



CITY & COUNTY OF SWANSEA

WRITTEN REPRESENTATIONS

Tidal Lagoon Swansea Bay Project

PINS REFERENCE: EN010049

CCS REFERENCE: 2013/1017

Economic Regeneration & Planning
Civic Centre
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- 1.1 In principle, as set out in the City and County of Swansea' adopted Unitary Development Plan (UDP), the Council supports Welsh Government's policy for strengthening renewable energy production, and recognises the long-term benefits to be derived from the development of renewable energy sources. It is recognised that renewable energy technologies can have a positive impact on local communities and the local economy in terms of monetary savings and in generating and underpinning economic development within the County. There are however concerns about the impacts that some renewable energy technologies can have on the landscape, local communities, natural heritage and historic environment, nearby land uses and activities. *The Council therefore seeks to achieve a balance between supporting renewable energy proposals whilst avoiding significant damage to the environment and its key assets.* Favourable consideration will therefore be given to developments that produce or use renewable energy where such proposals conform with UDP policies and are in scale and character with their surroundings.
- 1.2 It is anticipated that the Project will produce some 400 GWh net of electricity on an annual basis, which is enough to power around 121,000 homes.
- 1.3 In principle therefore it is considered that the tidal lagoon proposal would make a significant contribution to renewable electricity generation, using a sustainable natural resource.
- 1.4 In addition to generating electricity, the project also aims to provide visitor facilities and other amenities including art, education, mariculture and sporting/recreational facilities. The seawall is expected to be open to the public during daylight hours for walking, running, cycling etc, though access will be controlled in extreme weather.
- 1.5 In strategic terms therefore the tidal lagoon has potential to create a significant visitor attraction as well as an important local public realm resource.
- 1.6 However, Swansea relies on the character of the Bay as a major asset essential to its positive image and quality of life.
- 1.7 The focus for the Council's regeneration strategies, UDP Policy and adopted Supplementary Guidance is to make the most of this key asset and make Swansea a vibrant, exciting, attractive, sustainable, cultured Waterfront City. Proposals which would compromise these objectives will not be supported.
- 1.8 The development itself is of a very large scale protruding 3.5km into Swansea Bay and effectively dividing it into two. The lagoon seawall would form a strong dark horizontal structure extending a long distance into the Bay, closing down its apparent width, restricting views and disrupting the overall iconic sweep of the Bay.
- 1.9 The seawall structure appears to be dictated almost entirely by engineering and cost considerations, with design finesse and intervention primarily having effect at a very local level along the inside edge of the structure, in associated buildings and on the coastal edge of the lagoon. These elements are generally positive based on the indicative designs, but have limited mitigating effects on the overall character of the structure when viewed from outside the lagoon.

- 1.10 The offshore building would be highly noticeable and would form a built focus in the middle of the bay which, with the sea wall, would compete with Mumbles as a visual focus. Its final design is therefore very important as it will help define the quality of the project in many sensitive views.
- 1.11 Within this context, it is the view of CCS (and its landscape consultant) that the proposal will result in major adverse significant effects for Mumbles and from key representative locations along the seafront promenade, as well as Swansea Port, resulting in substantial change to the character of these areas. Such major adverse significant effects are taken to represent key factors in the decision making process or at least important considerations.
- 1.12 Major/moderate adverse significant effects are also expected on the Swansea Bay seascape unit, the Swansea landscape character area, representative viewpoints at St Thomas, The Knab (Mumbles), Mumbles Hill Nature Reserve, Kilvey Hill, Swansea Bay, Townhill, Wales Coast Path and National Cycle Route (NCN) 4
- 1.13 Major/moderate adverse significant effects are taken to represent important considerations at a regional or district scale and, if adverse, as is the case in this instance, are potential concerns to the project depending upon the relative importance attached to the issue during the decision making process.
- 1.14 There are also a number of moderate adverse effects which are taken to represent effects which, while important at a local scale if adverse, may not be key decision making issues.
- 1.15 It is considered therefore that the proposal will have significantly adverse seascape, landscape and visual impacts on CCS and its key asset and taken in isolation would conflict with UDP Policies EV1, EV2 and R11(ii).
- 1.16 Given the extent of the impacts and the sensitivities of the receptors, it is considered that significant weight should be afforded to these identified impacts in the decision making process.
- 1.17 It is recognised however, that for a renewable energy scheme of the nature proposed, adverse seascape, landscape and visual impacts are somewhat inevitable. In this instance, however, it is the highly sensitive location for such a scheme that is considered critical.
- 1.18 It is also recognised that these impacts need to be considered in the planning balance with the positive benefits of the development in terms of renewable energy generation and leisure, sport and environmental improvements to the coastal edge within the lagoon. It is also evident that the project will have significant socio-economic impacts during the construction phase with wider, more modest impacts secured for the long term.
- 1.19 On the leisure related points, the proposals for public realm, public art and associated community provisions such as sailing centre and education facilities, if delivered and sustainable, would make a significant contribution to improved recreational and tourism facilities within in Swansea Bay which capitalise on the seafront aspect and contribute towards the regeneration of the Bay, as envisaged by UDP Policies HC31, EC15 and EC16.

- 1.20 This however should be balanced against the significant adverse impacts on the City's existing tourist and recreational assets within the Bay, not least from the above stated adverse seascape, landscape and visual impacts on the Maritime Quarter, Tawe Riverside Basin, the seafront promenade and Mumbles. In addition there is a significant possibility that the lagoon would result in increased deposition of mud along large parts of the Bay which would also impair its visual and recreational value.
- 1.21 The lack of a pedestrian and cycle linkage to the west to connect to the City Centre via the SA1 regeneration area is a significant issue to CCS. Whilst the reasons for this omission are understood, this is considered to be a fundamental missed opportunity to provide a sustainable direct and car free link from the City Centre and SA1, along the dock edge to the emerging Swansea University Bay Campus and onward links to the Wales Coastal Path and Sustrans cycle routes, in accordance with the Council's wider ongoing waterfront regeneration objectives.
- 1.22 This amounts to an integral component in the delivery of 'world class' public realm. Its omission from the scheme has severe implications in terms of sustainable connectivity, resulting in the lagoon essentially becoming a destination rather than part of the City.
- 1.23 The impact on the operation of the existing Swansea Marina is also a significant material consideration. Problems with potential navigational hazards created by the lagoon and the increased siltation of impounded Waters, the River Tawe Estuary Channel and Swansea Bay could lead to a general perception that Swansea Marina is a difficult place to get in and out of. If this perception were to occur, it could result in a loss of Marina custom and could affect the viability of Swansea Marina, Swansea Yacht and Sub Aqua Club, the proposed SA1 Marina development and the local marine businesses whose trade relies on boat owners keeping the boats in Swansea. These are all integral aspects to the success of Swansea's Waterfront City aspirations.
- 1.24 Furthermore, whilst the lagoon would provide additional water recreation features, it does take away 11.5sq km of bay currently available for such purposes. By taking up such a large area, the Bay may lose its appeal for activities such as sailing, windsurfing, kayaking and paddle boarding etc.
- 1.25 The Council's Pollution Control & Public Health Division has identified the effect of the tidal lagoon on bathing water quality and in particular, the potential loss of the current prediction method, which is used to protect public health on an otherwise failing beach as the most important issue affecting the Division.
- 1.26 CCS regards the compliance of Swansea Bay as a very important issue. This is for economic regeneration reasons, for legal reasons, for socio-political reasons as well as the fundamental reason behind the revised bathing water Directive (2006/7/EC) – that is to protect public health.

- 1.27 CCS has been able to access over €4 million of public money to deliver a predict and protect model which has been successfully used for Swansea Bay and is successfully using the 'discounting rules' in the Directive to change its current status from 'Poor' to 'Sufficient'. This is of major significance to the Council as it is promoted as the 'waterfront city' and much of the regeneration efforts over the last 20 years have been to refocus on the Bay and the Maritime Quarter. Without this approach to the revised Directive, the Council would have to publicly sign Swansea Bay as a failing beach with very obvious swimming prohibition signs and similar information on the Internet by 2016. Apart from these important concerns, there would also be the potential for infraction proceedings for the continued failure of Swansea Bay as a designated bathing water under the Directive.
- 1.28 Within this context it is considered likely and highly probable, that the proposed lagoon would significantly change the hydrodynamic behaviour of water flows within Swansea Bay. This would compromise the utility of any hydrodynamic model calibration data collected to date. Thus any future hydrodynamic model build needed to drive a Storm Impact modelling approach would need to replicate the extensive calibration data acquisition, paralleling the Smart Coast programme scope and costs to ensure that the hydrodynamic model produced was equivalent to the present models produced for Dwr Cymru/Welsh Water.
- 1.29 If this was not done, and most importantly, appropriate funds not committed (i.e. it is likely that similar to the Smart Coasts £1.5m plus inflation would be needed), any hydrodynamic modelling used to underpin the storm impact approach would prove insufficiently precise in predicting faecal indicator organism concentrations at the Swansea Bay designated sampling point (DSP).
- 1.30 It is therefore the Council's position that unless there is a paradigm shift in the science around this subject, CCS would expect any consent for the tidal lagoon to require sufficient fieldwork (i.e. comparable to the presently available model calibration resource) to be undertaken at the applicant's expense so that a high quality predictive statistical model can be maintained with the same degree of explained variance as the current model. This is critical to the application's compliance with UDP Policies EV34 and HC31.
- 1.31 Furthermore, Swansea Bay is of significant European, national and local importance for its coastal and marine wildlife. This is reflected in its part designation as a Wildlife Corridor, and Site of Importance for Nature Conservation (SINC), whilst over half of Swansea beach is a Site of Special Scientific Interest (SSSI). The Bay supports a wide variety of important habitats and species, including sand dunes, honeycomb worm reefs, harbour porpoise, grey seal, sanderling, ringed plover and small -flowered catchfly. Its rich biodiversity, together with its tranquillity, iconic landscape character, and ecosystem functions make it one of Swansea's most important and distinctive assets.
- 1.32 From an ecological perspective the key areas of concern regarding the possible impact of the lagoon on biodiversity in the Bay are the inadequacy of the baseline ecological data, and subsequent uncertainty regarding the likely ecological impacts of the lagoon development, and the robustness of the mitigation proposed. This uncertainty is further increased due to lack of confidence in the Coastal Processes Sediment Transport and Contamination Baseline Assessment which is also limited due to the inadequacy of the baseline data.

- 1.33 Most of the habitats and species in the Bay are sensitive to changes in the flow of currents, wave structure and sediment deposition. Relatively small changes can lead to extensive long term changes in the quality and distribution of these habitats and species. The predicted likely effects of increased sand and mud deposition and increased wave height /storm damage in parts of the Bay could have significant detrimental effects in particular on Blackpill SSSI and the sand dune and honeycomb worm reef habitats and species. Further work/research is required to ensure that all potential adverse impacts on biodiversity are fully considered and mitigation agreed.
- 1.34 CCS is also concerned about the potential introduction of and increases in invasive non native terrestrial and marine species eg *Spartina anglica*, and lack of suitable mitigation proposals or a biosecurity strategy.
- 1.35 It is considered that there is a need for more detailed plans for long term monitoring of changes and impacts on biodiversity and a more robust Habitats Regulations Assessment.
- 1.36 CCS is further concerned about the likely increase in wind blown sand and increased visitor pressure within the Bay which will create additional management responsibilities and costs. It is considered that a mitigation scheme needs to be agreed to address this.
- 1.37 CCS consider that the flood risk aspects of the application have not been adequately considered in Swansea Bay in general or for the various locations identified as suffering detriment as a direct consequence of the proposals and therefore the application does not meet the requirements of TAN15: Development and Flood Risk and UDP Policies EV2(ix) and EV36.
- 1.38 A residual area of concern for CCS is that the proposed access arrangements to the proposed lagoon will significantly increase traffic movements and general disturbance in close proximity to the rear of residential properties in Bevan's Row. This would run contrary to UDP Policy EV1(iii) and Policy R11(iii).
- 1.39 CCS is satisfied that matters relating to contamination, air quality and highways can be satisfactorily dealt with by way of legal agreement (including financial contributions) and the requirements of the DCO, in the manner set out in its LIR.
- 1.40 On the basis of the above stated uncertainties and issues, it is not possible for CCS to arrive at a fully informed position as to whether the benefits of the scheme outweigh the negative impacts as the full extent of the negative impacts are unknown as is the potential to mitigate such impacts and the commitment of the applicant to the same.