When considering if a wind farm should be granted approval for Wigtown Bay and describing the South West in 2011 (Marine Scotland, Blue Seas Green Energy, Part A, The Plan, March 2011) the Scottish Government stated that ‘Socio-economic assessment suggests that there is little or no potential for regional economic benefit, and indeed there is the possibility for adverse economic impacts’. Wigtown Bay is just around the next peninsular to Luce Bay and indeed the South West remains the South West it hasn’t moved further north in the intervening years. However, here we are again considering wind and/or tidal developments in the South West despite the potential for ‘adverse economic impacts’.

Marine Scotland’s ‘Scottish Index of Multiple Deprivation: 2012 Overall Rank’ (Scotland’s National Marine Plan, Sustainability Report, 2013) shows the southern half of the South Rhins, Glenluce area, north of Glenluce in the Galloway Hills through to South Ayrshire and the North East coast of the Machars as next to the top in the ‘most deprived areas’ in Scotland. Therefore, it would be reasonable to assume that since Marine Scotland’s economic assessment of 2011 would result in ‘adverse economic impact’ that further deprivation would ensue if another wind farm were to be built. In Western Galloway (old county of Wigtownshire) there are 749 (39 wind farms) industrial wind turbines operational, under construction, consented, proposed or in scoping. These are mostly in a line from Luce Bay northwards to just over the Ayrshire border. In an area that relies heavily on tourism to sustain the local economy and with high unemployment, anything that would put further pressure on the economy is a risk too many. The long term effects of this so called ‘sustainable’ development will inevitably result in reduced tourist numbers to this area and both direct and indirect employment will be affected. Few people want to take a holiday in the middle of a giant power plant but that is what Wigtownshire (West D&G) will look like if all the turbines in the planning system are granted approval. The Mull of Galloway is now in public ownership and if fewer people holiday in the cottages this will result in reduced income and reduced investment in the community. The term ‘sustainable’ is used very frequently throughout the National Marine Plan. The dictionary defines the term as ‘capable of being maintained at a steady level without exhausting natural resources or causing severe ecological damage or without causing economic damage’. The Marine Scotland quote above from the Wigtown Bay proposals indicates that there is likely to be economic repercussions from developing this area and Marine Scotland’s SEA (2013) for OWSW1 (south of Luce bay) states that ‘It is difficult to predict the precise impact of potential changes to amenity on recreational use of the area. Some displacement could be permanent leading to recreational activities being discontinued...’ Any displacement or discontinuation of recreational activities will negatively affect the local economy and is unacceptable.

The Scottish Government’s energy policy is committed to current orthodoxy and wedded to the notion of a future without electricity production from fossil fuels despite technical and scientific evidence of the folly in this action. Despite evidence that wind turbines are damaging to human health, current policy is ideology driven instead of science led with vested interests clouding important issues.

**CONSULTATION PROCESS**

We wrote twice to David Pratt at the beginning of the year saying we were unhappy with the make-up of the ‘Project Advisory Group’ and the ‘Stakeholders to be Contacted’ at the beginning of this project when the first drafts of the ‘National Marine Plan’ and ‘Planning Scotland’s Seas’ draft documents became available to a limited group but were emailed to us. In both letters we mentioned the Highland Centeredness of the above groups e.g. on the PAG there is the ‘Highlands and Islands Enterprise’ and not the ‘Solway Partnership’ or the ‘South Rhins Community Development Trust’. There are three Highlands or Islands councils but not D&G council. Whilst there are several north of Scotland based...
organisations and businesses, the businesses and organisations local to D&G are excluded. We inquired into the headquarters of several of the ‘consultee’ group and found they are also based in the north of Scotland. David Pratt’s response mentioned that all the councils in the consultee group have experience in tidal and wave energy yet D&G council has experience of off-shore wind generation, in the form of Robin Rigg wind farm, yet was not consulted. Robin Rigg was hailed as Scotland’s first off-shore wind farm so it appears that this blows a hole in Mr Pratt’s argument that everyone on the group had some kind of expertise which D&G were obviously considered not to have. The composition of these groups also caused concern because of the legality of this consultation before the options were closed and handed to the general public in a ‘choose from this list’ approach. As anyone knows this is not really a choice at all. The Marine Strategy Forum and the SG Energy Directorate are not ‘the public’ (see below) since they serve the interests of the Scottish government. The make-up of these groups and this selective primary ‘consultation’ cannot therefore be considered representative of ‘the public’ (see below). It is also in contravention to Article 7 of the Aarhus convention in relation to public consultation and access to information (UNECE The Aarhus Convention, An Implementation Guide, Second Edition 2013, UN). The process of the Plan contravenes international law and this must be rectified in the public interest.

**PLANNING PROCESS**

A United Nations legal tribunal ruled that the UK Government (vis-à-vis the Scottish Government) acted illegally by denying the public decision making powers concerning the NREAP renewable energy policy and the necessary information about the benefits or adverse effects of erecting thousands of wind turbines. The new ruling (agreed by United Nations European Economic Commission for Europe) calls into question the legal validity of any further planning consent for all future renewable energy developments. Article 7 requires that environmental information be provided to the public. It appears that the authors of Scotland’s National Marine Plan are also unaware of the Preamble to the Convention that states ‘Recognising the importance of fully integrating environmental considerations in Government decision making and the consequent need for public authorities to be in possession of accurate, comprehensive, and up-to-date environmental information...’ (UNECE The Aarhus Convention, An Implementation Guide, Second Edition 2013, UN). This Plan talks about not having enough information on for example EMF’s, phrases such as ‘...it is difficult to predict...’ (Draft Plan SEA) which do not seem to suggest that ‘all the relevant information’ has been obtained.

‘Planning Scotland’s Seas’ (2013) (Fig.2 Sectoral Marine Planning Process p13) at no point along the flow chart, or in the accompanying text, is public consultation mentioned prior to the options being closed. Both the British Government and the European Union have been reported to the United Nations Non-Compliance Committee for failing to undertake public consultation prior to their respective energy policies being adopted and the United Nations has ruled that they are unlawful. The Scottish Government is also in non-compliance with international law. The Aarhus Convention (Article 2, Definitions, 5) defines ‘the public as the public affected or likely to be affected by, or having an interest in, the environmental decision-making ... The preamble however, explores some of the values and considerations at the heart of ‘public participation’. The most fundamental of these is the role of public participation for ensuring a mechanism for the public to assert the right to live in an environment adequate to health and well being’ (UNECE The Aarhus Convention, An Implementation Guide, Second Edition 2013, UN). The United Nations’ Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters’ (Aarhus, Denmark, 25th June 1998 (An Implementation Guide Second Edition (2013)) signed by the European Union on behalf of the member
states, states that ‘The articles in the second pillar serve as a reminder to public authorities that it is vitally important to allow public participation to do its job fully. While it may be tempting to cut corners to reach a result that might appear on the surface to be the best……. public participation that is merely a pro forma - i.e. that takes place when options are already closed - can injure the chances for successful implantation of a decision because of the questionable legitimacy of the process’ (ibid Purpose of the Public Participation Pillar). It appears therefore that Marine Scotland’s process is non-compliant with international law since the public has been presented with two choices in relation to OWSW1 (wind or tidal) and the public were not consulted before the options were chosen.

**SCOTLAND’S NATIONAL MARINE PLAN (2013)**

The Plans strategic objectives (ibid) while full of lofty ideals is very short on practical steps to apply these to real life situations. While these objectives are laudable it is not at all clear for example, how ‘biodiversity, with rare, vulnerable and valued species’, is to be protected by developing renewable energy in the seas around Scotland which by definition has to disrupt and even destroy things such as sea grass meadows (present in the Solway) that are very sensitive to disturbance. Similarly in an area of deprivation (ibid Fig. 8 Scottish Index of multiple deprivation 2012) it is unclear how renewable energy will benefit the Rhins communities when DONG energy has developed a base at Belfast Docks, the ships maintaining marine wind farms in this area are Cypriot or Swedish and are also based at Belfast Docks or Whitehaven and when two thirds of British wind farms are owned by overseas companies benefitting from overgenerous subsidy (ROC) paid by the levy on British electricity bills.

- ‘all those who have a stake…’ (p16) Everyone has a stake in the marine environment and everyone should have been consulted not only on the energy policy but also on the plans to develop off-shore energy before the options were closed.
- ‘Using evidence Responsibly’. Where is the evidence on which to base this plan? Where is the evidence to suggest that there will be carbon saving from wind turbines or underwater turbines, both of which are very carbon intensive in their construction? Since 25% of the UK’s carbon footprint comes from the transport of food within (not to) the UK why is this not addressed prior to building more wind farms that take many years to pay back the carbon they have consumed in being built. Shipping produces 40% of the air pollution on land and is said to be responsible for 50,000 deaths in Europe per year at a health care cost of £58 billion (Air Pollution and Climate Secretariat, Sweden. European Environmental Bureau, Belgium. 2011). If plastering the land and sea in this area with wind turbines is really about carbon saving (and not blinkered ideology) why is this not addressed first. Where is the evidence to suggest that the building and running of turbines will safeguard ‘sea floor integrity ensuring the structure and function of ecosystems are safeguarded and benthic ecosystems are not adversely affected’. Where is the evidence that suggests the carbon sinks - sea grass meadows and kelp forests will not be damaged during construction and operation of these devices. Researchers know that the commissioning of research affects the outcome – he who pays the piper....etc. We believe therefore that the Scottish Government should commission research and not the developer in order to undertake the EIA. Although the Scottish Government has an interest in this matter it would be the lesser of two evils. Wind farm companies are not known for providing the general public with accurate, even truthful information, since several have been reported to the Advertising Standards Agency (ASA) in recent years. In addition ‘using evidence responsibly’ does not sit easy with the phrase ‘a presumption in favour of development’ (GEN1 below).
General Principles

BOX 1  Assessment of the Marine Area.
This section should also contain information about munitions dumps. In the South West this would be Beaufort’s Dyke but would also need to include the drift of munitions, and unauthorised dumping, in the Solway Firth just south of Luce Bay.

GEN1
‘There is a presumption in favour of sustainable development’. If the guiding principal in decision making is to be evidence based (as stated in the Plan) the driver cannot be ‘a presumption in favour’ of anything especially when the term ‘sustainable’ is open to interpretation. It’s arguable that the renewable energy subsidy in the form of Renewable Obligation Certificate (ROC’S) and Feed in Tariff (FIT’S) is sustainable and there is no evidence in this document demonstrating this is the case. Since the renewable energy levy on electricity bills to pay for the ROC’s and FITS is very unpopular with the general public it could be argued that it is not sustainable. In fact there is no evidence in this document explaining the claims about carbon saving either. A ‘presumption in favour of’ does not sit easy with public consultation since favour means approving or partiality which is not an appropriate stance in public consultation. Besides any legal obligations, in a democracy, public bodies are in place to serve the public and not ride roughshod over their wishes and concerns.

GEN2/3
‘...economic benefit to Scottish communities’. The term ‘community’ means everyone in a particular area (Collins English Dictionary). Thus far the community here can see that so called sustainable development provides economic benefits for land owners and several overseas owned energy companies. Two thirds of wind farm companies operating in the UK are owned by overseas companies. This does not ‘reduce social disparity’ (GEN3) and does not ‘lead to social cohesion’. Lofty ideals, though they might be, this Plan does not provide evidence of a link between the plan to develop renewable energy and (as stated) reducing social disparity. In addition Marine Scotland has already identified the potential for negative economic effects in this area. Marine Scotland needs to answer the questions – who will construct the turbines, who will erect them at OWSW1, who will maintain them, where will the ships be berthed for this to take place and how will this benefit the Scottish public in employment and economic terms. Lastly, the question of how this will bring about an equitable society should be answered since this is stated as a goal.

GEN 4
Relying on wind farm companies to undertake truthful EIA is not satisfactory. Several on-shore wind farm companies have been reported to the ASA for untruthful or misleading information supplied to the general public.

GEN 8
‘All marine interests will be treated with fairness and transparency when decisions are being made’. Neither does this statement sit easy with ‘there is a presumption in favour of development’ written earlier in the Plan. It is not possible to be fair and even-handed if there is ‘favour’ in the decision making process.

GEN 10
Where evidence does not exist the Scottish Government should commission research projects to fill the gap. Where this is impossible the precautionary principle should be used.
GEN13 Historic Environment (Map4 p33)
Buildings omitted from this map:-
  - Mull of Galloway Lighthouse
  - Lighthouse Cottages
  - Boundary walls
  - Engine House
  - Foghorn
  - Old Byre (RSPB Building) and
  - Wall across the headland

In addition there are approximately 30 other listed Grade A or B buildings on the east coast of the South Rhins bordering Luce Bay and several on the Machars peninsula.
The Mull of Galloway is now owned by the local community and anything that causes fewer people to visit the area and stay in the cottages will result in lower income generated and therefore less investment, in the local community.

Off Shore Wind (Page 85)
Robin Rigg wind farm is cited as Scotland’s first off-shore wind farm yet the power is transmitted to Cumbria and the maintenance team is based at Whitehaven in Cumbria. How then will ‘economic opportunity’ be created in Scotland when there isn’t a harbour large enough to berth the ships necessary to carry out the construction and maintenance work on the Solway coast. Belfast Docks is the headquarters of DONG Energy where the turbines (for OWSW1) will be built. The Cypriot and Swedish ships presently undertaking installation and maintenance work on off-shore wind farms, throughout the Irish Sea, are also based at Belfast Docks. Stranraer harbour lies empty, since the ferry companies moved to Cairnryan, but the Scottish Government has not taken the initiative to bring it into public ownership or attract new business to the harbour and town. These are strategic planning matters and cannot be dealt with by residents.

GEN 19 Climate change (Page 38)
‘Developments should not result in the complete loss or damage to natural carbon sinks....’ The Solway Firth and Luce Bay have sea grass meadows and kelp forests that risk being damaged by development of the Solway.

Chapter 11 Renewables (Page 85)
The statements in this section do not take account of public participation in the decision making process in relation to setting ‘renewables’ targets and is counter to the requirements of the Aarhus convention mentioned above.
Off-shore Wind p85
This section of the document quotes the same kind of figures that have been quoted by the Scottish Government and then retracted in the Scottish Parliament. The Route Map for Renewable Energy in Scotland breaches international law.

Part 2 Key Issues for Marine Planning p86/7
Supporting Economically Productive Activities.
...‘Wind and tidal energy will create significant economic opportunities in Scotland’... This is a definite statement that is not backed up by evidence. According to Marine Scotland, ‘Blue Seas Green Energy’ (Part A, The Plan, March 2011) ‘Socio-economic assessment suggests that there is little or no potential for regional economic benefit, and indeed that there is the possibility for adverse economic impacts’. The
only people to benefit from wind turbines are the people in the country of manufacture. Here in the South West of Scotland DONG Energy has been granted exclusive rights to develop the area just south of Luce Bay. At a meeting in Stranraer DONG representatives informed the group that the turbines will be constructed in Belfast where DONG Energy is based at Belfast docks. At present there are two ships undertaking maintenance on wind farms in the Irish Sea environs one is Cypriot and the other Swedish both of them are berthed in Belfast Docks. Robin Rigg wind farm maintenance team is based at Whitehaven. Would you like to inform the general public just how this area is to benefit, in employment terms, and what the economic opportunities, that you have written about, actually are. Which regions in particular will benefit and what evidence this is based upon?

Living within Environmental Limits (p88-90)

Noise
The statement that noise ‘...may be detected for several kilometres...’ This isn’t scientific or evidence based. Low frequency noise is hazardous to human health. If there was any doubt about this, research over the last 5yrs has provided sufficient data to be fairly sure that there is a health hazard. There is a small but growing body of knowledge easily available on the internet demonstrating that there are health effects from low frequency noise and that the noise that can be heard is irritating to residents. These studies have been undertaken by medics and acousticians across continents and are producing very similar results making the findings more believable.

Visual Impact (p90)
DONG Energy stated that the turbines they plan to erect (given relevant permission) are 190m high. At sea there is no way of ‘backgounding’ turbines and therefore they will be very prominent blocking views of the Solway Firth and the Isle of Man from the Mull of Galloway. In addition to this, the proposed OWSW1 is not really off-shore but in-shore and therefore close to the Machars and the S.Rhins peninsulars and will be very visible. With approximately 39 on-shore wind farms, built consented or in planning, in a north/south line with the proposed Solway OWSW1, and with nearly 800 turbines between them (see attached diagram), the cumulative impact of these in such a small area as Wigtownshire will resemble one huge power plant. The area will not be attractive to tourists and the economic impact of that will cause incalculable damage to the local economy raising unemployment even further.

PART 2 Key Issues for Marine Planning (p122)

MOD
There is a deep trench in the sea bed just west of the South Rhins peninsular called Beaufort’s Dyke. After WW1 and WW2 and indeed right up to 1970 the British Government disposed of millions of tons of munitions and other material into Beaufort’s Dyke. What seems to have happened is that ships left Stranraer harbour and didn’t always get as far as the Dyke before shedding their load. In addition, ships left Silloth on the Cumbrian coast and from these there was unauthorised dumping just south of Luce Bay (info from Imperial War Museum). In 1995 a company was siting a sub-sea cable but the sea bed plough disturbed large boxes containing thousands of phosphorous bombs which drifted with the wind and tide to the coasts of Scotland, Ireland, Isle of Man and England. When they reached the shores and dried the bombs exploded. According to Royal Navy divers there are six explosions per year in the Irish Sea and local communities around Luce Bay are aware of explosions in the Bay. A seabed survey of the Irish Sea and Solway detected 300 large munitions per square kilometre (see Fisheries Research Services: Munitions Dumping at Beaufort’s Dyke 1995-6 http://www.frs-scotland.gov.uk). A report compiled by Qinetiq (www.scotland.gov.uk/Resource/Doc/1086/0048983.pdf) states that the munitions have migrated a considerable distance eastwards into the Solway at least to Burrow Head,
into Luce bay and south to the Isle of Man. Qinetiq recommend the safest way to deal with these munitions is to leave them undisturbed. Our argument is that disturbing the sea bed in this area to install wind turbines or underwater turbines is likely to put coastal communities at risk.
Cumulative Wind Farm Map of South Ayrshire and Wigtownshire. October 2013.

Numbers in brackets = number of turbines in wind farm.

- Operational and under construction.
- Consented.
- Proposed (Planning Application, Appeal, Public enquiry).
- Scoping / Public Domain Proposals.