ENTERPRISE AND CULTURE COMMITTEE

3rd Meeting, 2004 (Session 2)

Tuesday, 20 January 2004

The Committee will meet at 10 am in the Victoria Hall, Kinloch Road, Campbeltown, Argyll and Bute

1. Renewable Energy Inquiry: the Committee will take evidence from:

   Panel 1

   George Harper, Director of Development Services, Argyll and Bute Council;

   Angus Gilmore, Head of Planning Services, Argyll and Bute Council;

   Steven Watson, Manager, Argyll, Lomond and the Islands Energy Agency;

   Panel 2

   Susan Reilly, Managing Director, Strategic Transactions UK, Scottish Power;

   Allan Mortimer, Head of Wind Development, Scottish Power;

   David Sigsworth, Generation Director, Scottish and Southern Energy;

   Dr Brian Smith, Head of Projects, Scottish and Southern Energy;

   Panel 3

   Robert Forest, Chief Executive, Scottish Renewable Forum;

   Maf Smith, Development Manager, Scottish Renewables Forum;

on its inquiry into renewable energy in Scotland.

Judith Evans
Clerk to the Committee (Acting)
Room 2.7, Committee Chambers
Ext. 0131 348 5214
The following meeting papers are enclosed:

**Agenda Item 1**

Submission from Argyll and Bute Council  
Submission from Scottish Power  
Submission from Scottish and Southern Energy  
Submission from Scottish Renewables Forum
ARGYLL AND BUTE CONTEXT

Argyll and Bute Council has a unique contribution to make to the future provision of renewable energy and has in fact had a long tradition of generating electricity from renewable resources principally through our long established hydro schemes.
Located on the west coast of Scotland we receive the prevailing westerly winds from the Atlantic Ocean. This generates weather systems, which give us amongst other things abundant, wind, rain, wave and tidal action and a climate, which is perfect for growing trees. This explains why we have some 10% of the UK coniferous plantations. Harnessing our abundant natural resource of wind, water, and wave has allowed us to, and will continue to allow us to, contribute to a diverse, secure and sustainable energy supply.

Most notably we have Scottish Power’s Cruachan Power Station constructed in 1965, one of only four pump storage power stations in the UK capable of generating 400 megawatts. Small privately owned Hydro schemes on farms are also becoming more common in Argyll. There are new schemes on Loch Awe, at Ashfield and Dalantoe in North Knapdale and older schemes at Ormsary Estate and at Feolin on Jura. These taken with our more recent wind farm developments means that we have made a significant contribution towards helping Scotland and the UK to meet Government objectives.

Argyll and Bute has seen the construction of one of the first wind farms in Scotland at Taynuilt in 1999 as well as the development of Beinn an Tuirc Windfarm in Kintyre, which when approved was one of the largest wind farms in terms of generating power in the UK, generating 30mw from 46 turbines. We currently have four operational wind farms with a further two wind farm applications approved and one under consideration. There are single turbines on the island of Luing (50kW) as part of a farm diversification project, and smaller turbines from 600watts to 15kW in situ or planned on the islands of Tiree, Lismore, Sanda and Jura, and at Kilchrenan and Lochgilphead. The Isle of Gigha Heritage Trust has submitted an application for three community owned 225kW turbines at Leim on Gigha. We have seen the development of the Limpet, the first commercial wave driven power station in the world at Portnahaven on the island of Islay, generating 500kw of renewable energy to the grid.

More recently we have seen the rapid development of the Biomass sector through the installation of wood fuel heating systems throughout the area. We have the award winning automated woodfuel installations at Whitegates, Lochgilphead, a housing association (Fyne Homes) development consisting of 52 homes, and the Mid Argyll Swimming Pool. There are planned installations at the new Fyne Homes Housing development in Campbeltown as well as at the Campbeltown Community Facility and at Glenshellach Housing development in Oban.

A catalyst in all of this has been the Argyll, Lomond & the Islands Energy Agency (ALI Energy). The Agency is a prime example of best practice in energy efficiency, promotion and development within Argyll and Bute. The Agency is dedicated to both increasing energy efficiency in the domestic, public and business sectors, and increasing the energy that is derived from renewable sources. ALI Energy plays a promotional and developmental role in everything from small community wood fuel schemes to the innovative Islay Hydrogen Project as well as covering a range of energy issues from householder insulation schemes to leading the promotion of Argyll for renewable energy development. The Agency has become a catalyst for energy activities in Argyll and Bute on a wide range of fronts and performs a critical role in increasing public awareness and improving public opinion of renewable energy schemes.

3. TOWARDS A RENEWABLE FUTURE

As COSLA have stated in their submission, to guarantee the availability of power on demand in the future, renewable energy must increase as other forms of power generation are phased out. We would endorse COSLA’s call for a Scottish Energy Strategy containing an integrated energy policy, including both energy generation and conservation, to guide the support and development of a range of renewable energy sources, along with the best technologies for their development, to secure stability and continuity of supply from renewable energy sources. The current over reliance on onshore wind farms, with their intermittent supply is often perceived as a particular weakness of the current renewable energy industry from a reliability
point of view and can, as a consequence, fuel public scepticism and can undermine consumer confidence.

Our abundant natural energy resource offers many exciting and innovative opportunities with regard to both the established technologies of onshore wind, hydro, biomass and solar, and the emerging technologies of wave and tidal. It is a well-accepted fact that we are now at a point in the development of wave and tidal technologies, which we were at 10/15 years ago with onshore wind technology. Scotland therefore has the potential to be at the forefront of these emerging technologies providing that the fiscal and policy support is available.

There are key areas where Argyll and Bute Council feels that renewable energy in Argyll and Bute needs to be developed in order to assist in meeting Government targets and to secure economically and socially sustainable communities. These key areas are as follows:

**The Electricity Grid**

It is imperative that there is capacity within the grid to accommodate new generation. There are current limitations within Argyll and Bute both on the mainland and on our islands, which requires to be overcome to ensure full exploitation of our renewable resources. Put simply, at present the grid is at its weakest where the opportunities to generate energy are at the greatest, the most remote and consequently the most fragile parts of our area. In this regard the Executive must work with all those involved to increase the rate of infrastructure upgrading. It is vital that investment is made available for a comprehensive upgrade of the grid to ensure that Argyll's remote and fragile locations, which can offer huge renewable resource but are currently handicapped by their weak grid connection, are appropriately serviced. There are currently proposals to upgrade part of the grid in Argyll and Bute relating specifically to the line between Sloy and Inveraray. It is imperative that this proposed upgrade will be sufficient to ensure that Argyll and Bute realises its full potential both now and in the long term. The Scottish Executive and Westminster have therefore a critical role to play through the development of both National and Scottish Energy Strategies, which will shape future grid investment. This strategy must take account of the needs and opportunities of remote communities and ensure that such communities are not penalised by having to pay locally for upgrades to the grid. The potential for a grant system for local grid upgrades should be investigated in order to encourage community level renewable energy projects which would otherwise be disadvantaged by the cost of connection to the grid.

**The Storage of Energy**

The Islay Hydrogen Project, which is an infrastructure and fuel cell test programme on Islay developed by Strathclyde University, offers a unique opportunity to develop hydrogen as an alternative energy resource. Hydrogen fuel cell technology also offers the opportunity to overcome grid issues in remote and island locations by providing ways of storing electricity in fuel cells and could offer major opportunities in manufacturing. If the funding package to allow a full demonstration project on Islay is approved by the Scottish Executive, the role of hydrogen in supplying the future energy needs of the United Kingdom could be showcased here with particular emphasis on assisting remote and island communities.

**Biomass**

Argyll and Bute has approximately 10% of the total UK coniferous plantation and hence high volumes of uneconomic brash and small round woods. Biomass is a particularly beneficial form of renewable energy because of the numerous economic and environmental benefits, which it generates within the immediate area. It utilises a local resource, reduces the export of that resource out with the area, reduces the impact on the road network, increases local employment and business opportunities through harvesting, storage, delivery, and system management, has minimal environmental impact and reduces Co2 emissions.

There are major opportunities in Argyll and Bute with regard to biomass and in fact significant developments are already appearing on the ground such as those mentioned earlier. ALI Energy has initiated a number of these developments. The development and expansion of local supply chains will be critical to the future of this sector and as such the Enterprise Networks must provide the necessary grant assistance to allow this sector to expand. The development of this sector on any significant scale will only happen if the Government
provides fiscal incentives. The device of Renewable Obligation Certificates (ROCs), which has been critical to the development of the renewable energy electricity market, should be widened from its current support purely for electricity, to include support for heat generated from renewable sources.

Wave and Tide
The coastline of Argyll and Bute provides the ideal opportunity for Scotland to develop new technologies in the emerging wave and tidal stream sector, thereby enabling Scotland to become a world leader in this technology much as the Danes have done with wind turbines. Our extensive coastline and numerous rapid tidal streams, which offer considerable shelter from ocean swells and prevailing winds, offers the ideal environment for demonstration schemes.

It is therefore vital to make a strategic assessment of the available resource and determine the locations and energy sources which offer the most sustainable solutions rather than responding in a piecemeal fashion, which would not necessarily secure the best sites, minimise environmental impact nor maximise economic benefit to the local area.

Whilst the identification of the potential renewable resource at a local level can be undertaken by the Local Authority and its local partners, there is a need for complementary action by the Government to provide the policy support and fiscal incentives to the major utilities and commercial companies to take forward new technologies to harness the various sources of renewable energy.

Opportunities for Communities
Traditionally support for communities from renewable energy development has been channelled primarily through the Community Trust Funds often under Section 75 agreements attached to the relevant planning consent. There are currently three such funds in Argyll and Bute providing valuable support to those communities directly affected by wind farm development. However, Argyll and Bute Council wishes to see greater long-term value from renewable energy being realised by our communities.

The Council is seeking to explore a pioneering approach in Argyll and Bute to realising greater community benefit. The Council wishes to create a Strategic Partnership with the major utilities, and renewable energy companies, to ensure that benefit from renewable energy developments are maximised locally through further renewable energy and energy efficiency measures. This partnership would recognise the long-term relationship, which the Council wishes to have with these companies geared towards ensuring the responsible harvesting of the full range of renewable resources in the longer term while maximising benefit to local communities and the local economy. A parallel can be drawn with the relationship between the Shetland and Orkney Islands and the Oil industry.

The partnership would seek to explore the opportunities for developing a legal mechanism out with the Planning Act to deliver Community Trust Funds. This model would separate the creation of such funds from the planning system thereby creating a more transparent, partnership process, which encourages developers to take a long-term view of their involvement in the area and seeks to foster the best possible relationships with the local community and the Council. This would negate any arguments regarding the potential for developers to “buy planning consents” from the local authority, by separating its regulatory and economic development functions in a transparent and accountable manner.

Key to taking forward this partnership in Argyll and Bute, is the existence and work of ALI Energy, which currently provides a significant focus for partner activity and has the potential to expand that role to support a strategic, Argyll-wide partnership while supporting local communities in developing renewable energy projects and integrating energy efficiency measures. The creation of an area wide fund could also provide security of funding for the long term sustainability of the Agency in order that it can continue to generate the community benefits, critical in increasing community understanding, and acceptance, of renewable energy schemes.
The work of the Agency is critical in engendering community support for renewable energy schemes both through their education programmes and their practical demonstrations of the benefits of renewable energy such as the Gigha Windfarm scheme.

Argyll and Bute Council would therefore, drawing on its own experience of the success of the energy management agency, encourage the Scottish Executive to explore the potential to create a fund which would support such innovative partnerships and energy management agencies.

4. THE PLANNING SYSTEM

Section 36 of the Electricity Act 1989 means that wind farms generating in excess of 50MW capacity are removed from the planning system. The trend towards larger wind farms has resulted in an increase in the number of wind farm applications falling out with the planning system and being determined centrally by the Scottish Executive. Whilst the local authorities are still called upon to provide the relevant information regarding developments above 50MW, the local authority does not benefit from the larger planning fees and local democratic accountability is weakened. The Council endorses the view of COSLA that the Planning Legislation is considered to be the most appropriate way to deal with all wind farm applications in the interest of local democracy and to allow the local authority to benefit from the larger planning fees.

The emerging National Planning Framework provides an opportunity to address strategic locational/capacity guidelines for the development of renewable energy taking into account operational, environmental and infrastructure issues and constraints. The Framework should also address strategic investment decisions with regard to identifying and removing national grid capacity constraints.

National Planning Policy Guideline 6 needs to be updated in order to reflect the larger renewable energy targets set since its creation as well as subsequent advancements in renewable energy. In addition Planning Advice Notes need to address the issue of cumulative and incremental impact and the potential to locate wind farms at lower altitudes within established commercial forests where environmental impacts could potentially be less significant. Argyll and Bute are working with Scottish Natural Heritage (SNH) to produce guidance for developers on this.

5. CONCLUSION

In conclusion Argyll and Bute Council is enthusiastic about the future potential for renewable energy development in Argyll and Bute. The Council believes that the best way forward is for the Scottish Executive, renewable energy developers, major utilities, Argyll and Bute Council and our communities to work in partnership to deliver our renewable future. Argyll and Bute Council seeks the Scottish Executive to consider, and move forward on the range of issues highlighted within this and COSLA’s paper and in particular to recognise and support the proactive work with communities such as that undertaken by ALI Energy.
ScottishPower plc

Submission to the Scottish Parliament Enterprise and Culture Committee
Inquiry into Renewable Energy in Scotland

1. Will the Executive targets be met, under current circumstances, and are they appropriate? (If not, why not?).

1.1 The Executive, and UK, targets for renewable energy are compared as follows:

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<thead>
<tr>
<th>Year</th>
<th>Executive</th>
<th>UK</th>
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<tbody>
<tr>
<td>2010</td>
<td>18%(^1)</td>
<td>10.4%(^2)</td>
</tr>
<tr>
<td>2015</td>
<td>-</td>
<td>15.4%(^3)</td>
</tr>
<tr>
<td>2020</td>
<td>40%(^1)</td>
<td>20%(^1)</td>
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Notes: 1. Aspirational
2. Binding on suppliers, under the Renewables Obligation (RO)
3. Recently announced, expected to become binding under the RO

1.2 ScottishPower support these targets, and the Executive’s (and UK Government’s) drive towards increased generation from renewable sources. However, if the targets are to become reality, **even more needs to be done** to remove barriers to development of renewable energy schemes.

1.3 Sufficient on-shore wind resource is available to meet the Scottish target for 2010, however **rapid improvements in the planning process** are required if the targets are to be met.

1.4 The Executive have in place planning guidance (NPPG6) which provides clear, criteria-based advice for local authorities and developers. Despite this we are seeing **many projects take two to three years or more to secure planning consent**, timescales which when added to front-end development work, and construction timeframes, act as a significant brake on development.

1.5 In addition to this, we have noted a **significant deterioration in local authority approval rates** throughout the past twelve months which will inevitably result in more planning inquiries plus further delay.

1.6 It should be reasonable to expect local authorities to process windfarm planning applications within a period of around eight months. We believe there are a number of contributory factors to the delays. One of these is the **level of resources within local authorities**, particularly within the planning departments. Increased resources would, in our view, allow speedier, more efficient processing. There is also a need, within many local authorities, for specialist renewable energy staff to help advise planners whilst assessing applications, as well as other valuable roles such as education, and promotion of community initiatives.

1.7 We note the good example set by Argyll and Bute Council, through ALI Energy, and would commend this form of initiative to other local authorities to the benefit of developers and communities alike.
1.8 We recognise that funding of such resources is a key issue. ScottishPower would like to suggest that the present planning application fee (typically around £10k for a 30MW windfarm) could be a mechanism for providing additional funds through an appropriate increase (but remaining pro-rata to project size so as not to prohibit small-scale developments), thereby allowing application timescales to be significantly shortened.

1.9 We note that some parties are calling for Strategic Locational Guidance on the siting of windfarms, at the national level. ScottishPower do not support such an approach. Our view is that this will significantly restrict the resource as no strategic assessment can have detailed knowledge of local issues which could, for example, prevent a development from proceeding in a designated “preferred area”, or alternatively, allow one to proceed in a designated “sensitive” area.

1.10 ScottishPower would, on the other hand, support a system of regional targets, similar to that proposed for England, supported by regional resource assessments where a more informed view of opportunities and constraints can be formed with local knowledge input. Targets, addressed to each local authority, could then result in a more positive approach to planning applications with increased success rates.

1.11 At the national level, it is important to the achievement of the Executive’s aims that we make the optimum use of our natural resources. We consider that around 40% of the Scottish onshore wind resource is currently excluded from consideration because it lies within the Ministry of Defence’s South of Scotland Tactical Training Area.

1.10 M.o.D. Tactical Training Areas should not be treated as exclusion zones for wind farms. We believe it is possible to develop significant capacity in these areas at specific locations, perhaps with a few large wind farms, with no unacceptable impacts on M.o.D. operations.

1.12 ScottishPower has over 400MW of wind farms, approved by local authorities but awaiting clearance in relation to airport radar issues. Viable, safe solutions exist in countries such as Denmark, Germany and the USA and potential solutions for the UK are being reviewed. A very practical step for government would be to enable the relevant parties, including NATS, BAA and the CAA, each of which has legitimate issues, to join up their actions. Joined-up solutions, involving the Executive and various Government Ministries, where the parties takes full account of the down-side impacts of not addressing climate change in a timely manner, would go a long way towards securing the ambitious targets for renewable energy.

1.13 Renewable energy presents major opportunities for the Scottish economy. The Vestas plant at Machrihanish has demonstrated that many jobs can be created in areas where they are desperately needed. Large manufacturing businesses need a stable home market, with export opportunities, to be viable and government and the energy industry both have roles to play in maximising Scotland’s economic benefit. The industry can help through promoting local opportunities (the Vestas plant, for example, followed on from ScottishPower’s early plans to manufacture Beinn an Tuirc’s towers at Campbeltown), and through long-term partnerships with key suppliers. Government can help by providing a stable political climate with appropriate start-up incentives for new ventures recognising potential jobs and economic benefits.
1.14 Meeting the targets will mean increased build rates and there is clear potential for further manufacturing capacity in Scotland. Turbine assembly has the added benefit of catalysing other business locally through supply of sub-components as we are already seeing with Vestas. Other renewables technologies, especially wave and tidal stream, also have significant local manufacturing potential where Scotland could establish an early global lead.

2. **Global Issues**

*The Renewables Obligation (Scotland) and the UK energy legislative framework*

2.1 Working effectively together requires regulation to be more aligned with emerging energy policy objectives. The need for action in this area is underlined by Ofgem’s proposals for zonal transmission access and losses charges under BETTA, which will be detrimental to the growth of renewables, undermine past decisions to invest and have an exaggerated and discriminatory effect on Scotland.

2.2 NGC have recently published indicative rates for these charges were they to apply in Scotland, at £12/kWpa in ScottishPower’s area and £21/kWpa in SSE’s area. These represent increases of more than 400% in some cases, with sufficient impact on project economics that the prospects of meeting Scottish targets would be severely diminished.

2.3 The Renewables Directive imposes an unambiguous obligation on Member States to ensure that charging of transmission and distribution fees shall not discriminate against renewables. Our estimates show that Ofgem’s proposals would lead to the average charge for renewable generators being almost six times the average charge for non-renewable generators, and the average embedded benefit available to renewable generators being less than one fifth of that available to non-renewable generators.

2.4 We would welcome Ofgem’s work being better focused on areas that will help deliver the white paper’s targets. We await the DTI conclusions on their recent consultation on “Transmission Charging in the Context of the Government’s Policy Objectives for growth in Renewables”.

2.5 Ofgem’s proposals within the Second Distribution Price Control Review Consultation Paper relating to Distributed Generation will not provide network operators with an incentive to facilitate generation connections. As currently presented the mechanism will increase risk to network operators and could jeopardise the efficient expansion of the networks in key areas.

2.6 It is important to recognise the ultimate impact on consumer prices of the move to a lower carbon economy. The investments required to meet renewable generation targets are significant and this cost is contributing towards rising electricity prices. It is important that the link is recognised and endorsed by both Westminster and the Scottish Executive, in order to support the industry in its drive to transform our current generation mix.
2.7 One of the most urgent requirements is the creation of a single buyout fund for Great Britain. It is appropriate that ROCs are tradable throughout GB. However, to ensure equal value for all ROCs, it is essential that the GB tradability of ROCs is coupled with a single GB buyout fund. As we have seen in the first year of the ROS, the existence of two buyout funds can result in significantly different values for the buyout recycle in Scotland and E&W. This creates market uncertainty and unquantifiable risk for participants and, for Scotland in particular, makes it less likely that the renewable generation targets will be met. A GB buyout fund should be further extended to a UK fund if Northern Ireland introduces a Renewables Obligation.

2.8 It is also important to note that any changes to the fundamentals of the legislation in E&W should be mirrored in Scotland to ensure that a level playing field exists for all GB renewable generators.

Networks

2.9 We recognise that major investment in electricity networks is vital to meeting our long-term goals on renewables and we welcome the agreement reached with Ofgem on planning for initial investment within the Scottish transmission system as a consequence of the Renewable Energy Transmission study [RETS].

2.10 It is important that we build on this foundation and ensure that Ofgem confirms the necessary financing for the whole RETS investment for the 2004/07 period. We need a regulatory mechanism that incentivises an efficient infrastructure but also accommodates strategic investment in networks to facilitate rapid development of renewables. Developing networks solely in response to short-term economic signals is likely to be inefficient in the current environment and also in terms of meeting generators’ and government’s timescales.

2.11 We also need to recognise that planning constraints do not just apply to wind farms. The Northern Ireland inter-connector consents took 7 years to achieve and transmission upgrade planning delays will hamper progress with renewable energy. Timely progress through the planning process is required if the transmission upgrades are not to further constrain renewables development.

Investment

2.12 The scale of the task in moving to a low carbon economy is significant and requires a step-change in approach. Major investment is required and although ROC’s are enabling on-shore wind farm investments to be made, potential returns in other areas are still below the level necessary to justify capital spending.

2.13 Changes to the Renewables Obligation (Scotland) should be undertaken with caution. There has been concern expressed that recent significant changes could have a detrimental effect on short-term ROC prices without the corresponding benefit of additional renewable capacity being made available for the longer term. Further changes could significantly weaken investor confidence and thereby constrain expansion of the industry, and most investors comment that political risk remains their key concern.

3. Local Issues
3.1 Research for the Executive and for the Scottish Renewables Forum shows strong public support for wind power and that wind farms do not deter tourism. Operational wind farms are well accepted in their localities but before development, opposition from a minority is often vocal. Whilst members of the public and bodies charged with the protection and preservation of landscape and nature have a right to raise legitimate concerns, the planning process needs to balance these rights, in a timely and efficient manner, against the need for action on climate change.

3.2 ScottishPower consider it essential that local communities are involved in, and benefit from, our renewable energy projects. At all of our proposed windfarm locations we carry out extensive consultations with local communities involving public exhibitions, public meetings, and one to one meetings (plus ongoing dialogue) with closest residents. Literature with relevant information, and contact points, is distributed to residents. Feedback from the local community is fed into the design process in order that particular concerns are properly addressed (for example it is not unusual for us to relocate or delete turbines at this stage in the process). These provisions go well beyond the minimum statutory requirement within the planning process, and help foster positive relations at an early stage.

3.3 Our operational windfarms provide direct benefit for communities, principally through Trust Funds whereby an annual sum is administered by a Trust in order to benefit projects of an environmental, educational, or charitable nature. Despite this we note increasing pressure for greater benefit particularly in areas such as Highland, and we are in discussion with various local authorities over how best to balance these pressures against their economic impacts on projects. We are particularly keen to ensure that an identifiable proportion of funds is clearly targeted at those communities nearest to developments, but also that there is scope for wider benefits in the area particularly where they could assist community-lead renewables initiatives. Again we note the advanced thinking of Argyll and Bute on this subject.

4. Examination by Sector

4.1 ScottishPower is the second largest wind farm operator, with the UK’s most extensive development programme for on-shore wind. In addition to this we are actively pursuing the potential for offshore sites, as well as maintaining close contact with the developers of other renewable energy technologies.

4.2 Whilst in the UK context the offshore wind resource is large, we note that the majority of this potential is off England and Wales where water depths are typically less than off the Scottish coast. In Scotland the available offshore resource is relatively small due to a lack of areas with appropriate water, in areas where grid is (or is likely to become) available and also the turbines would be environmentally acceptable. It is unlikely therefore that deep-water areas will become economically viable for some time, depending upon progress with the earlier projects.

4.3 A significant proportion of generation to achieve the 2020 “aspiration” will need to come from alternative technologies to wind, for reasons of security of supply and resource availability. We do not believe there is yet a coherent and functioning mechanism to ensure that the most promising new technologies, such as wave and tidal, can move through the development cycle to full commercialisation.

ScottishPower 5 15/01/2004
4.4 Whilst there is considerable R&D funding available, a number of full-scale projects will need to be demonstrated prior to uptake by commercial developers on the scale necessary to bring costs within the present renewables obligation. **Additional capital grants are necessary to take promising new technologies beyond the R&D stage**, and we welcome the recent formation of the ITI in Aberdeen which will assist in this regard.

4.5 On biomass specifically, whilst we are supportive of the Executive’s aim of encouraging domestic energy crop production (subject to controls which avoid any adverse effect on the ROC market), we do not believe that the recent changes to the Renewables Obligation (Scotland) are sufficient to meet this aim. To develop the energy crop market, specific measures to encourage the development of crops should be directed at the producer end of the supply chain. These could include an extension to the deadline for applying for establishment grants, and the setting up of producer groups.

4.6 Use of the existing resources in Scotland (e.g. forestry) as a source of biomass fuel should also be considered, and barriers to their use addressed. Effort should also be put into developing a supply chain infrastructure to help producers get their biomass to market.

4.7 **A clear route-map to commercialisation is also essential.** It is important that funding is better directed in proportion to the prospects of a technology becoming competitive. This would require pre-identified criteria relating support to key milestones, including full-scale testing and securing partners such as utilities. It is noteworthy that some immature technologies were satisfactorily commercialised using the NFFO/SRO mechanism in the past.

5. **Security of Supply**

5.1 Recent blackouts on the East coast of North America demonstrate the practical dangers of tight capacity margins, and restricted transmission interconnections, yet in our view the present UK commercial arrangements still do not fully provide a mechanism for preserving security of supply at an appropriate level. Nor does the current policy recognise the significant political risks of a misjudgement in this area.

5.2 We are concerned that the potential role of flexible coal-fired capacity in a world of intermittent renewable energy has not been recognised and that such capacity will disappear more quickly than present forecasts suggest. **Coal generation is particularly suited to helping maintain system stability** and we are concerned that emissions controls will be implemented in such a way as to eliminate flexible coal capacity in a short timescale or, at best, restrict its ability to operate effectively in the Balancing Mechanism.

5.3 This may be a critical issue for system stability in Scotland after 2010 with two base-load nuclear stations and an effective target of 40% of generation from (largely intermittent) renewable sources by 2020.

5.4 **We would strongly urge government to consider introducing a capacity element into the wholesale price to reward flexibility and ensuring that opted-out plant is not constrained from playing a role in system stability as larger percentages of intermittent generation are installed.**
Submitted on a corporate basis by:

Jamie Maxton, Government Affairs Manager  0141 636 4563
Dear Ms Evans

INQUIRY INTO THE FUTURE OF THE RENEWABLE ENERGY SECTOR IN SCOTLAND (#9/1)

Scottish and Southern Energy (SSE) is the fourth largest FT-SE 100 company in Scotland. Amongst other things, it is involved in the generation, transmission, distribution and supply of electricity. Of particular relevance to the Committee’s inquiry into the future of the renewable energy sector in Scotland is the fact that SSE:

- owns and operates almost 1,400MW of renewable energy in Scotland, making it the largest generator of electricity from renewable sources in the UK;
- is investing over £500m in renewable energy in Scotland and has received planning consent for the UK’s largest onshore wind farm, in South Ayrshire; and
- owns and operates the electricity networks in the north of Scotland, where many renewable energy developments are expected to take place.

SSE welcomes this opportunity to submit written evidence to the Committee’s inquiry. This submission covers four main areas

- The Scottish Executive’s ambitions for the development of renewable energy in Scotland.
- The seven vital issues which need to be addressed if Scotland’s renewable energy aspirations are to be achieved.
- Meeting the challenges of the Executive’s longer-term targets for increasing the proportion of electricity generated from renewable sources
- Who benefits from growth in renewable energy.
Because the Committee’s focus is on the future of the renewable energy sector in Scotland, this submission does not address the vital contribution that greater energy efficiency can make to improving Scotland’s environmental performance and to achieving reductions in carbon dioxide. Greater energy efficiency would also help to tackle the important issue of fuel poverty. SSE would, however, welcome the opportunity to discuss these issues with members of the Committee at any time.

Appropriate ambitions
In the early part of 2003, the Executive decided that Scotland should build on the existing target of generating 18% of its electricity from renewable sources by 2010 and aspire to generate 40% of its electricity from renewable sources by 2020. These targets are ambitious and it is not certain that they will be achieved. Nevertheless, it is essential that stretching targets are in place and help to drive policy and planning initiatives which contribute to their achievement. There are three reasons for this:

- **Environment**: it is now generally acknowledged that climate change is real and that the level of carbon dioxide in the atmosphere is one of the main causes of climate change. Under the Kyoto protocols the UK is committed to cutting emissions of greenhouse gases such as carbon dioxide by 12.5% by 2012. Longer term, the UK is now on a path to a 60% reduction in its carbon dioxide emissions by 2050.

- **Energy**: it is clear that Scotland’s and the UK’s existing indigenous energy supplies – oil, gas, nuclear and coal – are in decline. The UK will become a net importer of gas within the next three to five years and a net importer of oil within the next 10 years. As the country moves from being a net energy exporter to once again being a net energy importer, it is vital to capitalise on every opportunity to generate energy from indigenous resources. These include hydro, wind, wave and tidal power and other available sources of energy such as coal mine methane and biomass.

- **Economy**: the Executive has acknowledged that a thriving renewables sector has the potential to enhance Scotland’s manufacturing capability (including within rural areas), to develop new indigenous industries and provide significant export opportunities. Already, Scotland is set to benefit from the investment of several billion pounds in existing renewable electricity generation technologies and there is a range of investment opportunities in less mature technologies which could provide a major economic development opportunity.

For all of these reasons, there is no doubt that the Executive (and the UK government) must remain committed to stretching targets for renewable generation and to the key policy instrument for achieving growth, the Renewables Obligation. Its aim is to encourage investment in renewable energy sources by incentivising generators to produce progressively higher levels of renewable energy over time.

The success of policy in general and the Obligation in particular in increasing the amount of renewable energy should be measured in absolute terms, and not in terms of performance relative to targets. The economic incentive which the Obligation is designed to create is only fully effective if the proportion of electricity generated from renewable sources is actually less than the target. It operates in such a way that the value of renewable energy is greater if the amount being produced is less than the target. In other words, the long-term achievement of the Executive’s and UK government’s renewables goals is dependent on targets for the production of renewable energy continuing to out-strip the actual production itself. For this reason, SSE urges the Executive and the
UK government to keep their respective targets under review and to ensure that they continue to operate as effective incentives to drive significant growth in renewable energy.

**Fulfilling potential**
The reasons for Scotland’s renewable energy potential are obvious. The country is the windiest in Europe, and has a long coastline and outstanding marine resources. But to fulfil this huge potential, no fewer than seven vital issues need to be addressed:

- **Planning:** the planning process remains a formidable obstacle in the way of taking renewable energy projects from the proposal stage to the construction stage. It is also a significant obstacle in the way of the consequential upgrading of the electricity networks (see ‘Infrastructure’ below). It needs to be eased to reflect the wider benefits to be derived from the development of more green energy projects. The planning risks that currently exist make developing such projects an increasingly risky and expensive business. In its report in November 2003, CBI Scotland published a critique of Scotland’s planning system and made proposals for reform. CBI Scotland’s analysis highlighted issues such as the fact that input to planning decisions by national agencies can be uncoordinated and slow the system. SSE endorses this point of view, and welcomes the Executive’s commitment to identifying practical measures to improve and speed up the Section 36 consents process, and believes any improvements should apply to the Section 37 consents process for networks. At the same time, there is an obligation on developers to deliver first class developments. For example, SSE’s first new hydro station for 40 years, Cuileig, is widely acknowledged to have achieved environmental excellence.

- **Defence:** the Ministry of Defence needs to make sure that wind farm developments do not impair its operational needs and the difficulties encountered by some wind energy schemes with regard to MoD interests have been well-documented. While SSE believes that there have been encouraging examples of the MoD’s willingness to engage with wind energy developers and planning authorities to ensure that good wind farm developments such as Hadyard Hill can take place, it is important to remain vigilant so that ‘no go’ areas for wind developments are not created.

- **Infrastructure:** growth in renewable energy developments will have major implications for the electricity transmission and distribution network. The network in the north of Scotland is robustly capable of meeting the current demands on it. It was not, however, designed to carry increasingly large amounts of electricity generated from renewable sources in the north of Scotland. There is agreement that Scotland’s renewable energy potential simply cannot be exploited without it being upgraded. Of most immediate concern is the need to build a new 400,000 Volt overhead transmission link between Beauly and Denny, to replace the existing 132,000 Volt line. This is an infrastructure project of national importance, on which Scotland’s renewable energy ambitions hinge, and it is vital that it goes ahead as soon as possible.

- **Charging:** it is important that the arrangements for charging generators for the use of the electricity network do not discriminate against those connected in Scotland. One issue is transmission use of system charges following the start of British Electricity Transmission and Trading Arrangements (BETTA). The National Grid has published indicative transmission charges of £21/kW which would seriously challenge the economics of transmission connected renewable generation. Modelling by the Scottish licensees suggests that a figure of £12/kW – while still a significant increase on current levels – would be more equitable. Another example is highlighted by the DTI/Ofgem consultation, *Small Generator Issues Under BETTA*, which contains proposals which, if implemented, would have the effect of Scottish generators paying significantly more than their English and Welsh counterparts (£19/kW against £6/kW in England and Wales). A fair outcome would be a generator charge for connections at 132kV in Scotland
of around £6/kW, which would put generators north of the border on a comparable basis to their competitors in England and Wales. SSE is making this case in detail in response to the consultation, but the proposals as they currently stand undermine the prospects for investment in renewable generation in Scotland.

- **Emissions Trading:** the EU Emissions Trading Scheme, due for implementation next year, applies to power stations with a thermal input of more than 20MW, and is aimed only at carbon dioxide in the first instance. While emissions trading is intended to be a ‘further incentive’ for renewables, it is vital that it is introduced in a way which is sensible, sustainable and genuinely drives Scotland and the UK towards a low carbon economy. In particular, it has got to be developed in a way which allows the renewables industry time to grow and increase its overall contribution to the UK’s energy needs and thereby compensate for any loss of high-carbon generation.

- **Partnership:** the future development of the industry needs the ongoing commitment of the Executive and, at UK level, the DTI. Already, for example, they are helping to fund an engineering study for the possible development by Talisman Energy and SSE of the world’s first offshore wind farm based around the Beatrice oilfield infrastructure in the Moray Firth. Fulfilling its potential, and that of other new renewable technologies, will require a sustained partnership between the public and private sectors.

- **Confidence:** the Executive and the UK government need to maintain and encourage the right climate for investment. Investors are bound to have a concern that an obligation created as a result of decisions taken by public policy makers can also be removed by them. That is why it is vital that the Executive and the Scottish Parliament ensure that all policy developments are compatible with maintaining the climate for investment in renewables which they are trying to achieve. Investor confidence, while undoubtedly there, is nevertheless a fragile thing. This issue is illustrated by the new Energy Technology Institute. It should focus on developing the new technologies that will shape the future of renewable energy not just in Scotland, but across the world. But it is vital to guard against the risk that the Institute develops in the comfort zone of oil and gas rather than fully tackling the challenges of renewable energy. It is an important opportunity, but also a major test of the substance of public policy and it is critical that it develops in the right way.

### Meeting the challenges of 2010 and 2020

The Executive’s longer-term ambitions for increasing the proportion of electricity generated from renewable sources cannot be achieved by the established technologies of hydro generation and onshore wind. With the exception of the proposed 100MW hydro-electric scheme at Glendoe, the potential for large-scale hydro generation in Scotland has largely been exhausted. It is also clear that, for a variety of environmental reasons, onshore wind also has a finite potential.

The key issue is that onshore wind – the second most mature renewable technology – has only been made economically viable by the existence of the Renewables Obligation. Even then, the cost of building an onshore wind development is typically 50%-75% greater than the cost of developing a state-of-the-art combined cycle gas turbine power station. For offshore wind, that cost is significantly greater still. In terms of future developments, this has three main implications:

- As companies will invest in the best available and most economic technologies, the Executive must ensure that it keeps its focus on maximising the contribution of proven renewable technologies: hydro-electric schemes and, more significantly, onshore wind energy schemes.
- Longer term, but only with continued Executive and UK government support, there is clear potential for the development of offshore wind and marine technologies. Partly because of their
likely scale, these are more likely to become economic and make a far greater impact within the foreseeable future than the likes of biomass and solar PV. This reality needs to be reflected in Executive support for future developments.

- As the proportion of intermittent renewable technologies grows, there will be clear implications for the management of the electricity system. In particular, there will be implications for the cost of maintaining stable supplies of electricity. For this reason, it is vital that sufficient capacity of flexible thermal plant is retained.

**Benefits all round**

The Committee has acknowledged that there has been widespread support for developing sources of renewable energy in Scotland. This level of support is not surprising, given the breadth of the benefits that renewable energy can bring to Scotland over the next 15 years and beyond. For example:

- Everyone in Scotland will benefit from a concerted effort to tackle the serious threat of climate change, and its implications.
- The Scottish economy will benefit from the investment of billions of pounds in existing renewable energy generation technologies and in electricity networks.
- Scotland’s established capability in energy means it is well placed to derive further economic benefits from newer and emerging renewables technologies.
- Local communities close to renewable energy developments benefit from job-creation opportunities and the commitment of developers to acknowledging the contribution they make through various kinds of community support.

On this last point, there have been suggestions that local communities should, in some form, become directly involved in renewable energy schemes by, for example, taking equity stakes. SSE believes it would be fundamentally wrong to saddle local communities with all of the risks inherent in significant investment in renewable energy.

At the same time, the Scottish Community Renewables Initiative provides good opportunities for communities and householders to develop small-scale renewables projects. In addition, SSE is in partnership with RSPB to provide RSPB Energy which generates money for an ‘investment fund’ to support the development of local renewable energy projects across Britain.

**Summary**

SSE hosted an event on renewable energy for MSPs in September 2003, and strongly welcomes the Committee’s inquiry into the future of the renewable energy sector in Scotland as a further example of legislators’ interest in and commitment to the achievement of sustainable energy policy objectives.

Clearly, Scotland’s ability to realise its renewable energy potential is dependent on a series of policy issues and developments, which have been summarised in this submission. Most importantly of all, it is dependent on an ongoing and focused public policy agenda geared to maximising the prospects for long-term success. SSE is committed to working with legislators and officials in the continuing development of that agenda.

Yours sincerely,
David Sigsworth
Generation Director and Lead Director for the Environment
Enterprise & Culture Committee:
An Inquiry into the future of the renewable energy sector in Scotland
Submission from The Scottish Renewables Forum

Introduction
This submission represents an overview from The Scottish Renewables Forum. As Scotland’s leading renewables body, we represent the interests of almost 100 organisations working in the field of renewable energy in Scotland. Our members range from private individuals to international companies to non-governmental bodies and support agencies. Between them, our members are involved in biomass, hydro, solar, tidal, wave and wind power.

This submission follows the questions laid out in the Inquiry Remit and is intended to provide background to the evidence to be given to the Parliamentary Inquiry on the 20th January in Campbeltown. For this reason in this submission we are focussing on mature technologies. We will be producing a supplementary submission to accompany our presentation to the Committee on the 24th February on Research and Development. That 2nd submission will provide more in-depth comment on emerging technologies (in particular wave, tidal, biomass and small scale renewables). However, this submission provides some information on these technologies as part of an overview.

Will the Executive targets be met, under current circumstances, and are they appropriate?
- How were they arrived at by the Executive?
- What is the relationship with UK targets?
- Have assumptions been made about the contribution of different sectors?
- What are the opportunities and implications for the economy in achieving the targets?
- What are the implications if the executive’s targets are not met?

There are two relevant targets, the 2010 target that 18% of electricity generated in Scotland comes from renewable sources, and the 2020 target that 40% of electricity generated in Scotland comes from renewable sources.

It is our view that both targets are achievable, provided existing barriers to deployment are removed and new barriers not created. The 2010 target will be more achievable as it can be done using existing mature renewables. Achieving the 2020 target will require accelerated development of new technologies such as wave and tidal energy.

The relationship with UK targets is important. The key target comes from UK Energy Policy, setting a 10.4% target for 2010. It is this target that is implemented through the Renewables Obligation (RO) and the Renewables Obligation Scotland (ROS) The 18% and 40% targets highlight (a) Scotland’s expected contribution and (b) Scotland’s aspiration.

The RO and the ROS are interlinked pieces of legislation that can be thought of as Siamese twins. It is important that they are identical to provide a clear market framework and ensure that the costs of new renewables are shared across GB, and that trading of a renewables market across GB is supported.
Approximately 11% of Scottish generation is currently from large hydro, and we expect that the majority of the next 7% will be from wind, with a modest contribution from small-scale hydro. This will take us to the 18% target.

To meet the 2020 target, we would estimate that hydro will meet approximately 12%, wave and tidal up to 10%, with wind contributing most of the remainder. However, much depends on the readiness of the market and other factors to support development of a mix of these technologies.

There are significant opportunities to be gained from renewable development. It is our estimate that by 2020, this industry could be worth £1bn a year to the Scottish economy, and provide up to 20,000 jobs.

Currently the number of jobs are much fewer, but it is important to recognise that activity in renewables is just re-starting. Already we are seeing a rapid increase in the number of jobs in wind energy, yet the bulk of development opportunities lie ahead of us. Developments such as the Vestas factory in Campbeltown and the reopening of the Arnish Yard in the Western Isles highlight the opportunities available. However, the wind market is an international one and very competitive. With the right support job benefits could be further maximised, with more inward investment and a greater level of manufacturing being established in Scotland. To achieve this, companies need a steady stream of projects receiving consents and being constructed, backed up by proactive economic development policies.

A key Scottish sector is hydro. Scotland has a strong presence in the international hydro market, and despite the fact that the opportunities for future development are more limited, it important that hydro developments can continue, both for their role in meeting targets, and for the ability of Scottish based projects to (a) provide jobs within rural areas, and (b) support a continued export market.

In terms of future development beyond 2010, a key focus is obviously wave and tidal: a number of countries are seeking to take the lead in developing their domestic markets for wave and tidal energy with the specific intention of creating a new industrial sector with long term global export opportunities.

The key for Scotland, which is home to some of the world’s leading marine energy companies, will be ensuring that these emerging technologies are nurtured and that home markets are created for their innovations to thrive. Scotland now has the world’s leading wave and tidal energy test centre, in Orkney, but with companies starting their testing early in 2004, focus will soon turn to the support required to get the first commercial scale projects into the water.

It also needs pointing out that other technologies have a very important role to play. Biomass schemes of all sizes, as well as small scale wind and solar could all make important contributions to the Scottish targets, as well as providing significant numbers of jobs in manufacture, installation and operation and with the potential to add significantly to rural and urban development. Furthermore such jobs could also be located in rural communities. It should be noted that the job potential for such dispersed small scale renewables will likely be higher per unit of energy than larger scale technologies.

Also, ensuring a diverse mix of electricity supplies to meet our future needs will be important, in providing stability and maximising opportunities. A stable, robust electricity network requires a mixture of technologies with different generating characteristics and with foresight can be capable of supporting a significant percentage of non-firm technologies such as wind power.

We would say that the implications for not meeting the Executive’s targets are clear. Not only will Scotland not support the UK in meeting its climate change obligations, but we will miss the
opportunity to diversify and grow our economy. Maintaining a lead within the UK and Europe on
development of technologies will allow Scotland to maintain or create a headstart in securing job
benefits from renewable energy deployment.

Finally, in relation to targets, the real omission is the lack of target for non-electrical
technologies. Electricity makes up just 20% of our total energy needs: the remaining 80% split
equally between heating and transport. Thus the 18% electricity target equates to a 3.6%
energy target; and the 40% electricity target an 8% energy target.

Setting of targets has been a key to catalysing interest on the electricity side. It has enabled
support initiatives, enabled finance, and given development a drive and purpose. By contrast, no
targets have been set for heating and transport. While these markets are more diverse and less
regulated than electricity, options exist for using targets and market mechanisms to stimulate
and support these technologies.

We estimate that up to 20% of our heating energy could be met from renewables, given the
right level of support. Heating needs could be met by biofuels, solar heating or combined heat
and power. A 20% target would be challenging but achievable with the right support. Support
mechanisms could learn from successful application of tariff and grant schemes in the energy
efficiency sector.

Setting targets for transport would be harder, but bio-diesel technology is available now, and
hydrogen fuels will follow in the future.

If not why not? (What are the current barriers, and what action needs to be taken to
ensure that the targets are met?)

- Global issues

Currently the Renewables Obligation (Scotland) and its twin, the Renewables Obligation, are
acting well in supporting new renewables.

It is worth noting that these Obligations support all electrical technologies equally. However,
they reward the most cost-effective technologies, ensuring that renewables are developed at
least cost to the consumer. This means that for less mature technologies other support
mechanisms will be needed.

One problem with the Obligations has been the lack of a long term signal. The ROCs are the key
item used by developers to raise finance for projects. Banks assess long term prices of ROCs and
electricity when evaluating potential projects. Both of the Renewables Obligations are linked to
the GB 10% target, which is not a strong enough signal to financiers. However, recently the
Scottish Executive and UK Government announced their intention to consult on raising this to a
15% target for 2015. This is welcomed and we await the consultation with interest.

A key regulatory issue is the grid, its management and control of electricity trading. Ofgem, as
the energy regulator control much of the way the electricity and gas markets are run. Thus they
have a major impact on issues of pricing, grid and market development in renewables.

Currently Ofgem are reforming the electricity distribution and transmission markets. We agree
with the principles behind these two interlinked reforms, but we have concerns over the detail.

Currently our key concern relates to the implementation of BETTA (the British Electricity Trading
& Transmission Arrangements). BETTA will lead to the creation of a GB market in place of the
current Scottish & English-Welsh markets. The stated aims of BETTA are to reduce the price of
electricity to the consumer, and to facilitate development of renewable energy, particularly in
Scotland. Our analysis of current consultations suggests that these aims will not be achieved.
Key problems are:
• Discrimination between Scottish and English-Welsh generators, leading to higher charges for connection to the grid in Scotland;
• Introduction of locational charges for generators in Scotland. Locational charges are meant to reflect the fact that moving power long distances is more costly. However, the current proposed differences are too high and would stifle all generation in Northern Scotland.
• Overly bureaucratic regulatory codes. Codes designed for large generators are being applied to smaller generators without adjustment, creating onerous conditions on smaller operators.

Relating to electricity regulation is the development of the grid. It is our view that Scotland’s grid is in need of renewal and development at present, as it was planned and built for a time of different needs.

Plans exist to develop a new grid that would facilitate connection of new renewable electricity, and allow export of electricity from areas of good resource to areas of high demand. We would support calls to look strategically at the grid in Scotland, with the Scottish Executive taking leadership on this issue. Without this, development of new grid is likely to be through a series of piecemeal decisions, and be at too slow a pace. Strategic control is particularly important to ensure that the grid can:
• Match demand for renewable projects
• Provide capacity ready for expected development of wave and tidal schemes
• Support the ambitions of Scottish island communities seeking to develop renewables

Grid will not be achieved however, if its development becomes bogged down in a never-ending series of planning decisions, assessments and inquiries. Furthermore, regulations must continue their development to ensure that grid companies can have confidence in developing new grid ahead of (i.e. pre-empting) market demand.

Another important element of grid development is support for “embedded generation”; that is small scale generation. Currently it is difficult for small scale users to connect onto the grid and sell electricity. There are a number of technical challenges that must be addressed, but also important is ensuring this is prioritised by governments and electricity supply companies.

- Local Issues

Involvement and support of the Scottish public is crucial to continued development of renewables. It should be remembered that it is the public, usually as the electricity consumer, that is paying for development of this new generation. Their continued support will be crucial.

It is our view that support will be maintained provided that:
• Projects are developed in a responsible and sustainable manner
• Employment benefits are maximised
• A range of technologies are deployed
• Those who wish to are supported in developing renewables or investing in renewables

To maintain support it is therefore imperative that work continues to bring new employment to Scotland, particularly to rural and/or peripheral areas, where job gains will be significant. This will mean continued work from enterprise agencies in supporting supply chain development, diversification of Scottish companies and - where appropriate - sensible inward investment.

In terms of community involvement, we would support measures to enable communities to develop schemes. The Scottish Community and Householder Initiative, which provides support and grants to householders and community groups, is a very good initiative, and we would support moves to build on this. In particular, we would like to see the scheme develop to support and encourage public bodies (e.g. local authorities and housing associations) to significantly invest in small-scale renewables.
Simultaneously, we would support measures that assist local communities in developing larger scale projects. Development of large commercial projects and community projects ought to go hand in hand. At present it is difficult for communities to commence such projects, because financing of schemes is difficult and a specialist area.

We would note that the payment of community benefits to local communities is now a well established principle. It is our view that the levels are reasonable, given the current market, and in comparison to other industries. Responsible developers are engaging actively with developers to come up with community benefit agreements that are equitable and provide important revenue funding to rural communities. It should be remembered that community benefit applies across technologies, but that different technologies and different projects will be able to provide different levels of funding, due to different levels of cost and profit.

Also, we would call for reform of crofting law to facilitate rather than block crofting communities that wish to develop renewable schemes. We understand that the Executive is assessing this issue for a future Crofting Bill, but would seek assurances that this will happen, given the enthusiasm for this amongst many crofting communities and the fact that benefits from renewables could be significant.

Examination by sector

Here we will focus on issues relating to the following technologies: wind and hydro. We will provide a more in depth focus on emerging technologies as part of our second submission/visit to the committee.

- **Onshore wind**

  Development of wind projects in Scotland is currently receiving a lot of attention and comment. This is only natural given the scale of development and ambition to develop new wind sites.

  Concerns have been expressed about the level of wind developments, and the ability of the planning system to decide on the raft of new proposals.

  It is our view that the planning system is robust enough to deal with this issue, and current guidelines are detailed enough to support local authorities in making objective decisions on individual applications. However, it is not always the case that planning authorities properly follow the guidelines. We would note the following:

  - Planning authorities need to have the expertise and confidence to deal effectively with applications
  - Authorities need to “twin-track” planning applications alongside the secondary tasks of legal agreements and section 75 agreements.
  - The Scottish Executive should ensure that planning authorities have sufficient resources to deal effectively with planning applications. A current gap here is the fact that planning authorities receive no fee for work on Section 36 applications.
  - The Scottish Executive should ensure that Scottish Natural Heritage, as a statutory consultee and Government Non-Departmental Body, is properly resourced to comment effectively on planning applications.
  - Planning authorities, Scottish Natural Heritage, industry and the Executive need to engage on supplementary guidance on cumulative impact.
  - The Section 36 process works well, and is very rigorous for developers. Whilst the 50MW limit for wind might have been “inherited” from other parts of the electricity industry, the system is robust and provides sufficient control as well as involvement for local authorities. One concern would be the dismantling and moving of the current s.36 team to another location in Scotland. This would frustrate the consents process at a critical time for the
renewables industry. We would call on the Executive not to proceed with moves to relocate the Consents Unit from its current Glasgow base.

In this way, authorities will be able to deal effectively with what is a bulging caseload. We are not of the view that a Strategic Plan would assist authorities in this work: indeed it would not remove any of the tasks local authorities are faced with. Decisions on wind farms must be done on a case by case basis. The best wind farms will be those that apply existing good practice and guidance, and are decided “on the hill” rather than by putting pins on maps in offices within the Executive.

- **Offshore Wind**

There are fewer opportunities for offshore wind in Scotland than in England-Wales. This is due to the different seabed conditions here that make development more problematic and costly.

However, there needs to be guidance on this matter, because as the wind industry develops in the GB it will learn how to develop offshore wind in deeper, perhaps more challenging sites. Given the specialist nature of offshore planning, we would support moves for a Strategic Assessment that is able to gather up data on seabed conditions, designations and grid, so that the Scottish Executive can form a view about areas that are of most potential for development. However, it will be up to developers to then propose and take forwards schemes on a case by case basis.

Links need to be made with the current offshore wind activity in England-Wales, so that Scotland may benefit from this work (providing turbines and equipment as well as expertise from our oil and gas sector).

Also, there needs to be clarification about how projects outside of the 12 nautical mile territorial limit can be consented. We would support moves to bring this consent process to Scotland within the Scottish Executive consents team.

- **Hydro**

Hydro is the most mature and cost effective of technologies on the market today. While opportunities for new hydro are more limited than for wind, it has an important role to play in delivering renewables targets.

Hydro power can also assist in providing balancing to the grid, and has proven success in delivering Scottish jobs. Scottish companies have been pioneers in hydro and remain active in serving a worldwide export market (globally hydropower is the world’s largest renewables technology), but need a continued domestic market to keep skills and expertise intact.

Support for hydro must continue. We have particular worries about how the Water Framework Directive (and its enabling legislation of the Water Environment Water Services Bill) might stifle development by imposing onerous conditions on existing and new hydro schemes.

Many of our comments in relation to planning (see onshore wind) also relate to hydro. Our particular concerns for hydro are:

- The ability for hydro to receive a “derogation” under the Water Framework Directive must occur. Hydropower is itself a sustainable activity so should not be unnecessarily penalised by legislation. SEPA and SNH must adopt a pragmatic, rather than fundamentalist viewpoint on this issue.
- The consents process must be reviewed. Currently all hydro schemes above 1MW must go through the Section 36 process. This low threshold would seem inequitable in comparison to thresholds for other technologies.
In Conclusion

We hope that the above provides a useful review of current issues relating to renewables, as seen by industry in Scotland. We see the development of renewables as important to Scotland’s future economy and environment. Meeting our current and future energy needs requires choices to be made. It is our view that setting targets for renewables to contribute to our energy needs is a sensible choice. However, there are no panacea to solving our energy problem.

While much of the attention is focussed on wind, we would note that all technologies must be enabled to play their part. The Scottish public support renewable development, including wind. All technologies face, or will face opposition, but such opposition (to technologies, rather than to locations) is a minority view.

The way we use energy is in flux at the moment, and the next few years will be crucial in how we meet future energy needs. This Inquiry is timely, and we look forwards to its conclusions. A key issue for the Parliament is how it promotes or enacts change.

In relation to this we would like to address one overarching point. This is the issue of Strategic Planning or the development of an Energy Policy/Plan for Scotland. We have concerns about such proposals, and feel that they may be unworkable.

An overall Strategic Plan, that might guide developments to sites, or set targets for different technologies, would be an unworkable beast. There would be many assumptions involved in such work, and much that remains in flux (e.g. likely contribution of marine renewables). Such work would necessarily take a long time when it may be important to press ahead now. Also, such a Plan would not remove the work of local authorities or various agencies in deciding on or taking forwards projects.

Where Strategic Plans would work is if they are restricted to single issues and given manageable tasks. A good example of this would be having a Strategy on development of the grid, or in environmental assessments of the seabed for marine renewables.

An overall Energy Policy or Plan for Scotland would also have its drawbacks. Primarily this would stem from the fact that much of energy policy remains under the control of the UK Government.

Instead, we would call for Action Plans on key issues, with the Executive pulling such plans together. We would commend the work of the Executive’s Forum for Renewable Energy Development in Scotland to the Committee. Its work is at an early stage, but we see it as a good model for fast-tracking deliberation and Action Planning, provided that the resources are available to enact its conclusions and agreed actions.

So, in conclusion, we would thank the Committee for this opportunity to provide evidence. Its work demonstrates how the Parliament wishes to see renewables being developed successfully in Scotland to the benefit of our environment and economy.

We look forwards to returning to engage in a discussion on how we can bring on new technologies to play their part in this renewables future.