Donegal County Development Board
Bord Forbartha Chontae Dhún na nGall

Report of CDB workshop

Development of the renewables sector in County Donegal

Donegal CDB, in association with the following groups, hosted a workshop on the 14th July to discuss the potential for development of the renewables sector in County Donegal:

Environment sectoral forum
Economic Forum
Agriculture sectoral forum
Forestry forum

A full list of the attendees is attached as Annex 1.

In advance of the workshop, a CDB paper on renewables in County Donegal was compiled. This paper formed the basis of discussions at the workshop session. The workshop considered four broad heading areas:

- Provide details of activity taking place in Donegal at present
- Outline areas which have the potential for development
- Highlight issues which may be holding back development, and
- Make suggestions as to supports (locally and nationally) which could be put in place to facilitate development.

This is a report of the main discussion points raised in relation to each of the four broad heading areas. We would like to acknowledge the participation of all those attendees at the workshop session and those who made written submissions also.

1. Details of activity taking place at present

Wood Energy

- Thomas Becht, Glenties has installed a biomass wood gasifier to heat his home and two holiday cabins. The boiler installed was a Herlt.
- Gartan Outdoor Adventure Centre is involved in an Interreg project that is investigating the potential of willow chips as a heat source.
- Abbey VEC, Donegal Town has sourced 50% funding (LEADER) to install a biomass woodchip boiler in the school. Donegal Sligo Leitrim Renewable Energy Ltd. (DSLRE) is the lead partner of the project.
- EcoWood Energy Systems Ltd. is a new company set up to supply woodchips to biomass boilers in Donegal.
- Bio-mass is going on across the County. There is a good supply of wood/timber and short rotation coppice.
- Glenties/Ardara/Portnoo…Pilot bio-mass heating project proposed.
- ESB/Udaras did undertake some work in relation to self sufficiency

Wind Energy

- 13% target being met at present (wind energy) (Countrywide targets: 400mw in 2005, 1100mw in 2010 and 2000mw in 2020)
- There are a number of wind farms in operation in the county at present.
- The Dolmen Centre has dual renewable energy systems comprising a wind turbine and solar panels.

Hydro Energy

- Hydro(under ESB control)..3 main areas (Cathleens Falls, Cliff and Crolly)
- Small Hydro 1mw units (5).

Biomass (other than wood energy)

- Anaerobic Digestors (AD)…Farm Relief Services will have one (at commissioning phase).
- Unifi plant and Donegal County Council had AD for pollution control only.
- Plans for a community based AD in Gaeltacht (MFG)

Solar Energy

- An Sean Tech, Dungloe uses solar energy as a heating source.

2. Outline potential areas for development

Single Farm Wind Turbines

Where the wind turbine can satisfy the energy requirements of the farm. If the farmer produces has more energy than is needed he can sell the excess energy to the grid. This will reduce the energy costs of the farmer and also provide an alternative income source. The approval of single farm wind turbines will need to be site specific and take into account the visual, heritage and health impacts.

Wood Energy Producer Groups

The forest cover in Donegal is over 11% and expected to increase to a national average of 17% by 2030. The thinnings from these forests and less productive plantations, can be chipped and transported by local farmers to provide an efficient energy source. For example, if farmers choose to use the Austria wood energy supply chain model, fifteen times the number of jobs will be created compared with fossil fuel supply chain. If Donegal is serious about wood fuel then a complete inventory of the private plantations needs to be undertaken so that realistic targets can be set in a renewable energy action plan.

District Heating Systems

Renewable Energies should be considered for all new commercial or residential developments. Donegal County Council should encourage developers to install district heating systems where appropriate. The developer should be rewarded financially for installing renewable energies. District Heating Systems main fuel source is woodchip.

Wave Power

The potential of wave power in Donegal should be investigated. An R&D based project with linkages to countries that have demonstrated best practice in wave energy i.e. Alaska should be initiated. As wave energy requires large capital investment initially, local communities often do not benefit from the energy produced and sold. Therefore, whatever system is introduced in Donegal, the local community will need to benefit from the energy produced.

Recycled Energy

The potential of using materials for example, waste oils, packaging, cardboard etc as an energy source. An environment, economic and social cost/benefit analysis should be undertaken to assess the potential of recycled material.

Anaerobic Digesters

Small and large-scale digesters should be installed to generate electricity from the organic waste in Donegal.

Summary of main areas highlighted:

- County Donegal has the best potential to develop wind power.
- Domestic units (wind) which can reduce your bought-in energy costs.
- Acres wind Farm model states benefits to community-farmers can make 20% return on their investment.
- Ireland could be an International supplier of green energy into Europe.
- Identification of any new hydro sites with potential.
- Research project potential anaerobic digestor and bio-mass in parallel with pilot projects.
- Huge resource of saw mill residues in County..some residues are needed for their physical carrying capacity of soil or as a nutrient.
- Several private individual farmers have bulk managed small plantations—significant changes predicted on a smaller scale Farmers 2005 – 4,000m2; 2015 – 70,000
- Pilot AD/Bio-mass projects led by Donegal County Council.
- Treatment of waste – opportunity to use waste for energy (potential area to explore)
- Pilot project to build AD plant to use cattle and pig slurry and organic food waste to produce “green” electricity using heat and digestate.
- Pilot project to produce bio-diesel from rape seed oil and other crops grown in the tillage areas of East Donegal and Northern Ireland.

3. Issues holding back development

Main discussion points raised:

- Capital costs of installing renewable energies can be prohibitive.
- Planning permission, planners need training on renewable energy. A national network of planners should be established to feed in experience from other counties in Ireland
- Expertise among installers – An installer standard of certification is required.
- Lack of awareness among the public – a localised promotion campaign promoting renewable energy should be initiated targeting community groups, schools, construction, architects etc.
- Connection to the grid
- Impact of renewables on rivers and waterways.
- Better local communication needed.
- Electricity supply lines (location)
- Power storage.
- Planning constraints.
- Negative impact of hydro energy on fisheries – how to address.
- Regulations governing what can be done to specified raw materials and animal by-products (Foot & Mouth), (Swill order, animal matter).
- Cost of thinning – not economically viable, labour costs (scale of production) and machinery costs are a barrier.
- A lot of waste timber cannot be legally incinerated (volume exists but no market for it yet)
- Need for Capital grants to cover high installation cost of machinery.
- County Development Plans need to include compulsory policy .e.g.. “eco-houses” to create and market.
- Logistics (e.g. storage of timber, transfer and storage of diesel)
- Economic Resource Assessment (ERA) – if the potential contribution of renewable energies to Donegal is to be realised an ERA needs to be undertaken. This will allow real targets to be set.

4. Suggestions as to supports (locally and nationally) which could be put in place to facilitate development

Local Supports

- Establish information centre that provides impartial information on renewable energies. The centre should be responsible for education, training and promotion.
- All existing projects in the development stages should be realised. The information gleaned from these projects should be available to others considering installing renewable energies.
- Financial support should be given to local wood fuel producer groups to develop a highly efficient and coordinated supply chain.
- All new public buildings most install some form of renewable energy. Donegal County Council must take the lead role in promoting renewable energies.
- Research and Development needs to be funded at a local level
- Investigate potential for local contribution to communities as part of promoter business plan.
- Donegal County Council could pilot community –owned wind farm projects
- Development of off-shore wind farms could be investigated.
- Producer groups – support farmers on the logistics involved.
- Input into County Development Plan and CDB County Strategy (become local policy)
- Active public education especially focused on planners, construction industry and local communities. Heavy promotion of the use of renewable energies at a local level. Local communities need to understand renewable energies technology.
- Research and Development needs to be funded at a local level. If a company/group are considering a renewable energy enterprise they will need to travel to Austria, Germany, Sweden or Denmark to source equipment and network with experts.
- Proactive use of renewable energies driven by the Government, e.g. County Headquarters, Donegal County Council in Lifford could become a pilot energy centre, with possible district heating system between buildings.

National Supports

- Some form of subsidy or tax incentive should be introduced. For example, in Austria to initially encourage renewable energy, a 50% grant was available to install a boiler. Also grants were available to suppliers to set up companies. Another system used is to remove the cost of VAT from renewable energy construction, products etc
- Planning regulations need to be simplified. The current consultation process can be very costly and time consuming. Investigate the potential to set up a sub-section in Planning in Local Authorities that dealt purely with renewable energies.
- Remove barriers to grid connection.
- The government most proactively promote and use renewable energies.
- AER Scheme
- Fast track grid connection into UK Interconnector.
- Planning approval conditional on community support (Min 5 Turbines)
- We have best conditions for growing timber, yet we still import the bulk of it.
- Political context – need to drive forward the agenda.
- Carbon Tax, other tax incentives for use of renewable energies.
- Push for products…Burners v Oil…products are still not out there e.g. wood burning stove.
- Education for architects/engineers involved in building design – needs supply from market.
- Ringfence funding for renewables sector.
- Feed lessons learned locally more in to National policy making.
- Intelligent use of VAT system. VAT should be removed from construction and sale of renewable energies. This would reduce capital cost by 21%.
- Planning regulations need to be simplified, to increase the productivity and output of the sector. Consultation with all the relevant agencies i.e. DoEHLG, Environmental Protection Agency etc. is very time consuming and costly on those considering a renewable energy project.
- Reduction in fees i.e. Planning, Environment Impact Assessment (EIA), development etc. to encourage renewable energy enterprises.
- Separate category in planning and development for renewable energy, making construction easier.
- Secure capital funding, there are a number of funding systems already in operation throughout Europe. Government could develop a funding programme via a renewable energy loan fund scheme.

- Warning: do not under fund and over regulate renewable energy sector before the infrastructure etc has been established, as was the situation in the recycling sector.
- Utilise existing wood resources e.g. forest thinning to produce heat and power – create a viable outlet for wood/timber that should be sustainable into the future.
- Farmer/Community group involvement in wind energy – possibility of single wind turbine development and "net metering" concept.
- Local Authority could take a lead role in housing provision and design – "eco-houses"

Ends

ANNEX 1 - LIST OF ATTENDEES

NAME	AGENCY
Michael Heaney	**Director of Services, DCC**
P.J.Molloy	**CEO, Teagasc**
James Scott	**Teagasc**
Gareth Whitmore	**Donegal Creameries**
Phonsie Travers	**Ballyshannon Town Council**
Brendan Maguire	**NRFB**
Patrick Boylan	**Loughs Agency**
John McFeely	**Donegal County Council**
Joe Sweeney	**Inishowen Partnership**
James O'Donnell	**ICMSA**
Hugo Mc Carrick	**Greenbelt Ltd.**
Josephine Mc Cafferty	**Westbic**
Dan O Mahony	**Coillte**
Peter Mc Kelvey	**Donegal County Council**
Brian Britton	**Acres WindFarm**
Eithne Nic Lochlainn	**MFG**
Matt Clancy	**Údaras na Gaeltachta**
Michael Mullen	**Donegal Community Forum**
Donal Casey	**Donegal County Council**
Steven Meyen	**Teagasc**
Joseph Gallagher	**Donegal County Council**
Cllr. Francis Conaghan	**Chairperson Donegal CDB**
Hugh Gillespie	**Acres Wind Farm**
Alex Reid	**DSLRE**
John Jackson	**Forester**
Maria Ferguson	**Strategic Policy Manager, DCC**
Geraldine O Sullivan	**Project Officer (Forest Link)**
Charles Sweeney	**CEDO, DCC**
Barney Mc Laughlin	**CEDO, DCC**
Colm Mc Crossan	**Project Officer (Non-food uses)**