

## **Introduction**

Enclosed is a selection of information that has been compiled by concerned Bute residents, regarding the imminent submission of a planning proposal for the erection of three wind turbines on farmland at Ascog Farm.

We are all mindful of the need for 'green' energy but in this instance we are concerned that it will come at the cost of the destruction of our social, historic, architectural and environmental heritage. If granted, this industrial, and potentially, hugely damaging planning proposal, would have a most detrimental and irreversible effect upon this wonderful island and its residents.

Although at present there is only a 50 meter monitoring mast on the site, it can be seen from as far away as Wemyss Bay, at a distance of ten kilometres. If the plan gained approval it would be for three 74 meter turbines, (Scott Monument in Edinburgh only 61.1 high) half as high again as the mast, clearly considerably much wider, and contrary to original statements four to five times the height of trees on the site.

As can be seen from the enclosed information a number of properties are already very close to the mast, but because of generating issues the turbines would have to be between 200 and 300 meters apart resulting in a potential separation distance of less than 500 meters from many more homes and businesses nearby, as well as being a highly visible industrial intrusion for hundreds more family homes on the island, and, of course, every potential visitor.

As can be seen from the enclosed maps, and within a short distance from the mast, are also many outstanding Listed Buildings such as Balmory Hall a Grade A Listed Victorian mansion, the famous Ascog Hall and Fernery, Southpark House, two Landmark Trust properties plus many more listed buildings, and a short distance from Mount Stuart House.

In complete contrast to all of this potential visual destruction, environmental degradation, and the daily disturbance for our residents, the applicants themselves will encounter nothing at all. They do not live on the island, and will only experience the plight of others when they spend time here on occasional visits.

Also to infer that the power generated by such a scheme could in any way result in a significant protection of the planet and cheaper electricity for the local population is at best bogus and highly misleading. This is a commercial proposal with potentially huge financial rewards for the applicants, and the truth may, in fact, point to the exact opposite.

There are huge amounts of CO<sub>2</sub> produced during the initial production, installation and ultimate dismantling of turbines, with the net cost of one unit of energy produced by wind power, many times that of conventional fuels. Rather than cheap or cheaper electricity the whole nation contributes hugely in the form of higher electricity bills for everyone.

At present, The Isle of Bute is an area of outstanding beauty and charm, combined with a rare, peaceful tranquillity. It is a wonderful place to live and to visit, and needs to be developed and protected for all islanders and the generations to follow.

Progress, development and financial viability are essential, but we must all take responsibility to protect the very obvious essence and soul of this remarkable oasis.

The close proximity to homes, the potential damage to tourism, wildlife, and the environmental and health issues are obvious, as is the certainty that many families and their properties would be seriously harmed, and the visual blight of this beautiful area of Scotland guaranteed.

As very concerned residents of Bute we humbly ask all members of the Council to listen to our grave concerns about this potentially damaging proposal.

### **Some of the Main Objections**

- The site is not suitable, it is too close to residential properties, listed buildings, businesses and will effect the health and well being of the people in the area: see contents 1,3,7 and 9.
- It will have a high visual impact with adverse effect on tourism and economy of the island: see contents 2,8 and 10.
- The site is not a preferred site on TZCB survey and is in an area of scenic beauty and green belt and an area of SSI and contravenes the Local Plan for Bute: see contents 3,4 and 7.
- These turbines do not produce the results claimed and cause major problems with flicker, vibration, noise, a reduction in property values, a danger to wildlife in the area and the quality of life of the people round about: see contents 1,3,4,5,6 and 9.
- New recommended distance which was 750 mtrs and now extended to 2km from residential properties. Below are some examples of the distance of some properties from the mast:

Dun Eistein	509 m
Braeside	433 m
Millbank Cottage	656 m
Bogany Farm	451 m
Ardbeg Farm	485 m

- Costs
- Contravention of Scottish Planning Policy Principles as stated by Energy Minister Fergus Ewing 13<sup>th</sup> June 2012 see 6.
- An Independent Technical Report by Professor David M Johnson disputes the applicants claims for efficient energy production. See content 11.

## **Contents**

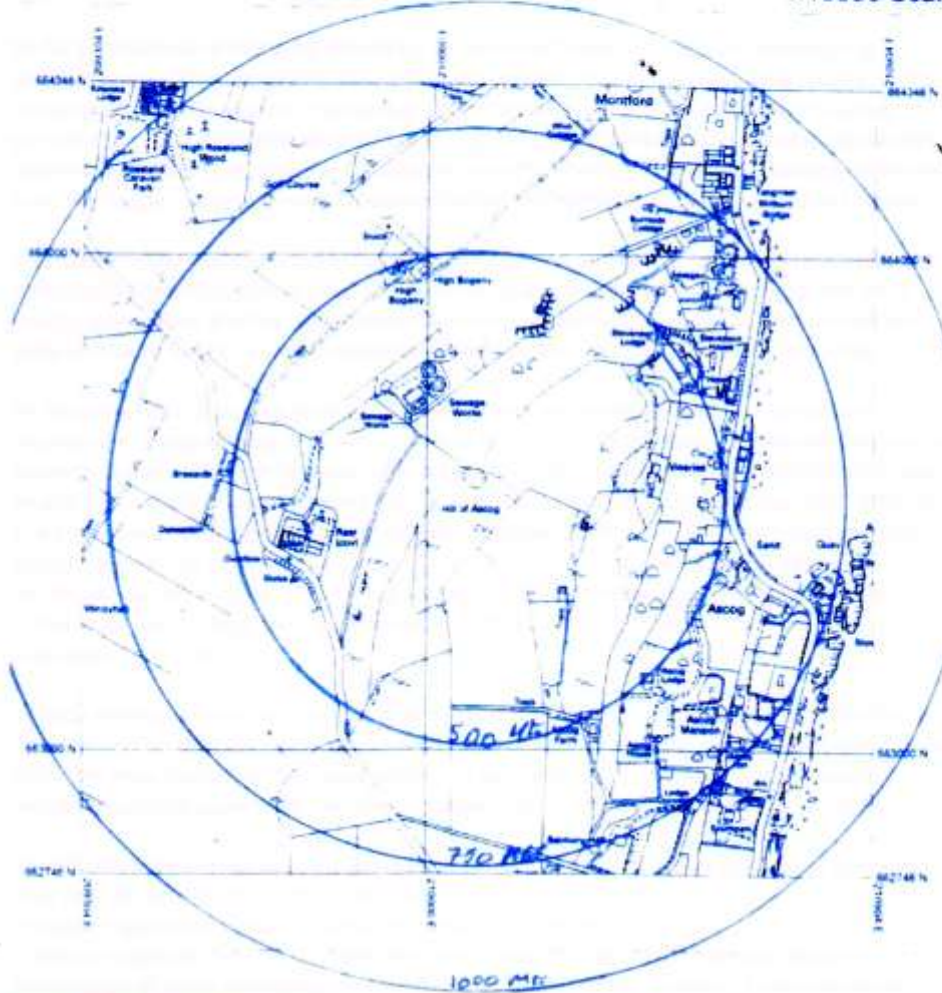
1. Wind turbine and health issues plus appendix A map plus approximate distance from mast to selected properties.
2. Area where wind farm will be highly visible
3. Listed buildings plus Scottish Planning Policy
4. Scottish National Heritage
5. MEP full letter to the Buteman
6. Report on Spittal wind farm planning rejection
7. AECOM map for TZCB wind farm sites NOT INCLUDING ASCOG SITE
8. Three photographs taken from the ferry of the mast
9. Wind turbines, the facts
10. Costs
11. Approximate scale photographs of turbines from the ferry and Barone Road.
12. Independent Technical Report by Professor David M Johnson
13. Guidance for Argyll and Bute Council Landscape Wind Energy Capacity Study
14. The way Forward

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Mapping sourced from  Ordnance Survey

Appendix 1

1:10000 Scale



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The representation of a road, track or path is no evidence of a right of way

The representation of features as lines is no evidence of a property boundary



Supplied By **Dash**  
Serial number: 001029240  
Pier Centre Coordinates: 210104 663546

Residential properties as close as 450 meters from present mast,  
and many properties are within 750 meters from the mast. See map!  
NB. This all goes against the recommended separation distance of 2000 meters!

## Wind Turbines and Health Issues

So far as nearness to domestic dwellings is concerned when planners are considering applications, in the majority of cases it is 'visual impact' that is the overriding consideration rather than 'noise nuisance'. Increasingly there are now reports from around the world of people living near industrial wind turbines, suffering sleep problems (insomnia), headaches, dizziness, unsteadiness, nausea, exhaustion, anxiety, anger, irritability, depression, memory loss, eye problems, problems with concentration and learning, tinnitus (ringing in the ears).

The Government and the wind companies have denied any health risks associated with the noises and vibrations emitted by wind turbines. Acoustic engineers working for the wind energy companies and the Government say that aerodynamic noise produced by turbines pose no risk to health, a view endorsed recently by acousticians at Salford University.

Dr Nina Pierpont, a leading New York paediatrician, has been studying the symptoms displayed by people living near wind turbines in the US, the UK, Italy, Ireland and Canada for more than five years. Her findings have led her to confirm what she has identified as a new health risk, wind turbine syndrome (WTS). This is the disruption or abnormal stimulation of the inner ear's vestibular system by turbine infrasound and low-frequency noise, the most distinctive feature of which is a group of symptoms which she calls visceral vibratory vestibular disturbance, or VVVD. They cause problems ranging from internal pulsation, quivering, nervousness, fear, a compulsion to flee, chest tightness and tachycardia – increased heart rate.

Clinical medical studies are beginning to suggest that sounds that are audible to the human ear may not be the sole cause for concern - even that "infrasound" or "low frequency" noise pollution may represent the major portion of potential health hazards. Such "inaudible" noise pollution is apparently not being analysed by the wind driven turbine industry.

Proofs of evidence produced for several UK Planning Inquiries by Dr Christopher Hanning. BSc, MB, BS, MRCS, LRCP, FRCA, MD, who is Honorary Consultant in Sleep Disorders Medicine to the University Hospitals of Leicester NHS Trust, based at Leicester General Hospital. Concluded that **"In my expert opinion, from my knowledge of sleep physiology and a review of the available research, I have no doubt that wind turbine noise emissions have been clearly associated with sleep disturbances. Further, the evidence now available is quite clear that present noise guidelines are inadequate to protect the sleep of residents living too close to wind turbines"**. He also concluded that **"predicted external turbine noise should not exceed 35dB to avoid disturbance to sleep and 40dB to avoid risks to health. Experience of existing wind farms mandates a setback of at least 1.5km in order to avoid disturbance to sleep"**. He also includes a table in his report in which 17 scientists, engineers, governments and others give their recommended distances between turbines and dwellings; these ranged between 1 km and 2.4 km (average 1.9 km).

## **The Implications of Wind Turbines on Ascog Hill**

The attached map appendix shows the properties within a 500 mts, 750 mts and 1000 mts radius of the proposed site. What is clear that taking a lower figure of distance of 1000 mts there are a very significant number of dwellings including at least four Grade 1 & 2 listed properties.

In Scotland the Government recommends at least 2 kms distance between turbines and dwellings, however this is only a guideline. Increasingly countries such as Denmark, which is Europe's largest wind turbine country, in response to increasing concerns, has lowered allowable wind turbine noise emissions, including stricter regulation on low frequency noise, both outside and inside homes and other facilities and areas, they have also introduced a compensation scheme for those whose properties are deemed to be devalued by the proximity of wind turbines. The State Government of Victoria, Australia, increased set-back distances to a minimum of 2km between a wind turbine and a residence.

Currently a Lords Private Members' Bill has received its second reading and if it becomes law, turbines of the height likely to be proposed for Ascog Hill would require a minimum distance requirement of 1500m.

### **Conclusion**

There is increasing evidence from around the world that wind turbines can cause serious health problems;

Acoustic tests often fail to predict nuisance. It is not until the turbines are up and running that the problems are revealed;

Experience of existing wind farms mandates a setback of at least 1.5km in order to avoid disturbance to sleep.

Tony Harrison (10<sup>th</sup> May 2012)

The wind farm will be highly visible from these areas

Note 1. Mainland

Inverkiip

Wemyssbay

Wemyssbay Caravan Park

Skellmory

Skellmory Golf Course

From the A78 Wemyssbay to Largs road

Big Cumbrae

Small Cumbrae

Most of the ferry crossing between Wemyssbay and Rothesay

Toward

All yachts , pleasure craft and cruise liners sailing past on the Clyde estuary

On Island of Bute

From the B879 Crossbeg towards Ambrosbeg road

West Island Way at Lochend

From entrance to Roseland Chalet park via High Bogany, Loch Ascog to Mid Ascog Farm

From the A844 Hermitage corner towards Ascog Bay

Part of the Moor Road

Rothesay Golf Club

Rothesay Bowling Club

The Riding Centre

Loch Ascog Fishing

Ballachgoy Road

St. Brides Road

Blane Terrace

Prospect Terrace

Havelock Terrace

Inkerman Terrace

Note 1 Cont.

Longhill Terrace

Barone Road

Robertson Drive

Caledonia Walk

Hillview Walk

Waverly Avenue

Bryce Avenue

Auchnacloch Road

And many others

fitted into their surroundings to avoid or minimise visual intrusion and mitigation strategies should be incorporated into development proposals. Applications should be accompanied by information on the extent of the site, type, number and physical scale of structures, the disposition of structures across the lease area, on-shore facilities, ancillary equipment, lighting and noise impact and proposed restoration following cessation of operations.

108. There are a number of regulatory controls covering fish farming in addition to planning permission, including the rights and interests of the Crown Estate as owners of the seabed. The planning system should not duplicate other control regimes such as controlled activities regulation licences from SEPA or fish health, sea lice and containment regulation by Marine Scotland. Planning authorities and applicants should engage with other regulators to improve understanding of relevant requirements. Voluntary Codes of Good Practice have been produced by fish farming stakeholders which address a range of issues outwith planning control such as cage and equipment design, security, management and operational practices. These codes provide the basis for certification of standards and practices put forward in support of planning applications for fish farms.

109. There is potential for conflict between fish farming and local fishing interests, including commercial inshore fishing and recreational fishing. The effects of fish farm development on traditional fishing grounds, salmon netting stations and angling interests should be considered. Other uses of the inshore area, such as recreational use, should also be taken into account when identifying potential development areas and sensitive areas in development plans and when determining planning applications. Fish farming is one of a number of activities excluded under Ministry of Defence (MOD) by-laws on controlled areas that are used by the UK, NATO and allied nations for training purposes. The most significant of these areas are the Dockyard Ports of the Gareloch, Loch Long, Loch Goll and Rosyth. Similar prohibitions also exist at the British Underwater Test and Evaluation Centre and the Rona Noise Range. There are also MOD Danger areas and Exercise areas used for firing from shore, ship and aircraft. Mine laying and mine hunting operations around military facilities on the west coast and the presence of submarine exercise areas constrain the provision of fish farm moorings in some areas. Details of these areas are normally indicated on large scale Admiralty Charts or MOD Practice and Exercise Area (PEXA) charts. The MOD also has statutory safeguarding zones surrounding military facilities on land which extend over estuaries and marine areas.

#### Historic Environment

110. The historic environment is a key part of Scotland's cultural heritage and it enhances national, regional and local distinctiveness, contributing to sustainable economic growth and regeneration. It is of particular importance for supporting the growth of tourism and leisure, and contributes to sustainable development through the energy and material invested in buildings, the scope for adaptation and reuse and the unique quality of historic environments which provide a sense of identity and continuity for communities. Planning authorities can help to safeguard historic assets through development plans and development management decisions. The Scottish Government's policy on the historic environment and guidance on relevant legislation is set out in the Scottish Historic Environment Policy (SHEP). This SPP, the SHEP and the Managing Change in the Historic Environment guidance note series published by Historic Scotland should be taken into account by planning authorities when preparing development plans and determining applications for listed building consent, conservation area consent or planning permission for development which may affect the historic environment<sup>15</sup>. Developers should also take Government policy and guidance on the historic environment into account when forming development proposals. Relevant legislation includes the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997, the Ancient Monuments and Archaeological Areas Act 1979, the Town and Country Planning (Scotland) Act 1997, the Planning etc. (Scotland) Act 2006, the Protection of Wrecks Act 1973<sup>12</sup> and the Protection of Military Remains Act 1986.

111. The historic environment includes ancient monuments, archaeological sites and landscape, historic buildings, townscapes, parks, gardens and designed landscapes and other features. It comprises both statutory and non-statutory designations. The location of historic features in the landscape and the patterns of past use are part of the historic environment. In most cases, the historic environment (excluding archaeology) can accommodate change which is informed and sensitively managed, and can be adapted to accommodate new uses whilst retaining its special character. However, in some cases the importance of the heritage asset is such that change may be difficult or may not be possible. Decisions should be based on a clear understanding of the importance of the heritage assets. Planning authorities should support the best viable use that is compatible with the fabric, setting and character of the historic environment. The aim should be to find a new economic use that is viable over the long term with minimum impact on the special architectural and historic interest of the building or area.

112. Development plans should provide the framework for the protection, conservation and enhancement of all elements of the historic environment to allow the assessment of the impact of proposed development on the historic environment and its setting. Setting is more than the immediate surroundings of a site or building, and may be related to the function or use of a place, or how it was intended to fit into the landscape or townscape, the view from it or how it is seen from around, or areas that are important to the protection of the place, site or building. When preparing development plans or considering development proposals with a potentially significant impact on historic character, planning authorities should consider the capacity of settlements and the surrounding areas to accommodate development without damage to their historic value. Authorities should also consider whether further and more detailed assessment is required to establish the capacity of an area for and its sensitivity to change. Relevant assessments include conservation area appraisals, townscape audits and landscape character assessments. When significant elements of the historic environment are likely to be affected by development proposals, developers should take the preservation of this significance into account in their proposals. The amount of information and analysis required should relate in scale to the possible impact on the historic environment.

#### Listed Buildings

113. Listed buildings are buildings of special architectural or historic interest. The term building includes structures such as walls and bridges. Listing covers the whole of a building including its interior and any ancillary structures within its curtilage that were constructed before 1 July 1948. Works which will alter or extend a listed building in a way which would affect its character or its setting and demolition works require listed building consent. Works requiring listed building consent may also require planning permission. More information on listed building consent is provided in SHEP. The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 requires planning authorities, when determining applications for planning permission or listed building consent, to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. Change to a listed building should be managed to protect its special interest while enabling it to remain in active use. The layout, design, materials, scale, siting and use of any development which will affect a listed building or its setting should be appropriate to the character and appearance of the building and setting. There is a presumption against demolition or other works that will adversely affect a listed building or its setting.

114. Enabling development may be acceptable where it can be shown to be the only means of retaining a listed building. The resulting development should be of a high design quality, protect the listed building and its setting and be the minimum necessary to enable its conservation and re-use. The new development should be designed to retain and enhance the special interest, character and setting of the listed building.



**Conservation Areas**

115. Conservation areas are areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance. Their designation provides the basis for the positive management of an area. A proposed development that would have a neutral effect on the character or appearance of a conservation area (i.e. does no harm) should be treated as one which preserves that character or appearance. The design, materials, scale and siting of new development within a conservation area, and development outwith the conservation area that will impact on its appearance, character or setting, should be appropriate to the character and setting of the conservation area. Planning permission should normally be refused for development, including demolition, within a conservation area that fails to preserve or enhance the character or appearance of the area.

116. Conservation area consent is required for the demolition of unlisted buildings in conservation areas. The merits of the building and its contribution to the character and appearance of the conservation area are key considerations when assessing demolition proposals. Where demolition is considered acceptable, careful consideration should be given to the design and quality of the replacement scheme. More information on conservation area consent is provided in SHEP.

117. Planning authorities are encouraged to undertake conservation area appraisals. Appraisals can assist owners and developers in formulating proposals and should inform development plans and development management decisions. Where necessary planning authorities can put in place Article 4 Directions to increase the protection of an area of historic value. Planning authorities also have powers to preserve trees in conservation areas in the interests of amenity. PAN 71 Conservation Area Management provides good practice for managing change, sets out a checklist for appraising conservation areas and provides advice on funding and implementation.

**Scheduled Monuments and Designated Wrecks**

118. Scheduled monuments are archaeological sites, buildings or structures of national or international importance. The purpose of scheduling is to secure the long term legal protection of the monument in the national interest, in-situ and as far as possible in its existing state and within an appropriate setting. Scheduled monument consent is required for any works that would demolish, destroy, damage, remove, repair, alter or add to the monument. Where works requiring planning permission affect a scheduled monument, the protection of the monument and its setting are important considerations. Development which will have an adverse effect on a scheduled monument or the integrity of its setting should not be permitted unless there are exceptional circumstances. More information on scheduled monuments is provided in SHEP.

119. Where planning control extends offshore, planning authorities should ensure that development will not adversely affect the integrity and setting of scheduled wreck sites or wrecks designated under the Protection of Wrecks Act 1973 or the Protection of Military Remains Act 1986.

**World Heritage Sites**

120. World Heritage Sites are inscribed by UNESCO as cultural and/or natural heritage sites which are of outstanding universal value. Planning authorities should protect World Heritage Sites and their settings from inappropriate development, including relevant policies in the development plan and setting out the factors that will be taken into account when deciding applications for development proposals which may impact on a world heritage site. The immediate setting of a World Heritage Site, important views, and other areas which are important to the site and its protection, should be protected from inappropriate development. The setting of a World Heritage Site is the area around it in which change or development may have an adverse impact on the World Heritage Site.

121. A statement of outstanding universal value is adopted by UNESCO when a site is inscribed, which provides the basis for the effective protection and management of World Heritage Sites. World heritage site management plans should be prepared which summarise the significance of the site and set policies for the protection and enhancement of the site. Planning authorities should consider incorporating the management plan into the development plan as supplementary guidance.

**Gardens and Designed Landscapes**

122. An Inventory of Gardens and Designed Landscapes of national importance is compiled by Historic Scotland. Planning authorities have a role in protecting, preserving and enhancing gardens and designed landscapes included in the current inventory and gardens and designed landscapes of regional and local importance. Relevant policies should be included in local development plans. The effect of a proposed development on a garden or designed landscape should be a consideration in decisions on planning applications. Change should be managed to ensure that the significant elements justifying designation are protected or enhanced.

**Archaeology**

123. Archaeological sites and monuments are an important, finite and non-renewable resource and should be protected and preserved in situ wherever feasible. The presence and potential presence of archaeological assets should be considered by planning authorities when allocating sites in the development plan and when making decisions on planning applications. Where preservation in-situ is not possible planning authorities should, through the use of conditions or a legal agreement, ensure that developers undertake appropriate excavation, recording, analysis, publication and archiving before and/or during development. If archaeological discoveries are made during any development, a professional archaeologist should be given access to inspect and record them.

**Other Historic Environment Interests**

*eg: Acoy Ferry*

124. There is a range of non-designated historic assets and areas of historical interest, including battlefields, historic landscapes, other gardens and designed landscapes, woodlands and routes such as drove roads which do not have statutory protection. These resources are, however, an important part of Scotland's heritage and planning authorities should protect and preserve significant resources as far as possible, in-situ wherever feasible. The effect of new development on these resources should be considered by planning authorities when allocating sites in the development plan and when making decisions on planning applications. Planning authorities should ensure they have access to a Sites and Monuments Record and/or a Historic Environment Record that contains necessary information about known historic environment features and finds in their area.

**Landscape and Natural Heritage**

125. Scotland's landscape and natural heritage are internationally renowned and important, underpinning significant industries such as the food, drink and tourism industries, and are a key component of the high environmental quality which makes Scotland an attractive place in which to live, do business and invest. Improving the natural environment and the sustainable use and enjoyment of it is one of the Government's national outcomes.

# List of listed buildings in Kingarth, Argyll and Bute

From Wikipedia, the free encyclopedia

This is a list of listed buildings in the parish of Kingarth in Argyll and Bute, Scotland.

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- 2 Key
- 3 See also
- 4 References

## List

HBnum	Name	Notes	Coordinates	Category	Image
44990 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44990">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44990</a> )	Ascog, Millbank House Including Boundary Wall, Gatepiers, Gates And Terrace Fence		<span><span><span><span><span>55°49′54″N</span> <span>5°01′34″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.83167°N 5.02583°W</span><span><span>﻿</span> / <span>55.83167; -5.02583</span></span></span></span></span>	B	
44994 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44994">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44994</a> )	Ascog, The Old Manse Including Boundary Wall And Gatepiers		<span><span><span><span><span>55°49′33″N</span> <span>5°01′28″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.82583°N 5.02444°W</span><span><span>﻿</span> / <span>55.82583; -5.02444</span></span></span></span></span>	C(S)	
45001 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45001">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45001</a> )	7 And 8 Kerrycroy Village Including Outbuilding And Boundary Walls		<span><span><span><span><span>55°48′30″N</span> <span>5°01′22″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.80833°N 5.02278°W</span><span><span>﻿</span> / <span>55.80833; -5.02278</span></span></span></span></span>	B	
45014 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45014">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45014</a> )	Kingarth, The Old Schoolhouse Including Boundary Wall		<span><span><span><span><span>55°45′47″N</span> <span>5°02′21″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.76306°N 5.03917°W</span><span><span>﻿</span> / <span>55.76306; -5.03917</span></span></span></span></span>	C(S)	
45023 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45023">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45023</a> )	Mount Stuart, Kennels, Including Boundary Walls And Railings		<span><span><span><span><span>55°47′32″N</span> <span>5°01′21″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.79222°N 5.02250°W</span><span><span>﻿</span> / <span>55.79222; -5.02250</span></span></span></span></span>	B	
45029 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45029">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45029</a> )	Mount Stuart, Old School House Including Boundary Wall		<span><span><span><span><span>55°48′12″N</span> <span>5°01′32″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.80333°N 5.02556°W</span><span><span>﻿</span> / <span>55.80333; -5.02556</span></span></span></span></span>	C(S)	
12052 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12052">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12052</a> )	Mount Stuart House		<span><span><span><span><span>55°47′30″N</span> <span>5°01′07″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.79167°N 5.01944°W</span><span><span>﻿</span> / <span>55.79167; -5.01944</span></span></span></span></span>	A	
12053 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12053">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12053</a> )	Mount Stuart, Monument		<span><span><span><span><span>55°47′35″N</span> <span>5°01′03″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.79306°N 5.01750°W</span><span><span>﻿</span> / <span>55.79306; -5.01750</span></span></span></span></span>	B	
12056 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12056">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12056</a> )	Mount Stuart, Kerrylamont Farm Dairy		<span><span><span><span><span>55°46′59″N</span> <span>5°00′56″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.78306°N 5.01556°W</span><span><span>﻿</span> / <span>55.78306; -5.01556</span></span></span></span></span>	A	
12064 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12064">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12064</a> )	Ascog, Ascog Hall Including Garden Arch And Boundary Wall		<span><span><span><span><span>55°49′22″N</span> <span>5°01′29″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.82278°N 5.02472°W</span><span><span>﻿</span> / <span>55.82278; -5.02472</span></span></span></span></span>	B	
44986 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44986">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44986</a> )	Ascog, Boat House		<span><span><span><span><span>55°49′30″N</span> <span>5°01′20″W</span></span></span><span><span>﻿</span> / <span>﻿</span></span><span><span>55.82500°N 5.02222°W</span><span><span>﻿</span> / <span>55.82500; -5.02222</span></span></span></span></span>	C(S)	

HBnum ?	Name	Notes	Coordinates	Category	Image
44987 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44987">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44987</a> )	Ascog, Entrance Gate, The Railway Convalescent Home		55°49'24"N 5°01'23"W	C(S)	
44989 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44989">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44989</a> )	Ascog, Meikle Ascog Including Gatepiers		55°49'27"N 5°01'39"W	B	
44996 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44996">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44996</a> )	Ascog, Southpark Including Former Coach-House, Boundary Walls And Gatepiers		55°49'19"N 5°01'29"W	B	
45000 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45000">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45000</a> )	5 And 6 Kerrycroy Village Including Boundary Walls		55°48'31"N 5°01'23"W	B	
45002 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45002">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45002</a> )	10 Kerrycroy Village Including Boundary Walls		55°48'29"N 5°01'21"W	B	
45003 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45003">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45003</a> )	11 And 12 Kerrycroy Village Including Boundary Walls		55°48'28"N 5°01'20"W	B	
45008 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45008">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45008</a> )	Kilchattan Bay, Quay		55°45'04"N 5°01'25"W	C(S)	
45010 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45010">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45010</a> )	Kingarth, Brick Cottage And Roselea Including Outbuilding		55°45'45"N 5°02'06"W	C(S)	
45011 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45011">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45011</a> )	Kingarth, Bruchag Road, The Manse Including Courtyard Range, Walled Garden, Boundary Wall, Gatepiers And Gates		55°45'54"N 5°01'55"W	C(S)	
45025 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45025">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45025</a> )	Mount Stuart, Kerrylamont Farmhouse And Outbuildings		55°46'59"N 5°00'56"W	B	
45026 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45026">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45026</a> )	Mount Stuart, Kerrylamont Gatelodge, Off Bruchag Road		55°46'48"N 5°00'46"W	C(S)	
45030 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45030">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45030</a> )	Mount Stuart, South Lodge Including Outbuilding, Boundary Wall And Gates		55°47'10"N 5°01'05"W	C(S)	
12059 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12059">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12059</a> )	Kerrycroy, Quay Including Bridge		55°48'29"N 5°01'13"W	B	
12065 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12065">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12065</a> )	Ascog, Former Saltpan		55°49'35"N 5°01'21"W	B	
45006 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45006">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45006</a> )	Kilchattan Bay, Ashgrove And Hazelbank Including Boundary Wall And Gatepiers		55°44'56"N 5°01'18"W	C(S)	

HBnum ?	Name	Notes	Coordinates	Category	Image
45012 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45012">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45012</a> )	Kingarth, Langalchorad Cottages Including Outbuilding		55°45'46"N 5°02'14"W	C(S)	
12055 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12055">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12055</a> )	Mount Stuart, Mausoleum And Graveyard		55°48'05"N 5°01'00"W	A	
12057 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12057">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12057</a> )	1 Kerrycroy Village Including Boundary Walls		55°48'33"N 5°01'22"W	B	
12061 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12061">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12061</a> )	Ascog, Ascog House Including Tower, Outbuilding, Garage And Garden Wall		55°49'24"N 5°01'39"W	B	
44983 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44983">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44983</a> )	Ascog, Ascog House, Pink Lodge Including Boundary Walls And Gatepiers		55°49'35"N 5°01'29"W	C(S)	
45004 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45004">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45004</a> )	13 And 14 Kerrycroy Cillage Including Boundary Wall		55°48'28"N 5°01'18"W	B	
45009 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45009">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45009</a> )	Kilchattan Bay, St Blane's Hotel Including Boundary Wall		55°45'00"N 5°01'25"W	C(S)	
45013 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45013">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45013</a> )	Kingarth Langalchorad Farmhouse Including Outbuilding And Boundary Wall		55°45'47"N 5°02'29"W	C(S)	
45016 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45016">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45016</a> )	Lubas Farm Including Outbuildings And Boundary Wall		55°44'48"N 5°02'58"W	C(S)	
45017 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45017">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45017</a> )	Mount Stuart, Beehive Well		55°47'56"N 5°01'11"W	C(S)	
45027 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45027">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45027</a> )	Mount Stuart, Laundry Cottage And Store		55°47'29"N 5°01'11"W	C(S)	
44984 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44984">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44984</a> )	Ascog, Balmory Road, Balmory House (Former Laidlaw Memorial Home) Including Boundary Walls And Gatepiers		55°49'17"N 5°01'42"W	A	
44995 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44995">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44995</a> )	Ascog, St Margaret's		55°49'09"N 5°01'33"W	B	
44997 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44997">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44997</a> )	Ascog, Southpark Lodge		55°49'20"N 5°01'26"W	C(S)	
44999 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44999">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44999</a> )	3 And 4 Kerrycroy Village Including Boundary Walls		55°48'32"N 5°01'23"W	B	

HBnum ?	Name	Notes	Coordinates	Category	Image
45007 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45007">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45007</a> )	Kilchattan Bay, Kingarth And Kilchattan Bay Church Of Scotland, Including Boundary Wall And Gatepiers		55°45'08"N 5°01'44"W	C(S)	
45019 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45019">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45019</a> )	Mount Stuart, East Lodge Including Outbuilding		55°47'52"N 5°00'51"W	C(S)	
45021 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45021">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45021</a> )	Mount Stuart, Heather Lodge		55°48'16"N 5°01'33"W	C(S)	
12058 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12058">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12058</a> )	Mount Stuart, North Lodge Including Outbuilding, Gatepiers, Gates, Estate Boundary Walls And Railings		55°48'27"N 5°01'17"W	B	
44982 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44982">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44982</a> )	Ascog, Ascog Hall Fernery		55°49'22"N 5°01'29"W	B	
44988 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44988">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44988</a> )	Ascog, The Hermitage Including Summerhouse		55°48'49"N 5°01'26"W	C(S)	
44992 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44992">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44992</a> )	Ascog, 1 And 2 Millburn Cottages Including Front Wall And Gatepiers		55°49'56"N 5°01'37"W	C(S)	
45015 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45015">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45015</a> )	Kingarth, The Tileries Including Outbuildings And Boundary Wall		55°45'43"N 5°02'00"W	C(S)	
45018 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45018">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45018</a> )	Mount Stuart, Blackwood Cottage		55°48'04"N 5°01'31"W	C(S)	
45020 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45020">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45020</a> )	Mount Stuart, Game Larder		55°47'27"N 5°01'11"W	B	
12054 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12054">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12054</a> )	Mount Stuart, Sundial		55°47'16"N 5°01'07"W	B	
12063 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12063">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12063</a> )	St Blane's Church Including Graveyard, Cauldron And Boundary Wall		55°44'13"N 5°02'10"W	A	
44985 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44985">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44985</a> )	Ascog, Balmory Road, Balmory House (Former Laidlaw Memorial Home), Gate lodge		55°49'19"N 5°01'34"W	C(S)	
44998 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44998">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44998</a> )	Glencallum Bay, Ruvha'An Ean Minor Light		55°43'48"N 5°00'14"W	C(S)	
44981 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44981">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44981</a> )	Ascog, Agnes Patrick Guest House Including Boundary Wall And Gatepiers		55°49'46"N 5°01'31"W	C(S)	

HBnum ?	Name	Notes	Coordinates	Category	Image
44991 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44991">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44991</a> )	Ascog, Millbank Stables, Coach-House And Dower House Including Boundary Wall, Gatepiers And Courtyard		55°49'54"N 5°01'33"W	C(S)	
44993 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44993">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=44993</a> )	Ascog, Millburn House Including Boundary Wall		55°49'57"N 5°01'33"W	B	
45022 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45022">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45022</a> )	Mount Stuart, Kennel Cottages Including Boundary Wall		55°47'31"N 5°01'17"W	C(S)	
45024 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45024">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45024</a> )	Mount Stuart, Kerrylamont Cottage, Off Bruchag Road, Including Railings, Gatepiers And Gates		55°47'02"N 5°01'22"W	C(S)	
45028 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45028">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=45028</a> )	Mount Stuart, Former Meat Store		55°47'26"N 5°01'09"W	C(S)	
13800 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=13800">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=13800</a> )	Mount Stuart, Scoulag (West) Lodge Including Entrance Forecourt		55°47'36"N 5°01'55"W	B	
12060 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12060">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12060</a> )	Ascog, Ascog Church Including Boundary Wall And Piers		55°49'34"N 5°01'20"W	B	
12062 ( <a href="http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12062">http://hsewsf.sedsh.gov.uk/hslive/portal.hsstart?P_HBNUM=12062</a> )	Ascog, Ascogbank Including Boundary Walls And Gatepiers		55°49'39"N 5°01'34"W	B	

## Key

The scheme for classifying buildings in Scotland is:

- **Category A:** "buildings of national or international importance, either architectural or historic, or fine little-altered examples of some particular period, style or building type."<sup>[1]</sup>
- **Category B:** "buildings of regional or more than local importance, or major examples of some particular period, style or building type which may have been altered."<sup>[1]</sup>
- **Category C(S):** "buildings of local importance, lesser examples of any period, style, or building type, as originally constructed or moderately altered; and simple traditional buildings which group well with others in categories A and B."<sup>[1]</sup>

There are approximately 47,400 listed buildings in Scotland. Of these, around 8 percent (some 3,800) are Category A, and 51 percent (24,000) are Category B, with the rest listed at Category C(s).<sup>[2]</sup>

## ← Note on Preliminary Discussions with Scottish Natural Heritage

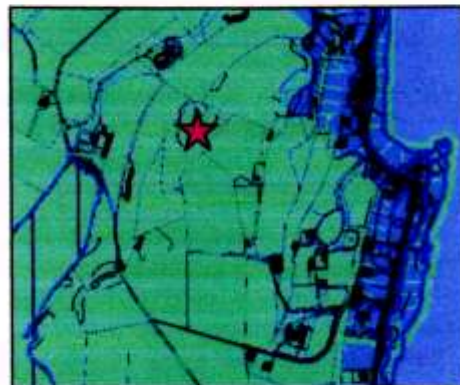
Ronnie Falconer called SNH local office on 12 June (01369 70 5377). Liz Pryor covers Bute and was well aware of the Ascog windfarm proposal. Preparation of the Environmental Statement is well advanced and there has been consultation with SNH on this. SNH covers landscape as well as environment (biodiversity). At this stage she could not give SNH's view but did say that visual impact is the biggest issue. Geese are an issue given the proximity of Loch Ascog and local roosting sites. Bats are less of an issue as bat populations are on the increase. Otters might be impacted by road alterations. Liz suggested group members access the SNH website for further information and guidance (<http://www.snh.gov.uk/planning-and-development/renewable-energy/onshore-wind/>) – she is happy to be contacted further on any particular aspects.

I have had a quick look at the SNH website and it is indeed comprehensive with many reference documents. There is specific guidance on onshore wind farms – SNH 'Policy on Onshore Windfarms' is a key document together with the associated maps. In Zone 3 areas on these maps there would be a general presumption against windfarm development. Zone 2 needs careful consideration. A brief look at the Map 5 Zones of Natural Heritage Sensitivity indicates that the proposed development site is in Zone 2 but adjacent to a Zone 3 area (probably Loch Ascog). Loch Ascog is also has SSSI environmental designation. Map 4 confirms the location is in an area of high sensitivity with regard to birds. The Visual Representation of Windfarms Good Practice Guidance is also a useful document.

## Note on Local Plan Policies

The current Argyll and Bute Local Plan map indicates that the proposed development site (red star) is:

- In an area of 'Sensitive Countryside' [light blue]
- Adjacent to an SSSI (Loch Ascog) [red vertical stripes]
- Adjacent to a 'Rural Opportunity Area' [green]
- In an Area of Panoramic Quality (brown line along shore)



Objections should include a section on compliance with Local Plan policy. Relevant Local Plan Policies include:

### LP Env1 - Development Impact on the General

**Environment:** *The Council will assess applications for planning permission for their impact on the natural, human and built environment, and will resist development proposals which would not take the following considerations into account: [relevant items only listed below]*

*(B) Likely impacts, including cumulative impacts, on amenity, access to the countryside and the environment as a whole and in particular, the designated sites listed in (I) and (J) of this policy statement;*

*(C) All development should protect, restore or where possible enhance the established character and local distinctiveness of the landscape in terms of its location, scale, form and design.*

f) Special Areas of Conservation; Special Protection Areas; Ramsar Sites; Sites of Special Scientific Interest; National Nature Reserves; Local Nature Conservation Sites; National Scenic Areas; Greenbelt; Marine Consultation Areas and Areas of Panoramic Quality.

**Policy LP ENV 5 - Development Impact on Sites of Special Scientific Interest (SSSIs)** In all Development Control Zones development which would affect Sites of Special Scientific Interest and National Nature Reserves will only be permitted where it can be adequately demonstrated that either:

(A) The proposed development will not compromise the conservation objectives and overall integrity of the site; OR,

(B) There is a proven public interest where national, social, economic or safety considerations outweigh the ecological interest of the site and the need for the development cannot be met in other less ecologically damaging locations or by reasonable alternative means.

**Policy LP ENV 6 - Development Impact on Habitats and Species** In considering development proposals, the Council will give full consideration to the legislation, policies and conservation objectives, that may apply to the following:

- Habitats and Species listed under Annex I, II & IV of the Habitats Directive;
- Species listed under Annex I of the Birds Directive;
- Species listed on Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981; (and as amended by the Nature Conservation (Scotland) Act 2004);
- Habitats & Species listed in the UK
- Biodiversity Action Plan; AND,
- Habitats and Species which are widely regarded as locally important as identified in the LBAP.

**LP Env10: Development Impact on Areas of Panoramic Quality:** Development in, or adjacent to, an Area of Panoramic Quality will be resisted where its scale, location or design will have a significant adverse impact on the character of the landscape unless it is demonstrated that:

(A) Any significant adverse effects on the quality for which the area has been designated are clearly outweighed by social and economic benefits of National or regional importance;

(B) Where acceptable, development must also conform to Appendix A of the Local Plan. In all cases the highest standards, in terms of location, siting, landscaping, boundary treatment and materials, and detailing will be required within Areas of Panoramic Quality.

**LP Env19 - Development Setting, Layout and Design:** The Council will require developers and their agents to produce and execute a high standard of appropriate design in accordance with the design principles set out in Appendix A of this

Local Plan, the Council's sustainable design guide and the following criteria: [relevant items only listed below]

(B) Development layout and density shall effectively integrate with the urban, suburban or countryside setting of the development. Layouts shall be adapted, as appropriate, to take into account the location or sensitivity of the area. Developments with poor quality or inappropriate layouts or densities including over-development and overshadowing of sites shall be resisted.

(C) The design of developments and structures shall be compatible with the surroundings. Particular attention shall be made to massing, form and design details within sensitive locations such as National Scenic Areas, Areas of Panoramic Quality, Greenbelt, Very Sensitive Countryside, Sensitive Countryside, Conservation Areas, Special Built Environment Areas, Historic Landscapes and Archaeologically Sensitive Areas, Historic Gardens and Designed Landscapes and the settings of listed buildings and Scheduled Ancient Monuments. Within such locations, the quality of design will require to be higher than in other less sensitive locations.

**LP REN 1 - Wind Farms and Wind Turbines:** Wind farm developments will be supported in forms, scales and sites where the technology can operate efficiently, where servicing and access implications are acceptable, and where the proposed development will not have an unacceptable adverse impact directly, indirectly or cumulatively on the economic, social or physical aspects of sustainable development.

(A) For all commercial wind farms, regardless of scale, the issues raised by the following must be satisfactorily addressed: [relevant items only listed below]



- 111  
→  
20
- **Communities, settlements and their settings**
  - **Areas and interests of nature conservation significance including local biodiversity, ecology, and the water environment**
  - **Core paths, rights of way; or other important access routes**
  - **Important tourist facilities, attractions or routes**

(B) **The Windfarm Policy Maps provide further guidance on where wind farm schemes over 20 megawatts may be acceptable. They show for proposals on that scale:**

- **Broad Areas of Search within which proposals will be generally supported subject to addressing satisfactorily all other material considerations.**
- **Protected Areas within which proposals will be generally resisted unless it can be demonstrated that the proposed development will not have an unacceptable adverse effect on Special Protection Areas, Special Areas of Conservation, and Ramsar sites; National Scenic Areas and Sites of Special Scientific Interest; and land within the Green Belt; and that all other material considerations have been satisfactorily addressed.**
- **Potentially Constrained Areas where proposals will be neither generally supported nor resisted but considered on their merits taking account of the criteria referred to in (A) above and all other material considerations including any unacceptable adverse effect on Special Protection Areas, Special Areas of Conservation, and Ramsar sites; National Scenic Areas and Sites of Special Scientific Interest; and land within the Green Belt.**

The proposed development site is in a **Potentially Constrained Area** on the Windfarm Policy Map

There may be other relevant policies but these appear to be the main ones to consider whether the development is in compliance with the policy or not.

Ronnie Falconer  
16 June 2012

This is the full letter to the Bute man! Published letter  
was much edited (5)

### Wind Turbines will impact more than the landscape at Ascog Farm

Why destroy some of our most pristine, ancient landscape in order to build wind turbines that will last 20 years at a push? That is just one of the concerns raised by Bute islanders in a series of recent community meetings to discuss the three planned wind turbines at Ascog Farm.

Contrary to the belief of Adrian Tear, the man behind the plans, these turbines will not help to reduce carbon emissions and halt climate change. In a presentation to Bute Community Council on the day that planning permission was granted for a temporary 50-metre wind monitoring mast at Ascog Farm, Mr Tear spoke of polar ice caps melting and sea-levels rising. He noted that his "children's children may live to see the island start to go under water".

This type of climate change scaremongering is wholly unacceptable. Mr Tear's three turbines will do nothing more than despoil the landscape and reduce the value of local land. More worryingly, the Scottish Government's recommendation of a 2km separation distance between turbines and residential dwellings has been completely ignored. These turbines will be spaced between 300 and 450 metres apart, leaving just 500 metres between the turbines and some residential homes, including Balmory Hall which is a Grade A listed mansion house and gate lodge of outstanding national architectural importance. The turbines will also impact Ascog Hall and its rare Victorian fernery, Southpark, two Landmark Trust properties and at least another 11 listed properties in the surrounding area.

The wind turbines will impact tourism, a vital source of income for many islanders. Besides being home to some of Scotland's finest heritage sites including Rothesay Castle, Mount Stuart House St Blane's Chapel and numerous standing stones/stones circles, the Isle of Bute is a haven for nature tourists. More than 100 species of birds live on Bute, attracting many dedicated ornithologists. People travel from all over Scotland and from further afield for rambling, cycling and fishing holidays on the Island. Rothesay Golf Course, Port Bannatyne Golf Course and Bute Golf Course are arguably some of Scotland's most scenic courses and the importance of golf to Bute's economy simply cannot be overstated.

If constructed, the turbines will intrude on many of Bute's tourist attractions, but the potentially hazardous impacts of the turbines on local residents' health are most worrying. The health impact of wind farms has recently become a hot topic in the media and independent biomedical experts have shown that living close to a turbine can cause headaches, dizziness, sleep deprivation, unsteadiness, nausea, exhaustion, mood-swings and the inability to concentrate.

The low-frequency noise emitted by a turbine travels easily and varies according to the wind. This constitutes a permanent risk to people exposed to it. There is even military weaponry that relies on low-frequency sound for crowd control purposes. At high intensities it creates discrepancies in the brain, producing disorientation in the body and resulting in what is called 'simulated sickness'. The Israeli army uses this technology to cause instability, nausea and headaches. It is great for crowd control as it has no adverse

effects...unless you are exposed to it for hours, as you would be if you lived beside a turbine.

Turbine noise is particularly dangerous when combined with visual effects such as shadow flicker. This compounds the adverse impact on residents and can induce both physical and psychological symptoms. Visual flicker and 'strobing' effects occur at certain times of the day, similar to when you drive past a row of trees with the sun behind them. Night-time flicker can also occur with the rising and setting of the moon. On elevated ridges or hills, tall turbines can cast shadows for thousands of feet, well above any vegetative screening and nearby residents will be exposed to numerous shadow flickers simultaneously. That is, all three blades of each turbine will cause flicker, and the flicker from each turbine will not be synchronised.

Needless to say, the SNP Government has yet to properly legislate against shadow flicker or any other of the potentially hazardous health consequences of turbines. But the threat is very real and must be considered by the planners at Argyll and Bute Council and by Community Energy Scotland, who have endorsed the planned turbines at Ascog Farm.

**(705 WORDS)**

**STRUAN STEVENSON, MEP**

**Struan Stevenson is a Euro MP for Scotland and President of the Climate Change, Biodiversity and Sustainable Development Intergroup in the European Parliament.**

6

**BBC NEWS**

**HIGHLANDS & ISLANDS**

13 June 2012 Last updated at 16:39

## Caithness Spittal Hill wind farm plans rejected

The Scottish government has rejected plans for an onshore wind farm for the first time in four years.

Spittal Hill Wind Farm Ltd's proposal to construct up to 30 turbines in Caithness received 1,546 letters of objection and 1,268 letters of support.

Highland Council had objected to the Spittal project and a public inquiry was held to examine the scheme.

Energy Minister Fergus Ewing said it would have a negative impacts on nearby properties and views of the landscape.

Noise from the turbines could potentially have been heard from residents in 89 properties within 1.2 miles (2km) of the site, the inquiry held in Halkirk last year heard.

The area already has Causeymire, Flex Hill and Achairn wind farms, while one at Camster has planning consent and another farm has been proposed for Halsary.

Spittal Hill Wind Farm Ltd had sought permission for 30 turbines - 27 of them 110m (360.8ft) high and three of them 100m (328ft).

In February 2011, the company suggested an alternative development of 27 turbines.

Mr Ewing said Scotland had "enormous potential" for renewable energy, which could benefit jobs and communities.

He said: "I am determined to ensure communities all over Scotland reap the benefit from renewable energy - but not at any cost and we will ensure a balanced approach in taking forward this policy, as we have in the past and will in future."

"The Scottish government wants to see the right developments in the right places."

"Scottish planning policy is clear that the design and location of any wind farm should reflect the scale and character of the landscape and should be considered environmentally acceptable."

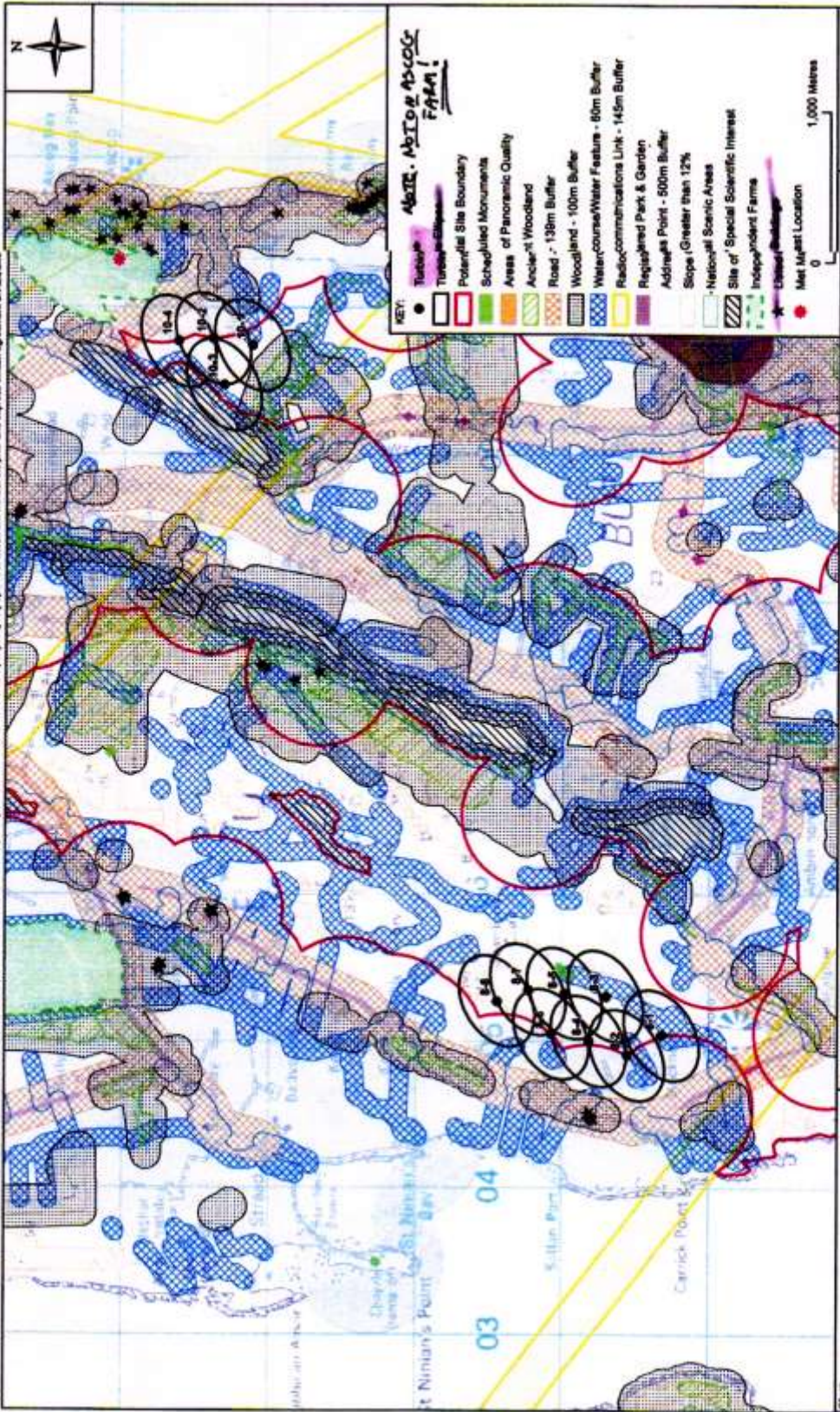
"The impact of this proposed wind farm on the landscape, and the impact it would have on the homes of those who live closest to it, is too great."

**BBC**

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Client: <b>TOWARDS ZERO CARBON BUTE</b>		Title: <b>DRAWING 4 -</b>	
Project: <b>THE ISLE OF BUTE - SITE FINDING ASSESSMENT</b>		Sub-Title: <b>DETAILED CONSTRAINTS MAPPING AREAS 8 &amp; 10</b>	
Design: TTR	Drawn: TTR	Check: AB	Approved: AB
Date: OCTOBER 2011	Scale: as A3: 1:23,895	Drawing Number: A3	
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1 (9)

The ONLY reasons industrial wind power should exist are to:

- (a) **HELP REDUCE GREENHOUSE GAS EMISSIONS.**
- (b) **REDUCE ELECTRICAL ENERGY COSTS** and
- (c) **PROVIDE AN ALTERNATIVE, SAFER SOURCE OF ENERGY.**

However, all the evidence points to WIND POWER FAILING on ALL 3 counts.

### 1. WIND TURBINES DO NOT WORK!

- They do NOT solve our energy issues.
- In fact, they INCREASE our dependence on imported oil and other fossil fuels.
- Wind is unreliable and intermittent as a source of power. During periods of HIGH wind, the turbines have to be switched off. The energy produced by the turbines ceases and the National Grid has to start up fossil-fuel based plants to keep the energy output constant.
- As a result, CO<sub>2</sub>, NO<sub>x</sub> and SO<sub>2</sub> output increases\*.
- In the Netherlands, a Dutch physicist, **Dr. Kees Le Pair**, provided a report to **\*\*Civitas**. In the report, he stated that the use of turbines actually increased gas consumption and CO<sub>2</sub> emissions into the atmosphere; compared with modern, more efficient gas-run turbines.

\*See Bentek Report: <http://www.bentekenergy.com/WindPowerParadox.aspx>

\*\* See Civitas Report: <http://www.civitas.org.uk/economy/electricitycosts0112.pdf>

People say wind power is good because it brings money into their community. Wind Power and the development of turbines are sold to a community based on the FINANCIAL INCENTIVES offered by the developers.

Developers **AVOID** the environmental destruction that turbines cause. For example, Neodymium is an essential component of wind turbines. It is a rare mineral mined in China. The extraction process involved has created massive amounts of CO<sub>2</sub>, large toxic lakes and caused ill health among the local population.

### 2. THE ECONOMICS

- To produce a watt of wind power, we have to provide a watt of conventional power; hence, there are no actual savings in time or power. It costs 2x as much on-shore and 3x as much off-shore to that of existing, conventional energy power stations.
- The only people making money out of these generators are the land-owners who are paid to install these expensive eyesores, run them **AND STOP** them in times of HIGH WINDS!
- Most turbines are closed down during periods of extreme weather. The energy produced beforehand is not saved or stored. So, conventional power plants have to come back online to regulate the amount of energy provided. The **Daily Telegraph** has reported that 'wind power costs the energy company £50 per mega-watt hour, compared to £15 for conventional fuel'. This extra cost is being passed on to YOU through your energy bills.



- **The Scottish Government** estimates that one-third of all households are living in fuel poverty. **Whitehall** adds that electricity prices are 15% more expensive as a result of the 'Green Tax'. Are we REALLY paying to destroy (or at least compromise) our own environment?
- **The Council Tax Valuation Tribunal** found (in 2008) that, " *dwellings located in close proximity to wind farms had seen their property prices drop by around 20%*".
- The cost of the creation of a single wind turbine is enormous and they have a maximum lifespan of 20 years. When, not if, these turbines break down, the metal used to make them is non-recyclable. The cost of 'storing' (i.e. disposing of) this scrap metal is not usually considered in lobbyists' reports.

### 3. **HEALTH & SAFETY**

- **The National Institute of Health** states that, "*Wind energy will undoubtedly create noise, which increases stress, which in turn increases the risk of cardiovascular disease and cancer*".
- **Dr Chris Hanning** mentions that if "*you live within 2km of a wind farm, there is every likelihood that your sleep will be disturbed. Poor-quality sleep results in daytime fatigue, poor mental function and a host of other health problems*".
- Developers often claim that their technology is safe and whenever there has been a turbine fire, or other form of serious accident, the developer states that this is a rare occurrence.
- On 11<sup>th</sup> December 2011, the **Daily Telegraph** reported that **Renewable UK** confirmed that there had been 1500 wind turbine accidents and incidents in the UK alone within the past 5 years (i.e. 25 accidents per month). Two of these accidents left badly burned wind industry workers; and, on 9<sup>th</sup> December 2011, a wind turbine exploded at **Ardrossan Wind Farm** in North Ayrshire, during one of the strong gales.
- Weather patterns across mainland Europe and in the UK are considered fairly similar. **The IMIA** (Insurance of Wind Turbines) put together a report based on 15 years of the Wind Energy industry in Denmark. Mechanical faults (i.e. blade failure and other faults) accounted for 40% of all claims. Lightning accounted for 20% of the claims, Fire accounted for 7% and Storms accounted for 4%. Other faults (including short circuits) accounted for 28.5% of claims.
- **Caithness Wind Farms** compiled a report that stated, "*Fire can arise from a number of sources – and some turbine types are more prone to fire than others*". In the past year, a total of 185 fire incidents were found throughout the UK and internationally.
- The biggest problem with turbine fires is that, because of the turbine height, the fire brigade can do little but watch it burn itself out. While this may be acceptable in reasonably still conditions, in a storm, burning debris can scatter over a wide area – with obvious consequences.

### 4. **ALTERNATIVE OPTIONS**

Let us be clear. We are NOT against renewable sources of energy that actually do some good. **Water power or Geothermal** power are natural, clean, renewable, abundant sources that can

### Costs

UK wind farms are a very expensive way of generating electricity.

Take the proposed 2.4Mw scheme and consider just running costs. The developer gets perhaps £200,000 from the public purse, topped up by the £24,000 he is obliged to pass back to Fyne Futures.

This works out at £75.0 per household, assuming it is spread over 3000 households on Bute. On top of this are running costs, development and installation costs and ultimately demolition costs.

**“Ye Cannae be serious . . .**



**Do you know that . . .**

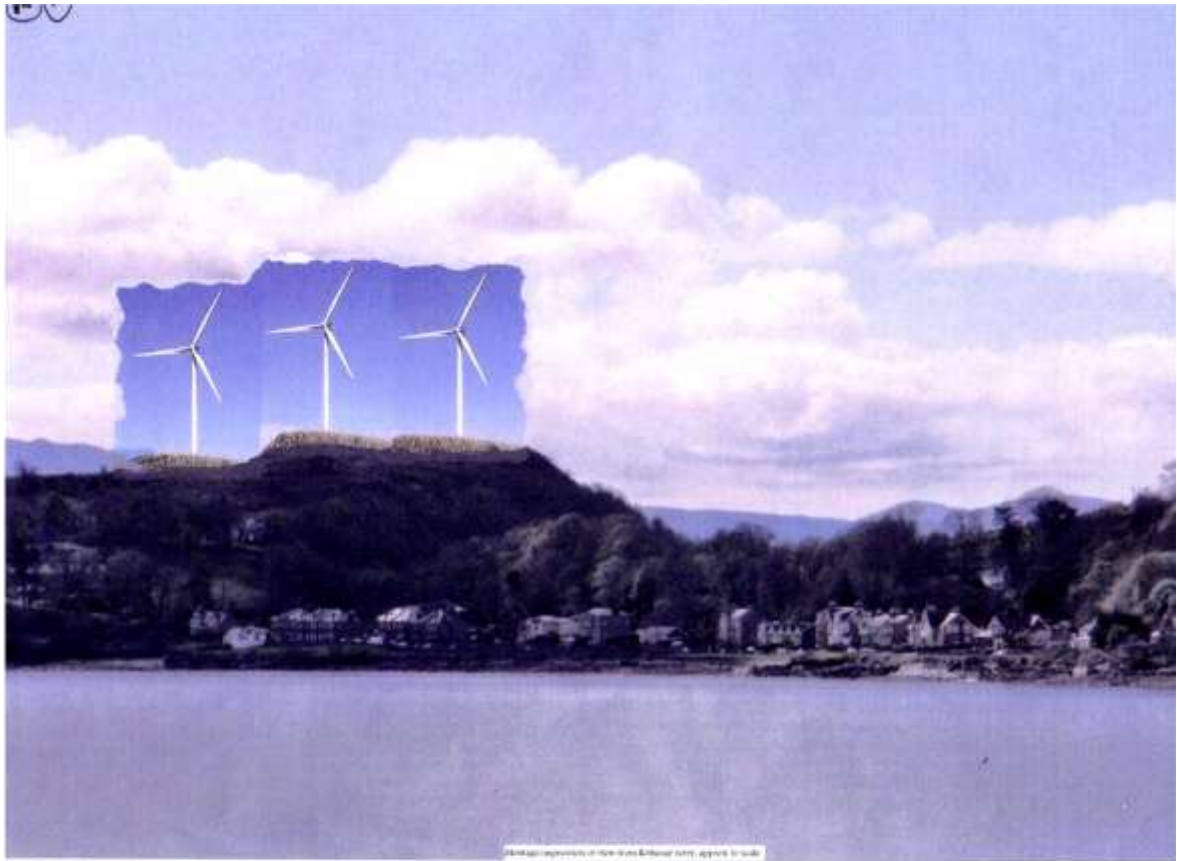
***Unless you object to this proposal, this will be your view in the future.***

***You will be paying, in increased petrol, gas or electricity costs, for building & running these giant turbines (vastly larger than those at Ardmory), as well as profits of hundreds of thousands of pounds per year to the developer.***

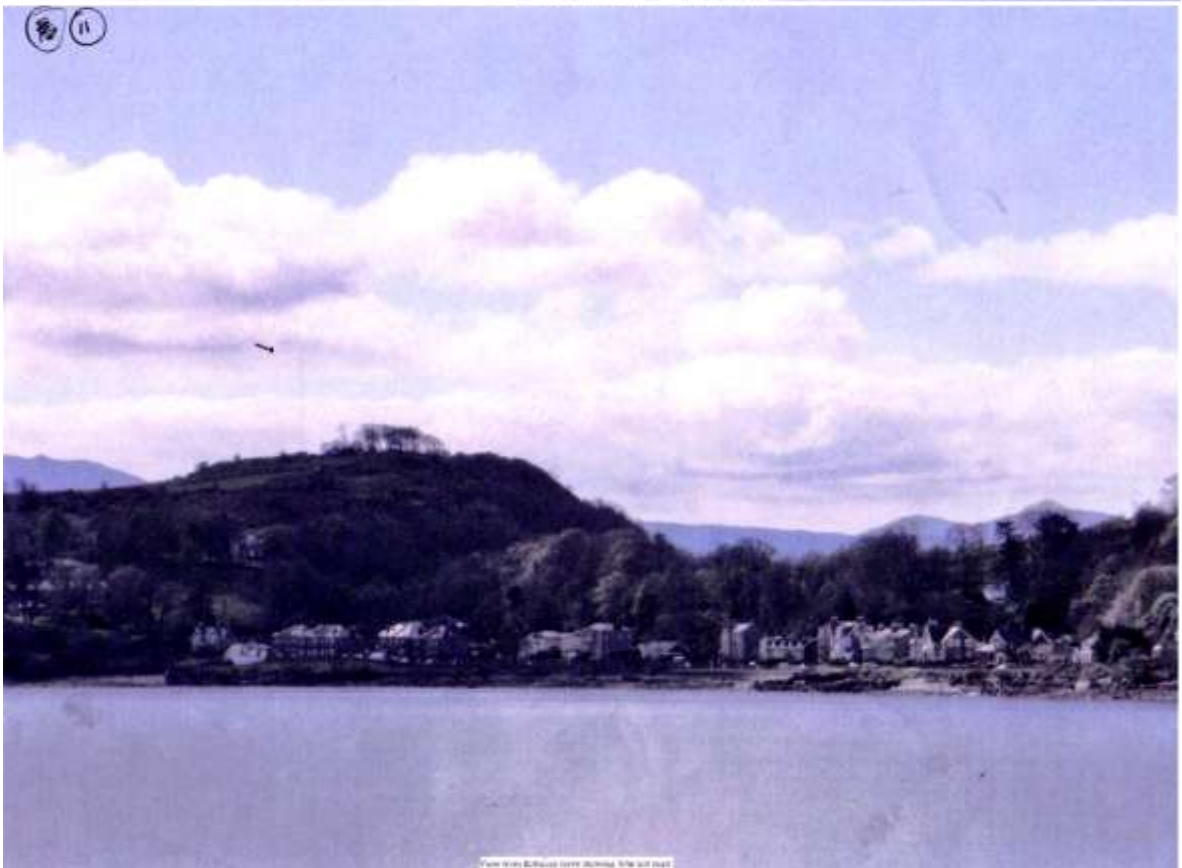
**When & where to object . . .**

***When the planning application is made (watch *The Buteman*), object to Steven Gove at Argyll & Bute planning dept., also to local councillors in writing.***

**Concerned local resident**



Wind turbines on a hill in the background, viewed from across the water.



Wind turbine on a hill in the background, viewed from across the water.

11



VIEW FROM BALLOCHGROY



VIEW FROM MID BARONE RD.

(12)

Cumhill House  
Pilton  
Somerset  
BA4 4BG

2<sup>nd</sup> July 2012

Mr & Mrs J Thomas  
Balmoray Hall  
Ascog  
Bute  
PA20 9LL

Dear Mr and Mrs Thomas,

#### **Proposed Wind Farm, Ascog Hill**

Further to our discussions relating to the above, and receipt of supporting information, I have done some very basic calculations to consider the viability of a wind turbine arrangement on Ascog Hill. My position on such developments is that I am neither supportive nor antagonistic towards them. I support 'green energy' but consider 'green' to be a lifetime carbon model.

My overwhelming concern is that evaluations should be balanced. It is not unusual for evaluations to be optimistic as it is often the sellers of equipment that lead the evaluation process. This inevitably leads to eventual disappointment, particularly by those investing in such schemes

To this end, I have considered a number of aspects relevant to the local situation, namely:

- The predicted output of such a scheme
- The distribution of electricity
- Environmental issues

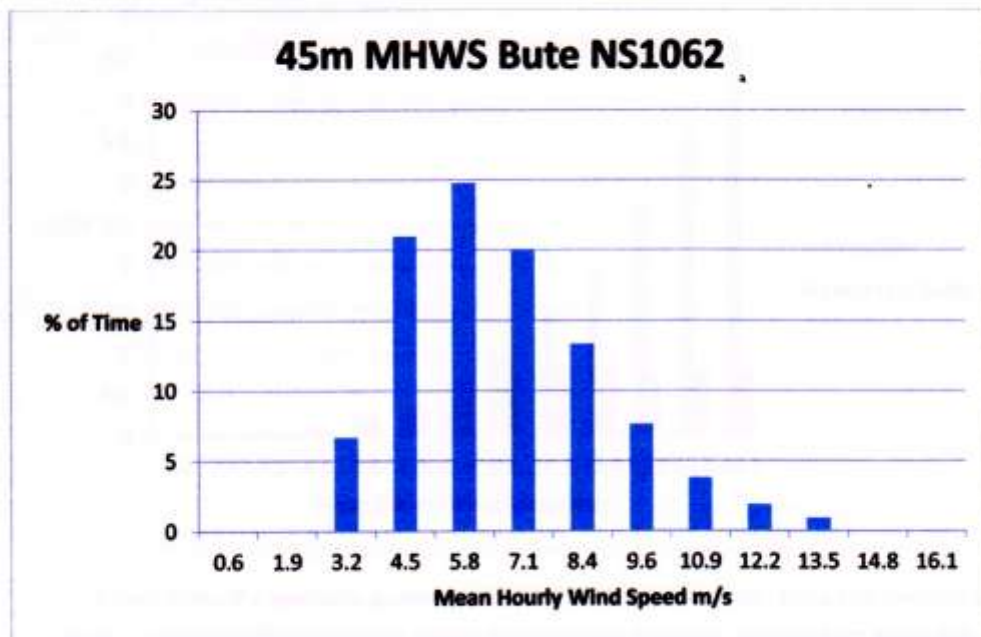
#### **Predicted Output**

I have used data from the Department for Energy and Climate Change database for grid reference NS1062 on Bute. This database gives an *indication* of the mean hourly wind speed at 45m (148ft) above ground level as 7.2m/s (16.2mph). The mean hourly wind speed is a measure of the average wind, considering both gusts and variations throughout the day and over the year. However, turbines produce an output that is dependent on the cube of wind speed ( $V^3$ ) so it is necessary to consider the likely range of wind speeds, together with their probability of occurrence. Wind speed will follow a Weibull<sup>1</sup> distribution to give a range of wind speeds over a period of time, such as annually. This figure is more meaningful in terms of expected generation.

The following graph shows the likely distribution of mean hourly wind speed, in terms of the percentage of time that a given mean hourly wind speed would occur. This has been based on

<sup>1</sup> The distribution ranks the likelihood of occurrence of a given speed

Meteorological data for Bute, adjusted for the expected local wind conditions. Each bar represents a range of speeds centred on the wind speed value shown.

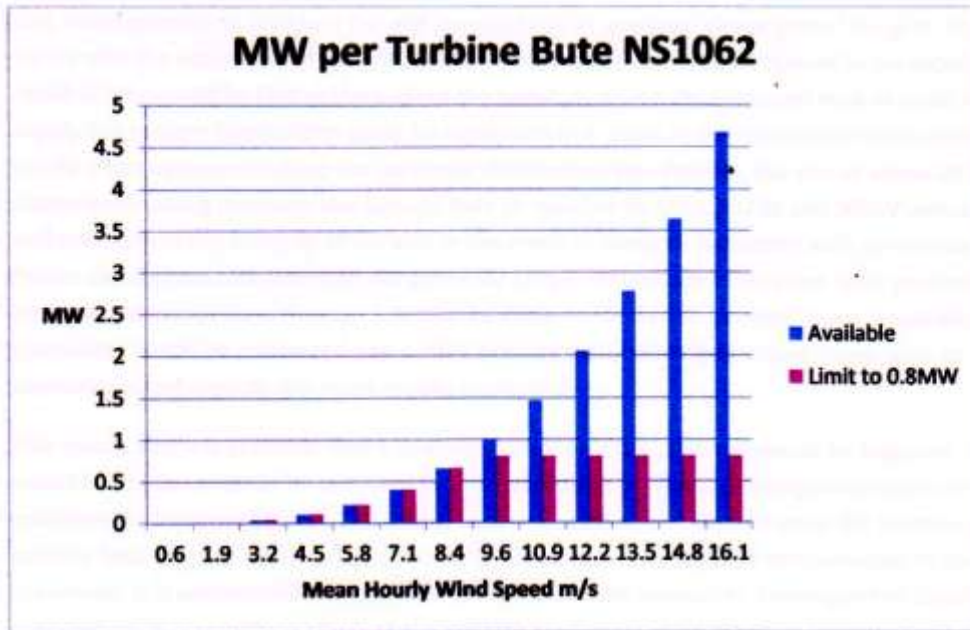


For example, for 25% of the time, the turbine hub (at 45m above ground level) would see a wind speed of between 5.15m/s and 6.45m/s (mid = 5.8m/s).

This will translate directly into turbine power generation using standard formulae. I have included the following efficiencies in my calculations:

- Availability (what % of the year that it will be working) 95%
- Electrical Efficiency (how many electrical kW are produced for each wind kW) 98%
- Turbine Performance (effects such as blade icing, etc.) 98.5%

The following graph indicates the power generation, per turbine, based upon the above:



The blue bars show the available power per turbine (in MW). However, since the turbines are rated at 0.8MW, then this is the maximum power that they can produce. The red bars show this.

Based upon 364 days per year running (1 day per year assumed for distribution network maintenance) each turbine could generate 3.141GWh (Giga Watt Hours).

As a 'farm' there will be a wake effect which reduces its overall efficiency. This is because the wind turbulence of one turbine will reduce the performance of others. It has been assumed that the farm will be arranged to maximise efficiency from the predominantly South West wind direction (i.e. minimise the shadowing of each other when the wind blows from this direction). This will produce a net output of 8.953GWh (8,953MW) from 3 turbines.

It should be noted that this has been based upon predicted wind data. Predicted data is generated by mathematically modelling the site and may not take into account local factors such as the roughness of the ground, upwind obstacles such as trees etc. It is therefore valuable as an indicator but is not really a substitute to measuring actual wind. Wind measurements should be obtained for preferably two years to minimise the seasonal effects. An absolute minimum period for collection of data would be one year.

#### Power Distribution

I have discussed the issue of power distribution with Scottish Hydro Power, the island's electrical distribution company. They have confirmed that the island has a primary 33kV and secondary 11kV distribution systems.

It is proposed to feed the 2.4MW plated<sup>2</sup> scheme directly into the 11kV system. Unfortunately, the presence of 11kV local distribution cables in the vicinity of the site does not provide the means to do

<sup>2</sup> The plated value is the maximum rated value of the turbines, being 3 x 0.8MW



this. Wind generators feed into the grid by supplying at a voltage above that of the grid. The voltage varies with the receptivity of the grid, i.e. how much power is being consumed in the vicinity. The result of this would be that at the ends of the network, where the proposed feed-in point would be, supply line voltage fluctuations could be significant and result in extreme overvoltage occurring. This would affect consumers along the particular distribution line. Further, the power losses of 2.4MW transmission along relatively low voltage lines (in relation to 33kV, 132kV and 500kV) would be large and could affect the integrity of the grid in the event of network disruption such as downed cables. Power distribution companies do not generally permit connection of medium scale generation into an 11kV grid unless done through a dedicated cable connected at 'primary' level. Generally, such generation would be connected into a 33kV primary distribution grid where issues such as overvoltage and capacity are more readily controlled.

This means that it is probable that a dedicated 11kV or 33kV cable run would be required. This would most economically be provided by overhead poles or pylons (underground cables are considerably more expensive). The length of such a cable would depend upon the location of a suitable feed-in point which would most certainly involve crossing land not belonging to the wind site owner. It is understood that the 33kV primary network extends to Bruchag in the South of the island where it is considered likely that a suitable feed-in could be made.

The large transformer referred to in the council minutes is a 'red herring'. Transformers merely convert the 11kV to 415V / 230V consumer-level voltages. They serve no purpose beyond this.

#### Environmental

It is noted from the AECOM report that Bute consumes approximately 76GWh of electricity annually. This scheme could provide approximately 9GWh, or 11.8% of the total. This is considerably less than the 67% presented to Bute Community Council (minutes of meeting Wednesday, 21<sup>st</sup> September).

The efficiency is further reduced by losses in distribution cables, which may be significant, depending on the length. It is highly likely that a new transmission line will be required, having its own environmental impacts.

Wind energy, although zero carbon (once installed), requires backup generation capable of rapid response to cope with changes in wind. Such backup generation (predominantly gas) is not zero carbon, and must be considered in calculating the carbon footprint of the scheme. The carbon cost of manufacturing and installing the turbines must also be considered.

It is normally considered that such turbines should not be situated within 750m of residential properties, which would appear to be the case here. Such recommendations are based upon noise (blade 'swish', turbine gearbox 'whine' and inverter 'hum'), safety (risk of fire and catastrophic failure) and visual disturbance (light flicker). The provision of less buffer zone should be supported by adequate indemnity to cover adversely affected amenity to properties affected, which will further increase the scheme costs.

#### Summary

- The proposed scheme could deliver up to 11.8% of the island's electrical needs (not 67% as suggested).

- Even 100% wind generation would not provide self-sufficiency for the island, due to the need for backup energy when there is no wind.
- Since the 11kV cables on site are not part of the island's primary power distribution network, it is likely that dedicated power distribution cables via poles or pylons would be required to connect the installation to a point in the network deemed suitable by the local electricity distribution company, the most promising being at Bruchag.
- The scheme is less efficient than sites identified by AECOM.
- The scheme is closer to habitation than recommended by the wind generation industry.

I trust that the above provides helpful information to inform the case for such generation.

Yours sincerely,

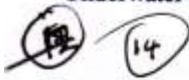
A handwritten signature in blue ink, appearing to read 'D. Johnson', with a stylized flourish at the end.

Professor David M Johnson PhD BSc DIC CEng FICE

**Extracts from Argyll and Bute Landscape Wind Energy Capacity Study**  
**March 2012 by Scottish Natural Heritage**  
**Guidance for Argyll and Bute Council**

1. "There is some scope to site additional windfarm development with turbines above 50m height only within the uplands of Kintyre" (Page 3)
2. "There is no scope to accommodate turbines above 50m height within the smaller scale, settled coastal/loch fringes and islands due to their increased landscape sensitivity to tall turbines" (Page 3) Therefore this report does not even consider the impact of turbines greater than 50 m high.
3. "Some coastal and island landscapes would be highly sensitive even to turbines below 20m" (page 3)
4. "Cumulative landscape impacts could be associated with larger scale (above 50m) turbine development being sited on Bute which appears largely undeveloped in comparison with the highly modified mainland coastal area to the east." (page 51)
5. Constraints for Bute "The relatively low elevation of the southern hills, and presence of nearby small buildings, which could be dominated by larger turbines" (Page 52)
6. Guidance on Development in Bute "There is likely to be very limited scope for *small-medium typology* (35-50M high turbines) to be located within this landscape type. Turbines should not be sited on prominent hill tops or steep slopes" On rolling farmland and estates: (page 52) There is "No scope for the *small-medium typology* (35-50m) to be located within this landscape type without incurring significant impacts on a number of sensitivity criteria." (page 130)
7. Sensitivity : "There would be a *high – medium* landscape sensitivity to the *small-medium typology* ( turbines 35-50 m high) due principally to the effect of taller turbines on the scale of the landform, its diverse vegetation cover and on settlement." "Visual Sensitivity is **high**" even for the *small-medium typology*(35-50 m high)
8. "It was concluded that there was no scope for the *small-medium typology* (35-50 m high turbines) to be located within any NSAs (National Scenic Areas) because of potential significant effects on the special qualities of these designated landscapes" (page 233)

9. The report concludes that the sensitivity to *small –medium typology* (35-50 m turbines) is *High – Medium* and states “ A *High-Medium* combined sensitivity indicates a landscape where the constraints are such that there would be likely to be unavoidable significant adverse impacts on some key criteria despite other criteria being potentially less sensitive to the development” (Page 234)
  
10. **Scope for larger turbines over 50 m high** As mentioned in point no 1 There is no scope for turbines of this size anywhere on Bute. Furthermore Ascog farm is in a High-Medium Sensitivity area (page 233 and map 13a pg 128) and the report does not recommend turbines in this area as “constraints are likely to result in significant adverse landscape and visual impacts on key characteristics” (Page 236)



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## Underwater turbine set to be used for Scottish tidal power

17 May 2012



An underwater turbine that is set to be used in Scotland's first and only consented tidal-power project has completed initial testing.

The 1MW HS1000 tidal turbine developed by Andritz Hydro Hammerfest was installed in December 2011 and has since been undergoing tests in the tidal waters around Orkney.

According to a statement, the test device in Orkney, which is providing electricity for homes and businesses on the northern Orkney island of Eday, aims to prove that the technology can operate efficiently in Scotland's fast-flowing tides, that monitoring and maintenance operations can be honed and to help reduce costs in operations and installation.

Scottish Power Renewables (SPR) plans to use this technology as part of the world's first tidal turbine array in the Sound of Islay. The company's plans to develop a 10MW tidal array in Islay received planning consent from the Scottish government in March 2011.

Keith Anderson, chief executive officer of Scottish Power Renewables, said: 'The performance of the first HS1000 device has given us great confidence so far.

'Engineers were able to install the device during atrocious weather conditions and it has been operating to a very high standard ever since.

'We have already greatly developed our understanding of tidal-power generation and this gives us confidence ahead of implementing larger-scale projects in Islay and the Pentland Firth.'

Said to be seen as one of the world's most advanced tidal turbine designs, a prototype device has been generating electricity in Norway for more than six years. The design is based on a mixture of technology used in traditional onshore wind turbines, subsea oil and gas production and in hydro-power plants.

Stein Atle Andersen, managing director of Andritz Hydro Hammerfest, said: 'The 1MW pre-commercial device is an important step in our staged strategy for developing reliable and cost-efficient tidal energy converting devices and power plants.

'The tests being carried out so far have confirmed the design basis for the technology and given comfort concerning the device's capacity.

'We are still early in the testing programme with endurance, availability and reliability being the most imminent factors for asserting a proper basis for developing commercial tidal-energy power plants. However, we are already well into design engineering for the first power plant.'

First Minister Alex Salmond said:

"Scotland has massive potential to meet our energy needs several times over from a wide range of renewables, from wind through biomass, hydro power and the massive potential of the sea. This, added to our advantages in clean coal, gas and carbon capture makes for an exciting energy future for Scotland.

"Today, the focus is on the opportunities to be found beyond our shoreline. Caithness, and the waters churning off the nearby coast from the Pentland Firth to the islands of Orkney, stand as a powerful symbol of that renewable energy potential. Scotland has a marine energy resource which is unrivalled in Europe - we have an estimated 25% of Europe's tidal resource and 10% of its wave

1. The largest owners of Hammerfest Strøm AS's are ScottishPower Renewables, StatoilHydro, the Norwegian oil and gas company, Hammerfest Energi, a power utility located in northern Norway, and Hammerfest Naeringsinvest. Their tidal technology has been extensively tested at 300kW scale over a four year period, in tidal waters at Hammerfest.

2. The tidal power resource is estimated at some 150 billion kilowatt-hours per annum globally. The UK share has been estimated at 13 billion kilowatt-hours (Phase II UK Tidal Stream Energy resource Assessment, Black & Veatch, 2005), and over 80% of this is located in Scottish waters.

3. Lånstrøm's technology is a form of "tidal stream" power which can be distinguished from "tidal barrage" power as there is no need to impound the water. This is expected to bring significant environmental advantages by avoiding impacts on sensitive inter-tidal zones around the coast.

4. Lånstrøm's technology is best described as an underwater wind turbine, but with much shorter blades, and turning more slowly. The units are mounted on the sea bed and aligned to the tidal flow. Each device will generate around 1MW of output, and in future arrays of multiple devices are anticipated which could generate 50MW to 100MW each.

5. The Scottish Government have taken a leading approach to stimulating the marine renewables market through support grants and a longer-term revenue support scheme. The Scottish Government has stated that "Scotland is uniquely placed to be a world leader in tidal power. We are home to the meeting point of two powerful seas and the Pentland Firth has been described as the 'Saudi Arabia of tidal power'. (<http://www.scotland.gov.uk/News/Releases/2008/09/09111618>)

6. The Scottish Government have recently confirmed their intention to introduce increased funding for wave and tidal projects with multiple ROC's (3 for tidal and 5 for wave). This will ensure that Scotland has the best support regime in the world for marine renewables.



## World's largest tidal turbine project in Sound of Islay

The world's largest tidal stream energy development will be built off the west coast of Scotland.

The Sound of Islay and an artist's impression of one of the turbines Photo: ALAMY

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ScottishPower Renewables' £40 million tidal array will harness the power of the Sound of Islay and generate enough electricity for more than 5,000 homes, more than double the number of homes on Islay.

The 10 megawatt (MW) facility will further develop emerging tidal energy technology, and provide economic and community benefits to Islay and Jura.

The Scottish Government said it will cement Scotland's position as a global leader in marine energy.

Cabinet Secretary for Finance and Sustainable Growth John Swinney, who determined the application as it is in Energy Minister Jim Mather's Argyll & Bute constituency, said: "With around a quarter of Europe's potential tidal energy resource and a tenth of the wave capacity, Scotland's seas have unrivalled potential to generate green energy, create new, low carbon jobs, and bring billions of pounds of investment to Scotland.

"This development - the largest tidal array in the world - does just that and will be a milestone in the global development of tidal energy."

Mr Swinney said the Scottish Power Renewables array will work in harmony with the environment and use the power of the tides in the Sound of Islay to generate enough green energy to power double the number of homes on Islay.

He added: "There is simply nothing like it consented anywhere else in the world.

"Developers must also work with host communities to provide local benefits.

"I am pleased that ScottishPower Renewables will work with the Islay Energy Trust to maximise social and economic opportunities, for instance using local marine contractors during installation or creating new local jobs in the onshore construction phase.

<http://www.telegraph.co.uk/earth/energy/8387558/Worlds-largest-tidal-turbine-project...> 08/07/2012

"And the wider Scottish supply chain is set to benefit, with Scottish businesses set to benefit from four million pounds worth of contracts in making the turbines to be used in the development, including manufacture of a test prototype at BiFab in Arnish.

"The Scottish Government has the right incentives for commercial marine energy generation.

"With the highest support levels in the UK for wave and tidal energy, our £10 million Saltire Prize - Scotland's energy challenge to the world to inspire innovation in marine energy - and our low carbon investment project, Scotland is one of the most attractive markets in the world for investment in marine renewables.

"We will continue to work with our enterprise agencies and with other partners to develop to our full potential and cement Scotland's position as a global leader in marine energy."