SUBMISSION BY JIM HAMPSON

The evidence submitted at the time of the last consultation highlighted that the Renewables Initiative would lead to higher electricity costs, that wind energy would cause unjustifiable decimation of our landscape, that Renewables were the least cost effective method of reducing man-made carbon emissions and Scottish carbon reductions would be insignificant. The correspondents’ predictions have now been demonstrated with the exception that the carbon reductions achieved (if any) have not been quantified.

The Convenor tabled specific questions some of which I address below. I have added an item at the end of my submission entitled “Why has this gone so far off the rails” since I believe that a complex mix of industry lobbying and a lack of independent advice has allowed Renewables to spiral out of control. The only winners will be the energy providers and the losers are industry and people living in Scotland. A greater amount of carbon could be saved at less cost outside the electricity generation sector.

Whilst short term jobs will be created the higher overheads borne through higher electricity costs and taxation will lose more permanent long term jobs than Renewables could ever create.

The Renewables Initiative is seen by many as a juggernaut without brakes.

The Renewables Policy requires vast land and economic resources. The latter are needed to stimulate the economy. Support from all parties will be needed if we are to stop or radically change the Policy. The significant lobbying strength of the Renewables industry has to be resisted and cannot be underestimated.

This consultation is timely since the true costs of the Renewables initiative to both 2020 and 2050 have not been fully investigated and this must be done. The costs need to be exposed. The future cost of electricity, related central government costs (tax burdens) and the carbon achievements require to be quantified. Targets need to be set based on different parameters.

Targets

Are the 2020 renewables targets (for electricity and heat) achievable? If not, why not?

Whilst the targets for electricity generation may be achievable these can no longer be justified and should be reduced for the reasons given.

Britain came out of the Industrial Revolution with energy efficiencies rising, energy prices falling and wages increasing. Any policy based on lower efficiencies and higher electricity costs is flawed. Renewables represents a regression rather than a revolution.

Renewables require to be understood. We have an abundance of natural resources yet we have not found a viable way of harnessing them to deliver electricity to
consumers on a competitive basis. The alternative is to focus more on conservation, heating, cooling and transport. Renewables save minimal carbon with increased costs whereas the alternatives save more carbon and with reduced costs. Energy conservation and affordable electricity should become the priorities. These measures would reduce fuel poverty whereas Renewables will increase fuel poverty.

Previous studies for Renewables included a number of grid connections but the present proposals involve revolutionising the whole grid. Our existing transmission is arranged to radiate out from power stations. The establishment of a magnitude of remote renewable generating sources is contrary to that which exists. Significant additional investment is needed to enable transmission and distribution networks to accommodate distributed renewables sited at locations which are remote from centres of demand.

Has the Scottish Government made any estimation of the overall costs of achieving the targets, and identified which parties will bear them?

Public accountability has to be addressed

The central cost burdens on consumers and tax payers are presently heavily concealed. We therefore need to see how this breaks down into the equivalent unit cost of electricity. Some costs are borne through taxation whilst others result in consumer costs.

These costs need to be exposed and published including:

- Interconnections
- Transmission and Distribution
- Subsidies and Incentives
- Promotional and marketing costs
- Cost of all Government Renewables Departments
- Payments when electricity from wind turbines is not wanted

It has been claimed that energy companies profiteered by downgrading the capacity of Hydro powered stations in order to receive subsidies. What steps have now been taken to enforce the re-instatement of these to their former publicly funded capacity? What subsidies have been paid to date for stations which were downgraded? What is the total cost borne by the Scottish Government and local authorities of all Public Inquiries held to date to deal with wind turbines, electricity transmission or similar?

It would be prudent to use the cost of conventional electricity per kWh and then to analyse and compare all the costs related to electricity from Renewables expressed also as an equivalent cost per kWh. Expressing these as equivalent unit costs will add the clarity necessary to demonstrate the seriousness of the ultimate overall costs. Electricity from Renewables is more expensive than conventional electricity. Since the Policy is to increase the share of the non viable energy sources these costs should be projected to 2020 and 2050. The unit rates should include costs which are borne through taxation as well as those borne through electricity bills.
By lowering the renewables targets the Beauly-Denny and other transmission upgrades become unnecessary.

There is also the need to carry out an interim cost/benefit analysis by quantifying what carbon savings (if any) have been achieved to date and to examine what global part these plays.

What carbon savings have been achieved in carbon emissions in Scotland to date?
(i) In tonnes of carbon per annum
(ii) As a percentage of the world's total carbon emissions (not just man-made)
(iii) As a percentage of the total carbon emissions from electricity generation

There is a need for a similar UK analysis.

Bear in mind the UK costs are in hundreds of £billions if these monies were spent more wisely we could take the UK out of recession.

Challenges
(a) Technology

Is the technology to meet these targets available and affordable? If not, what needs to be done?

The technology is not available to meet the targets on an affordable basis.

Since the technology is not available to meet the targets on an affordable basis it would be prudent to reduce the targets.

The UK Government’s Renewables Policy is presently being challenged. With Europe in crisis other countries will undoubtedly re-appraise their Targets. The Scottish Policy is the most extreme and the least viable. We must seek lower cost methods to meet the Obligation as well as seeking to re-negotiate the targets with the EU. We can instead rigorously pursue carbon savings in industry, commerce, health, education, heating and transportation.

With the state of our economy we should not be concerned about reducing our carbon targets since the difference in carbon reductions which Scotland contribute is miniscule. Well over 50% of Scottish electricity is already being generated by non-carbon sources. We have done enough to mitigate carbon emissions in this sector.

(b) Supply Chain and Infrastructure

Are we confident that the necessary infrastructure can be developed and financed so that Scotland can export any excess generation to the rest of UK?

Only electricity generators would substantially benefit from this.
The costs to the consumers and tax payers should again be quantified.

By pursuing export to England further transmission reinforcement is required within Scotland and England involving further substantial investment. These costs could ultimately be passed on to the consumers and tax payers as will the cost penalties of unnecessary transmission losses.

(c) Planning and consents

**How can national priorities be reconciled with local interests?**

We need public debate on the decimation of our Scottish landscapes and seascapes.

Decision makers need to be better informed.

Decision makers need to understand the technical and visual aspects of renewables and other non conventional project applications such as heat generation from waste. Members of Development Control Committees need an appreciation of all these technologies.

Industry lobbying needs to be addressed by involving a greater number of independent professionals.

Scottish Natural Heritage has not been effective in protecting our precious landscapes. Historic Scotland has always tightly controlled changes to our buildings and monuments. The responsibility for protecting our natural landscape should be transferred to Historic Scotland or to a new body based on similar control techniques to those employed by Historic Scotland.

A study should be commissioned to examine the previous precognitions from Landscape Architects and others who gave assurances of minimal visual impact for wind farms at Public Inquiries. These assurances should be compared with the physical results of the completed projects. Should such advice be substantially flawed recommendations should be prepared for the future conduct of relevant professionals at Public Inquiries.

The public is more likely to accept a location of a waste incineration plant for example if the location is selected by independent professionals to minimise intrusion. Thereafter the public should be part of a pre-feasibility study debate which deals with all aspects.

When Local Authorities choose not to fully challenge the Appellants at Public Inquiries due to their restricted resources funds should be made available to the public to finance expert witnesses and Advocates to look after public interests. There needs to be a level playing field with both sides properly represented.

(d) Access to finance
Will sufficient funds be available to allow investment in both the installation and the development of relevant technologies? What can the Scottish Government do to influence this?

We should not assume that further monies be allocated

What will the impacts be on consumers and their bills?

Expensive electricity is being pursued not for carbon saving but because the government mandates Renewables and provides generous incentives for creating something which is less efficient and more costly than that which exists. The hidden costs require quantification

It is important that the OFGEM approval of 25 January 2012 is not implemented until more information is available. We must spare those who live, work and run businesses in Scotland from being saddled with expensive electricity for decades to come.

The cost impact of Renewables to 2020 and 2050 must be examined in terms of the impact on households and businesses through taxation as well as in increased electricity bills.

Decision makers do not presently have sufficient information in a usable form to allow sensible decisions to be made

The grid reinforcement should be put on hold until this information can be appraised.

All targets should be reviewed at this point in time in order to reduce the targets for those Renewables which are either unaffordable and/or ineffective. By doing this it is still possible to avoid the major transmission upgrades including the Beauly-Denny project thus reducing the burden of cost increases.

It would be prudent to adopt a strict upper limit for each Renewable type.

We need to make commerce and industry more competitive rather than saddle them with further burdens.

The upper limit of the new target should ideally be that which avoids the transmission reinforcement. However a much lower target for electricity Renewables may need to set to achieve affordability. Different Renewables mixes should be modelled reflecting the carbon savings, landscape impact, efficiency and costs including transmission and backup for each Renewable.

This should be estimated against different Renewables mixes and a reduced overall target for Renewables

Businesses can recover VAT but domestic consumers are further penalised for something they neither need nor want
(e) Skills and workforce development

Will Scotland have sufficient home-grown skills to attract inward investment? Are current policies producing the desired move towards Science Technology Engineering and Maths subjects at schools and universities? Is the skills transfer from the oil and gas sectors being realised?

The cost of electricity could become a barrier to inward investment if the current targets are pursued.

At present France and Belgium offer more attractive tariffs than Scotland. Since Scotland has the highest targets in Europe the Scottish costs will rise more than elsewhere. High cost electricity will be a disincentive to inward investors.

(f) Energy market reform and the subsidy regime

Are the reforms of the energy markets and subsidy regimes at both UK and EU level sufficient to meet the challenge of the Scottish Government's renewable targets?

No

Why has this gone so far off the rails?

Renewables are not new to engineering and if these had been viable they would have been already utilised. Lord Kelvin developed the heat pump in 1852. The first wind turbine was built in USA in 1866. The La Rance Tidal Energy Project in Brittany was opened 45 years ago. Engineers were always keen to tap these natural resources. However these always proved to be non-viable except in a few special circumstances. Had the renewable energy solutions been viable in Scotland both the SSEB and the NSHEB our former Scottish public electricity companies would have used them extensively. However the difference was that these companies also had a duty to protect the consumer from high electricity costs. The Scottish Government now has that duty.

By the time the European initiative on Renewables was being discussed our electricity had been privatised and we had lost the wisdom of engineers in the public electricity supply companies who looked after the public’s interest. We were no longer in safe hands. Similarly the Scottish Office previously had a number of independent Mechanical and Electrical Engineers who kept fellow Civil Servants and Ministers well informed with respect to public interests. It would seem that there is currently insufficient independent expertise presently available for this purpose.

Researchers including academics who had developed Renewables were now able to join in. Their non viable solutions could now be adopted at the public’s expense. Some even became advisers to political parties on energy matters.

Private energy companies jumped at the renewable energy subsidies offered with financial glee.
In summary:

The Renewables Policy will weaken the Scottish economy.

The power of energy lobbyists requires to be tempered by independent Government Officials who have engineering training and experience. Accountants with experience in industry and who have open minds should be employed to review the impact of the Renewables on central finance, taxes and consumer costs.

Holyrood listened to the people of Scotland on nuclear yet ignored the peoples objections on the impact of wind turbines and pylons on landscape and their fears on electricity costs and job losses.

The targets need to be reset to a level near what has been achieved to date

Efficiencies and economics vary across each Renewable type. Each renewable also has a different carbon benefit. It is still possible to limit those which put the greatest cost burdens on consumers.

The proposed investment in transmission cannot be justified. The only sensible solution is to reduce the targets.

Prepared by:

27 February 2012