendency to rely upon certain people (Skidmore et al. 2006). Evidence also shows that there are key groups that do not engage across the spectrum of formal engagement, and that differentiation is most significant precisely along socio-economic lines (Grainger & Crowther 2007; Tallontire et al. 2001; Home Office 2003).

In general, formal participation in the UK is more prevalent amongst more prosperous individuals (Dorling & Thomas 2011) and to some extent this can be related to people’s sense of personal efficacy and/or influence over participatory activities, as well as to a lack of necessary resources, and/or of organisational capacity, on the part of disadvantaged communities (Anastacio et al. 2000). Hence, this identified difficulty in engaging with certain groups is by no means exclusive to the TLSB consultation, and rather reflects broader issues of power relationships, resource distribution and marginalisation, which tend to be replicated within most participatory spaces.

Furthermore, there is the highly problematic concept of ‘community’, in the sense of this being a community consultation. Within Swansea Bay (as will be further discussed below) there are a number of different and distinct ‘communities’, each with different needs and therefore concerns in relation to the development and consultation. As mentioned, the public consultation process has had to take account of these differences and to address their different concerns to meet their various...
needs in terms of facilitating their meaningful engagement with the consultation. Clearly, there are difficulties associated with the role that the consulting company has to play, in terms of educating and engaging the public, alongside pursuing their own legitimate commercial interests. Without impartial or disinterested third parties who are willing to facilitate the educational side, which to date has not been explored, the company is potentially open to criticism here. This raises interesting questions for future consultations by private sector organisations, and for the role of intermediaries in facilitating meaningful consultation.

1.4 Key Findings

- Patterns of involvement in community consultations frequently replicate patterns of community/citizen engagement more generally, which are in turn shaped by factors such as resource distribution and socio-economic inequalities. It is therefore to be expected that consultations will not necessarily reach all groups who may be affected by a particular issue.

- Community consultation can be complex and geographical areas frequently include a number of different and overlapping communities with distinct needs, concerns and preferences. Successful community consultations need to take account of the range of needs and concerns that may exist within a geographical area, and our research suggests that TLSB have done this very well.

- In consultations about energy infrastructure developments, private sector organisations have to balance commercial considerations with a duty to educate and inform the public about a range of different issues. We suggest that this educational role could usefully be supported by disinterested third parties and intermediary organisations.
Section Two: Attitudes to Environmental, Social and Economic Aspects of the TLSB Development

2.1 Environment

There are a number of environmentally-focused groups and organisations in Swansea, suggesting that environmental issues such as climate change, renewable energy, and energy security are relatively popular. Indeed, one stakeholder suggested that “there’s quite a strong environmental lobby in Swansea”. These issues often appeared to be balanced with more immediate personal concerns, however, and stakeholders tended to agree that climate change was not an everyday priority for many local people. The differing timescapes (Adam 1998) within which people understand and assess different levels of perceived risk has been a key emerging theme within this first stage of our research. Hence, concern for (longer-term) environmental issues does not necessarily translate into support for (shorter-term) renewable energy developments, when thrust into the mix of employment security and more immediate domestic responsibilities.

Further, our research suggested that people were wary of the potential disruption caused by new developments:

*There’s a general belief that renewable energy is good, but also people want the disruption minimised and to know it’s going to work* (Stakeholder 1).

Concerns about the environmental impact of the development itself appeared to be those most frequently raised at consultation events.

There were numerous mentions of the “fantastic local environment” (Stakeholder 5) of Swansea Bay, and the enjoyment that local people derived from the aesthetic of coast and countryside. Many people spoke about their involvement in leisure activities such as surfing, swimming, walking and fishing in the Bay. As a result, they wanted to find out whether/how the development would affect their current enjoyment of the local area, and/or interfere with their outdoor activities. Some people were particularly concerned about possible pollution of the Bay. For example, one keen surfer in Port Talbot spoke about the pride local people had in the Blue Flag awarded to Aberafan Beach, and how they would hate to lose it. Questions about fishing were also particularly common at the consultation events.

The questions asked most frequently were:

- What will be the impact on fish and other wildlife?
- How will the lagoon affect sediment and water quality?
- What will be the effect on nearby rivers and on the tidal flow?
- Will there be effects on the deposition of sand within the Bay?
- How will it affect the view across the Bay (or more specifically from people’s houses)?
- How big will the Lagoon wall be?
- How might it affect fishing, water sports and other activities?
- How much noise / disruption will there be during construction?

The environment of the city of Swansea has in the past been negatively affected by local industry, with a legacy of contamination of local rivers, streams, lakes, and land from copper, iron, nickel and arsenic (c.f. Lower Swansea Valley development). This history is significant in shaping attitudes towards new developments:
South Wales – with Swansea as an integral part – has seen many generations of misuses and working practices which have not protected the environment at all… The disappearance of the heavy industries has been sad from a work point of view, but good from an environment point of view, and the area is much cleaner, because of the change of industries, and nobody wants to go back to those days obviously. And they would have opposed anything that would have meant that (Stakeholder 9).

A perception that there would be a distinct lack of any negative impact upon the local environment or on people’s daily lives was in some cases sufficient to persuade people that the proposed development was acceptable:

Rather than necessarily saying “Everything will be positive”, an interesting line is “Nothing will be negative”. That’s how I feel. I can see the area, as I say, and I think “Well it’s not going to impact substantially on my view, or be an issue”, therefore I’m happy on that basis. Rather than I’m actively for it, I’m passively not against it, if that makes sense. (Stakeholder 3)

Similarly, another suggested that people might not object to the lagoon simply because it is “not an eyesore”. This perception of the TLSB development exists in sharp contrast to highly negative perceptions of wind turbines held by many of the people we spoke to. Frequently, the lagoon was very favourably compared to wind turbines, which were often referred to as a “blot on the landscape”. For example, one person in Port Talbot, who was very enthusiastic about the lagoon, told us about how wind turbines had been built near her house, saying “They’ve ruined my valley!”

For some people, it would seem that wind turbines are disliked for aesthetic reasons, although many people did not find them visually objectionable. For others, the predictability of tidal power was preferable to wind power:

I like tidal power, better than I like wind power, because you can rely on it (consultee at Transition Swansea event).

One stakeholder suggested that there was also some perception that wind turbines in Wales represented the exploitation of natural resources for the benefit of those living elsewhere:

Coal and water are resources that have benefited Wales in some respects, but through being extracted from the country to go across the border, and that has done damage to the country, so we have a different relationship with them. I think people see wind turbines in the same way: using “Windy Wales” to power a lot of house or factories in England (Stakeholder 3).

Interestingly, such ideas were rarely expressed about tidal power. As well as being favourable compared to wind turbines, the proposed tidal lagoon was also often spoken about in comparison to the Severn Barrage, which was seen as less “manageable” in size and likely to have a greater negative environmental impact.

Figure 6: View from Mumbles across the bay to Swansea
Many people suggested that they felt it would be beneficial to increase the amount of renewable energy nationally, and that the TLSB development was frequently seen as a means of demonstrating innovation in this area and showing that the technology works. As such, it was seen as a potential springboard to future developments elsewhere, which “would be ‘standing on the shoulders’ of this one” (field notes). Frequently, it appeared that people compared the relative merits of different potential forms of energy generation in coming to their conclusions about the desirability of the tidal lagoon. However, justifying the need for renewable energy through reference to the challenges presented by climate change was not always straightforward. Questions about the validity of climate change claims were raised by some interviewees, survey respondents and people we spoke to in our fieldwork. The issue clearly remains controversial. Interestingly, many of the people who spoke about this issue did so in terms of belief, either believing or not believing the scientists who make claims about it. One survey respondent referred to climate change as an “emotive” issue, and one that was not necessarily helpful for TLSB to be utilising. Several of the stakeholders referred to there being widespread misunderstandings about climate change and limited knowledge of what it might involve.

2.2 Society

The picture of Swansea Bay built from our research has provided insight into the key problems facing local people and their concerns, as well as into the more positive aspects of living in the area and the aspects of local life that people value. Many people emphasised the strong affection for the local area felt by local residents and the strong sense of community, which was particularly seen to exist in poorer neighbourhoods built around traditional industries. Some people expressed their sense that Swansea is “an improving place” (Stakeholder 10). Particular reference was made to the promotion of Swansea City Football Club to the Premiership, to the new Swansea University campus, as well as to the potential of TLSB as all contributing to this sense of improvement. Several participants spoke about the strength of the local ‘third sector’ and of the value of community projects, in particular
Swansea’s Vetch Veg initiative, which is a local community allotment scheme.

Figure 9: The Vetch Veg site, Swansea

However, there are also clear social and economic divisions within the Swansea Bay area, and within the city of Swansea. Mumbles and the West of Swansea are more affluent, middle-class areas, as contrasted to the poorer neighbourhoods in the East of Swansea and those in Neath Port Talbot. A review of available statistical evidence demonstrates that there are key modes of stratification across these areas in terms of, for example, income and health. Participants frequently mentioned differences in the social context of poorer and more affluent areas, with a stronger sense of community associated more frequently with those poorer areas in the East of Swansea such as Port Tennant, Danygraig and Granville Park. Several stakeholders referred to the idea that those living in the West of the city “where there are higher walls and longer driveways” (Stakeholder 6) are less likely to know their neighbours.

One interviewee spoke about the fact that, due to a sense of community being a “strong point” of the local area, “people worry about the impact of a new development on community”, but:

[Whilst] it can sound almost xenophobic, almost like we’re worried about incomers…it’s not ever in that way. It’s more about the impact on the fabric of our society (Stakeholder 3)

In reference to this idea, several participants spoke about the relatively high numbers of students now living in Swansea and the resulting ‘studentification’ of certain neighbourhoods as a result, a process characterised by a number of social, cultural, physical and economic dimensions (Anderson 2013). Others spoke about the lack of consultation with local people that has taken place for those other developments that had taken place in the area, or were believed to be due to take place. For example, several people mentioned the new Swansea University campus as having failed to engage effectively with local people, although many also spoke about the new campus in very positive terms. In contrast, the TLSB development appears to ‘fit’ and to make sense within the broader historical narrative of Swansea Bay and the specific socioeconomic context, as expressed by one respondent:

The introduction of Tidal Lagoon as a new industry – that works because people are capable, they’re able to say “Here’s an opportunity for employment” rather than it being something that’s imposed and throws us out. There’s not only the consultation, but also a sense that we know what this is about (Stakeholder 3).

Reflecting the differences in interests, resources and demographic characteristics across the Swansea Bay area, attitudes to the recreation and leisure facilities to be created as a direct consequence of the TLSB development tended
to vary. Whilst some people were enthusiastic about these facilities, not everyone felt that they would necessarily make use of them. Several people suggested that they already did sports such as swimming at existing venues, such as the Mumbles Yacht Club. One interviewee suggested that the popularity of these facilities might grow over time, rather than “necessarily suddenly attracting lots of people”. It was clear from our fieldwork that some people in Neath Port Talbot felt that the TLSB development would benefit Swansea more directly than their own particular part of Swansea Bay. However, some Port Talbot residents were very positive in their perceptions of the development, in particular the leisure facilities that would be offered. For example, one person we spoke to in the ethnographic stage of our fieldwork spoke about being “very excited” about the opportunities for cyclists. Some of the people we spoke to referred to the recreational and leisure facilities, as well as the visitor’s centre and arts projects, as “peripheral benefits” or as “window dressing” for the tidal lagoon proposal. One interviewee pointed out that the proposed “glamorous” facilities would need to be affordably priced to enable local people to make use of them, and expressed the hope that “ordinary working-class fishermen” will be allowed to use them.

As a landmark development, it was generally felt that the tidal lagoon could make a significant contribution to an enhanced sense of local pride. One consultee (echoing a sentiment expressed by many others) suggested that, should the development go ahead, “all eyes will be on Swansea”, in turn further raising the profile of the city, whilst a participant in the Investor Survey felt it would show Swansea was a city “going places”. Another suggested that the development would “help show that not everything is in decline…that some industries are in growth” (Stakeholder 11). In these ways, the proposed tidal lagoon development is seen as potentially contributing to positive perceptions of the local area, and so consequently also to the already strong sense of local identity.

2.3 Economy

Both our fieldwork and our statistical research have demonstrated that there are pressing socio-economic challenges facing many local people. Whilst some of these were felt to be issues shared across Wales, and/or the UK more widely, others were more specific to the Swansea Bay area. One issue that was repeatedly mentioned in this context, both by people we spoke to in our ethnographic fieldwork and in our stakeholder interviews, was that of employment. Unemployment figures are similar to those in the rest of Wales and the UK, however key issues for many people seem to be the high concentration of service sector work and a lack of diversity in the employment base for the area (in particular Swansea):

“Work is strongly service sector led in this area, we’ve got the DVLA, call centres…really the majority of jobs are in the service sector. It reduces some people’s ability to access work” (Stakeholder 3)

Furthermore, the type of work available locally is frequently insecure, part-time and poorly-paid, with wages failing to keep pace with rises in the costs of living. Such issues mean that some local people physically relocate in order to find more appropriate or desirable work. This was most frequently mentioned in relation to people who had acquired qualifications to work in the kinds of industry not available locally. There was a clear sense that the loss of any major local employers would have a significant and
detrimental impact on local people, in particular in relation to the steelworks at Port Talbot.

It was also frequently suggested that there was a general lack of money, in Swansea in particular, with many people on low incomes or struggling to cope given the level of their eligible state benefits. Many people made reference to the considerable difficulties they faced with rising energy costs and the related threat of fuel poverty. Issues relating to recent changes in both welfare entitlements and levels were raised by a number of participants. Whilst changes in Wales have been introduced later than those in England, stakeholders working with low-income groups and other vulnerable groups (such as older people and unpaid carers) suggested that the impact of welfare reform was beginning to hit some people hard. One stated that “it is a struggle for a lot of people, especially on benefits, to keep their head above water” (Stakeholder 2). Several people also mentioned the relatively high levels of drug and alcohol misuse in Swansea, and also of homelessness as key local issues. It was generally felt that, whilst Mumbles attracted tourists, Swansea itself lacked tourist attractions to draw in visitors. One person suggested that Swansea “needs to become a place people want to visit” (Stakeholder 12). Many people spoke about there being a notable frequency of empty shops in Swansea city centre.

The proposed tidal lagoon development was perceived by many as having the potential to help address some of the socio-economic challenges outlined here. Many people in our ethnographic fieldwork, investor survey and interviews referred to a perceived positive impact of the development on local employment:

*The jobs are going to be a great asset...I think it will be very welcome from that point of view* (Stakeholder 9)

**Figure 10: Swansea city centre**

In general, the potential of the development to provide a source of local work was highly rated, although some people expressed reservations about the sustainability of certain kinds of work beyond the construction phase. There was some mention made of the idea that, in the longer-term, the kinds of jobs the tidal lagoon development would offer might once again be more concentrated in the service sector than, for example, in skilled and/or manual occupations.

Mention was also made of the potential of the tidal lagoon to establish Swansea as a “renewable hub” (Stakeholder 8) and to facilitate the development of a ‘green economy’ in the local area. In terms of a broader economic impact, local people made consistent reference to the possibility of cheaper energy as a key benefit of the development. The long-term nature of the community benefit element of the
TLSB vision was seen as a valuable contribution to achieving socio-economic goals that could be sustainable in the local area. Many people felt that the development would benefit the tourist industry in the local area, as “it will add an additional attraction and area of interest to the city” (Stakeholder 7).

The innovative nature of the development and the associated facilities were seen to be key to attracting visitors to the area. Perhaps understandably, the potential of the lagoon to attract visitors to the area was rated more highly by local people than by participants in the investor survey, who tended to live outside of the local area.

### 2.4 Analysis

In order to form opinions and reach considered decisions about energy infrastructure in their local area, it would seem that people find it useful to be able to understand the comparative benefits of different forms of energy production, as well as to engage with wider energy security issues. This suggests that attempts to educate and inform the public should not be the sole responsibility of private companies aiming to develop (renewable) energy infrastructure and that the debate should not remain at local levels. Rather, strategic issues need to be better understood, and debates about developments need to take place at the national level as well as in local areas. People frequently weigh different concerns against each other in the process of forming their opinions, and long-term benefits may often be out-weighed by more immediate concerns. To some extent, the contested nature of environmental issues – in particular climate change (see p.10) – can complicate this further. Again, it would appear that there needs to be more education and understanding amongst the public more generally of the complex evidence and the social, as well as scientific, debate in this area.

The idea of having community benefit dimensions to a development such as TLSB, both in terms of making funds available to local groups and in associated recreational facilities, can be difficult to put into practice because of key differences in needs, wants and preferences across different groups. Landmark developments such as TLSB have the potential to contribute positively to local pride and to positively benefit local communities. However, regeneration projects do not always meet local needs and wants, and public consultation has been shown to have the potential to ensure that plans are as relevant to local people as possible. Whilst the wider associated developments for the TLSB project appear to be relevant to the interests and activities of many local people, for them to be well-used they need to be affordably priced and seen as open to all rather than as a further way of excluding those already facing very real socio-economic difficulties and related uncertainties.

Further, the economic issues facing people in the Swansea Bay area are not shared by all groups, but particularly affect those in poorer neighbourhoods and in lower-paid, lower-skilled work. Many of these issues are shared by others across the UK and hence cannot necessarily be considered as being solely ‘local’ in nature. A key local issue, already highlighted, is the lack of diversity within the local economy, and the concentration of work in particular kinds of service sector role, especially in Swansea. The TLSB development has the potential and, perhaps crucially, the ambition, to reinvigorate local industry and to build on existing skills and capacities to develop manufacturing and technology in the local area. For example, this has been mentioned explicitly by TLSB in
relation to the tidal turbines that will be used in the lagoon. A key challenge will be to ensure that the non-service sector work generated by the construction phase of the tidal lagoon will be sustainable beyond construction to provide ongoing work for local people. Another challenge will be to ensure that there are adequate skills available locally to fulfil these roles, and/or opportunities for people to learn them. This is something to which TLSB are seemingly very committed as a company.

2.5 Key Findings

- TLSB have been successful in engaging with the local social, environmental and economic contexts in developing their vision for the tidal lagoon development. They have demonstrated the importance of understanding the idiosyncrasies of local areas in their consultation, rather than employing more generic engagement strategies.

- In order for people to make informed decisions about energy infrastructure developments, it is vital for the public to understand wider issues of energy security and the comparative benefits of different forms of energy generation. Localised decisions about energy infrastructure could usefully be linked to a broader national debate to enable a more coherent, strategic approach for the UK as a whole.

- There is a need for greater public knowledge and understanding of relevant issues relating to energy options and environmental change. Again it would be useful for mechanisms to achieve this to operate at national levels.

- TLSB’s vision for the recreational and leisure facilities associated with the lagoon are of varying relevance to local people, reflecting the broad range of social groups in the Swansea Bay area. For these facilities to be well-used, it is important for them to be accessible and inclusive to all groups.

- TLSB’s potential to offer local employment in non-service sector work is seen by local people as a key benefit of the development. It is to be hoped that such work continues to be available after the construction phase, and that TLSB’s ambition to reinvigorate local industry, and to contribute to the development of a green economy in the area, is fully realised.
Section Three: Community Share

3.1 Background

During June 2013, a community share option was launched that enabled people to purchase relatively low-cost shares in TLSB for a limited period. This community share option was open to people throughout the UK. The official launch of the community shares was held at the National Waterfront Museum. This was a major event hosted by TLSB, and numerous people that we had met previously during the course of our research (e.g. local Baptist minister, artists, politicians, councillors, business people, the harbour master) were present, along with local press. Whilst canapés and drinks were provided, the model of the lagoon located in the Bay was there for people to look at.

Prior to the launch, there had been a varied response to the idea of the community share option. Some of the stakeholders we interviewed were positive about the opportunity:

*Environmentalists want a stake into it, and anyone with a financial head will see the financial benefit. Interest rates compared to bank rates are very good, any return above that would be welcomed. It does take some financial knowledge. But people that have several thousand just sitting in the bank, especially if they’re pensioners, are well aware of the benefits, and they see them with their solar panels.* (Stakeholder 2)

*Think it’s an excellent option for people to have – I don’t know the take-up, but I would be interested in it myself.* (Stakeholder 3)

Others expressed doubt about whether or not local people would have sufficient money to invest in the scheme, and one stated that:

*I don’t know [how likely it is people will invest], I want gently to encourage, but to remind people it’s “don’t invest what you can’t afford to lose”* (Stakeholder 6)

Another expressed misgivings about the level of risk involved, and the potential impact of people losing their investment:

*I just hope nothing goes wrong, because if people lose money…it could certainly harm the industry. There would be repercussions.* (Stakeholder 11)

Some of the local people we spoke to were “disappointed” in the scheme, because they felt that the price of the community shares, whilst much lower than usual, remained nevertheless “out of my range” (attendee at consultation event).

3.2 Who invested?

Our online investor survey was completed by 60 respondents (representing a 29% response rate). The demographics of our respondents provides some insight into the characteristics of investors in the TLSB development. A large majority (83%) of survey respondents were male, and most were from older age groups, with over a third (38%) aged over 65. Only 8% were aged between 18 and 35, or between 36 and 45. Over half (58%) of those responding to the investor survey lived in England, whilst 30% were normally resident in the Swansea Bay area and 8% lived elsewhere in Wales. One respondent lived in Northern Ireland and one in Scotland. A significantly large overall majority (90%) indicated that they had other investments aside from their TLSB investment, although
there was some considerable variation according to geographical location, with proportions varying from 80% of those living elsewhere in Wales (i.e. outside of Swansea Bay), compared to 83% of those living in Swansea Bay, and 94% of those living in England.

The jobs in which respondents were employed included a number that could be seen as directly related in some way to the TLSB development, such as jobs in finance and economics (e.g. credit analyst, independent financial adviser, accountant) and those in environmental or engineering sectors (e.g. water and environment consultant, electrical engineer). However, investors also include those from medical professions; IT; farming; and there was one vicar. The majority who were in paid employment were employed in professional roles. The survey responses suggested that investors in the TLSB development tended to be more concerned about environmental issues than average. A fairly high proportion (38%) belonged to a network, group or organisation relating to climate change or environmental issues. This is a higher proportion than is the case across the UK population as a whole, for example membership of Friends of the Earth members represents around 3% of the UK population according to their own 2008 figures, whilst RSPB members represent about 2% of the UK population. Furthermore, over half of our respondents (55%) indicated that they felt climate change was a ‘very significant’ issue, and one quarter that it was ‘quite significant’. This compares to 19% of respondents in recent Department of Energy and Climate Change (DECC) research who reported being “very concerned” about climate change (DECC 2013 Wave 1: 2).

3.3 Motivations for investment

Whilst definitions of ‘green’ or ‘socially responsible’ investment tend to vary, and can be difficult to pin down, we can broadly define this kind of investment as involving the integration of:

“…certain kinds of non-financial concerns – variously called ethical, social, environmental or corporate governance criteria – in the otherwise strictly financials driven investment process” (Sandberg et al. 2008: 519)

Respondents to our survey were asked to explain their primary reason for investing in the TLSB development, and the results included a range of different motivations. There was rarely a single motivating factor influencing people’s decision to invest, but rather several different elements tended to be spoken about together. Many respondents noted their concern about climate change, and environmental issues more generally, as their main reason for investment, sometimes linking this to their children’s or grandchildren’s futures. One person said, “I believe the climate scientists, and we need to get a move on with alternative energy.”

The idea that the investment opportunity enables individuals to “put my money where my mouth is” suggests that people are motivated to invest as they “want to see it happen”. Such a sentiment echoes those expressed during the public consultation events we observed and in our stakeholder interviews. One investor survey respondent highlighted the importance of investment being used for “public as well as private good”, and stressed “investing in what one believes in”. There was also an indication that people wanted to feel “a part of” something they believed to be a cutting edge and “worthwhile” project.
As might be expected, a number of respondents raised the possible financial benefits of investing in the TLSB development, although this was actually mentioned less often than the perceived environmental benefits as the primary motivation for investment. The two were also frequently connected and thus spoken about together. For example, one person regarded the TLSB development as providing an opportunity for “financial gain with an environmental benefit”.

The potential return on the investment was mentioned more frequently as an ‘Other’ reason for investing in the project, rather than being cited as the main reason. Three people spoke about the fact that the tax relief on investment provided by the Enterprise Investment Scheme (EIS) helped to reassure them about their investment, whilst one referred to a lack of significant opposition to the development as a contributory factor. It was generally felt that there was a “credible business case” for the tidal lagoon, and one person specifically mentioned the TLSB management team as lending the project credibility. Two people mentioned Mark Shorrock by name, citing his personal and professional reputation and approach as an important contributory factor in their decision to invest. Respondents tended to be complimentary about the “well-researched” project and the high quality of the presentations and reports that they had seen.

Respondents ranked the key benefits of the project from a list that we provided, with most agreeing that increasing the amount of renewable energy nationally and providing a reliable and predictable source of energy were top priorities. This was closely followed by the opportunity to demonstrate innovation. Many of the more localised outcomes (e.g. jobs, tourism, local pride) were less highly rated by the investor survey respondents, although they were still seen as important dimensions of the overall development by most. As such, a key driver for investment in the project was the perceived need to develop sustainable and predictable sources of energy for the future, both to address environmental concerns and energy security. As was the case in our ethnographic fieldwork, there were several favourable comparisons made between tidal energy and other forms of energy production, whether renewable (e.g. barrage, wind or solar) or not (e.g. nuclear). One respondent stated that “tidal is the best sustainable energy source”, whilst (as already highlighted on p.9) another said that they “much prefer this sort of solution to wind farms”.

Another suggested that:

“We need to harness all forms of sea power that we can, but a tidal lagoon avoids the perceived difficulties of the Severn Barrage; addresses the Achilles heel of solar and wind – unpredictability; and can be done quickly”

However, a small number of respondents spoke about their general “interest in renewable energy” and did not indicate that they preferred tidal power to other renewables. Some people expressed their interest specifically in the technology and design of the lagoon, which was described as “exciting” and there is clearly an appreciation of, and significance attached to, the technological innovation involved in the proposed TLSB development.

3.4 Key Findings

- Many of those who invested in TLSB had a strong interest in environmental issues and renewable energy, and were keen to be involved in supporting an innovative development which would contribute to energy security on a national level.
• The community share offer was successful in attracting some people who lived in the Swansea Bay area, though most lived in England. The majority of shareholders already owned shares in other companies, suggesting that the community share offer did not necessarily encourage new investors to buy shares.

• When speaking about their motivations to invest, people tended to balance profit with ethical or 'green' benefits, or to consider profit as a secondary consideration.

• The most significant benefits of the development were seen by investors to relate to broader environmental and technological benefits, rather than to the local area.
Section Four: Towards Community Resilience

As mentioned at the start of this report, the first year of our research has been the ‘data-gathering’ phase and has followed the public consultation process for the proposed Tidal Lagoon Swansea Bay (TLSB) development. This has been motivated by a desire to explore a range of related issues around community engagement, and the availability of community shares as an ethical investment in renewable energy developments. Our over-arching aim is to understand better the contribution that these might be able to make to an understanding of ‘community resilience’.

Our initial research into this concept has raised a number of social, economic and political complexities that need to be unravelled and then re-tied if ‘community resilience’ is to become a meaningful and policy-relevant idea. Indeed, one of our concerns at the outset of our two-year project is that ‘community resilience’ has emerged with some regularity in local, regional and national policy documents, seemingly with little attempt to state precisely what this might mean in practice.

At times, it is cited alongside the Coalition Government’s ‘Big Society’ agenda, either as an extension or attempted re-narration of the idea of empowering local communities through a transfer of social, economic and political power. On other occasions, it is offered as a way of justifying the further withdrawal of state and local authority investment, with communities identified as ‘coping’ with a heady mix of risks, resources, and responsibilities.

The second-year of our research project is the ‘analytical’ phase and will involve an in-depth review of the data gathered and presented throughout this report. Nevertheless, at this mid-point stage of the project, there are a number of key challenges for the next phase of our research to address.

4.1 Defining ‘community resilience’

One of the principal challenges ahead is to develop a meaningful definition of ‘community resilience’. Both are “contested concepts”, in the sense that there is no single, clear and agreed understanding of either term. ‘Communities’ can be geo-spatially located, or they can exist in mobile or virtual networks. ‘Communities’ can have shared or competing interests, and may or may not identify as being part of a community.

One of the important findings of our research so far has been the strong sense of local pride felt by many of those we have encountered. There appears to be a clear sense of ‘community’ in the traditional sense of an attachment to people and place in a local (geographic) area. Do ‘resilient’ communities need to have this sense of shared attachment?

‘Resilience’ is also a contested term, as are many ideas transferred from natural science into social science. For example, one can test the ‘physical’ resilience of an object or material by applying sufficient (external) pressure to cause a structural break or ‘snap’. It is sincerely hoped that communities, however defined, will not be subject to the same experience of sufficient (external) pressure to test at what point they may cease to ‘cope’ and instead start to ‘break’ or ‘snap’.

What appears to be intended by the concept of ‘community resilience’ is a desire to overcome various forms of social exclusion, to reduce vulnerability amongst under-resourced groups, and to enhance cohesion and a sense of...
belonging to something over and above the individual. Defined in this way, developments such as TLSB can be seen to play an important role, in providing a space for local people to come together and meet socially (e.g. the proposed leisure and recreational facilities), in providing social and economic opportunities to a local area, and in making far more explicit the interdependence of individuals upon each other and their natural environment – especially when this is a clear source of local pride.

Anticipating this conceptual work, we asked respondents at various stages throughout the first year of our project what the idea of ‘community resilience’ means to them. The following are typical of the responses we received:

My view is that it’s about having a stable population, with extended family and friends nearby, and about acting as a community as opposed to in more affluent areas, where there are more transient residents, for example university students, with a very limited interest in the local community. It’s about investment in your local area (Stakeholder 1)

[I think] it comes from a culture of people having to look after their own, to a certain extent, that spirit still continues, that eventually you sort of go through a phase of waiting for something to happen to help you, then realising it isn’t going to, therefore we have to put this together ourselves. It can happen anywhere, but particularly amongst those with experiences of difficulty in the past. Again it’s the rallying cry, “This is what we do…we’ve done this before, we’ll do it again”. For example, if you think of the North American natives - European settlers go there and they introduce a new disease, and they have no resistance or knowledge of how to deal with it. It’s the same sort of thing, in communities if something completely new is thrown in, it can split and destroy a community, but if the community is able to deal with something through past experience, then they’re much stronger and more able to come through (Stakeholder 3).

I suppose it’s about a community being able to support itself in hard times (Stakeholder 4).

And finally,

Resilience is very important for communities, for example if something had happened… when we were talking the other night, like an earthquake or explosion or terrorist incident, the group of us who were there, we are automatically then a community. And we might all of a sudden be isolated, so how do we sort it? This goes for any community. And I think it comes back again to the class system. Some people have no interest, and expect to dial 999 and someone will come. But actually if you do that, no-one will come in that circumstance [of an earthquake or explosion]. Then your resilience falls onto the community. If you’re a good neighbour you go and check on neighbours. But sadly it comes back to the class system, where people have no interest (Stakeholder 10).

As is clear, there are notable consistencies and inconsistencies within and across these responses to the challenge of defining what might be meant by ‘community resilience’. We intend to utilising all of the data we have gathered to refine the current understanding of ‘community resilience’ still further.

4.2 Emerging Questions

- How is the concept of ‘community resilience’ understood and employed across different areas of policy and practice?
• How do definitions of ‘community resilience’ relate to everyday experiences and understandings?
• What can we define as being characteristics of resilient communities, and are these generalizable across different geo-spatial location, different types of groups, and different risks?
• How can we theorise resilience in a way that engages effectively with the distribution of vulnerability and risk?
• In what ways can we understand the popularity of the concept of resilience in relation to the politicised context of neoliberalism?
• What roles do the government, the private sector and the third sector have to play in creating ‘community resilience’?
• To what extent can ‘community resilience’ be created by external factors, and to what extent is it an internal dimension with specific historical and cultural characteristics?

The results of this ‘analysis’ phase of our research will be presented in our Final Report, which we expect to be published in December 2014.
“I happen to believe that questions are hardly ever wrong; it is the answers that might be so. I also believe, though, that refraining from questioning is the worst answer of all”

Zygmunt Bauman