Environmental Pillar
OF SOCIAL PARTNERSHIP

Environmental Pillar

Tree Cover Policy

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1.0 Introduction

Ireland's western Atlantic seaboard location, with its mild winters and good rainfall combine to make Ireland an ideal location to have a thriving sustainable wood economy. In former times the abundant harvest from Ireland's great forests was legendary. This forest resource ensured the basics of good quality food, shelter and water which underpinned the economy of Ireland from the Neolithic period to the early middle ages, and allowed the development of societies which had sufficient leisure to achieve the high cultural levels which were recognised internationally then and now. In the future this sustainable wood economy could incorporate timber and non-timber benefits with huge advantages for biodiversity enhancement, ecosystem services, water quality, soil and air protection, eco-tourism, human well-being, carbon sequestration, alternative energy production, climate change adaptation and large scale employment opportunities. In fact one of the major starting points for a smart green sustainable economy is the wise use and management of our trees.

We face the mounting challenges of climate change, energy security, maintenance of biological diversity, and a severe economic downturn. In this context the Environmental Pillar calls for the reappraisal of the current forestry model and the adoption and implementation of a more beneficial Forestry/Tree-Cover model that better reflects the range of social, environmental, and economic policy needs. Such forestry would be sustainably managed in accordance with the Rio Declaration[1]. This Declaration proposed a set of forest principles and attached these to Agenda 21[2].

Forest resources and forest lands should be sustainably managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations. These needs are for forest products and services, such as wood and wood products, water, food, fodder, medicine, fuel, shelter, employment, recreation, habitats for wildlife, landscape diversity, carbon sinks and reservoirs, and for other forest products. Appropriate measures should be taken to protect forests against harmful effects of pollution, including airborne pollution, pests and diseases, in order to maintain their full multiple value. (From Forest Principles, Agenda 21, Principle 1(b))

To date this comprehensive definition of SFM (Sustainable Forest Management)[3] has not been fully understood or applied in Ireland. An out-dated policy of sustainable yield of single species timber, coupled with the primacy of profit is still the main driver of forestry policy. The Environmental Pillar believes that diversification of Irish Forestry is urgently

[1] Following on from Rio and informed by the forest principles of Agenda 21, the European Council adopted a resolution on a Forestry Strategy for the EU in December 1998. This fixed as overall principles for action: Sustainable Forest Management; and the multifunctional role of forests, as agreed by the EU Ministerial Conferences on the Protection of Forests in Europe (MCPFE) in Helsinki 1993 and Lisbon 1998[1]. To date Ireland has not fully implemented this Forestry Strategy.

[2] Agenda 21 is the blueprint for achieving Sustainable Development in the twenty first century. Chapter 11 of Agenda 21 outlines ways to combat deforestation at a global level.

[3] Sustainable forest management is "the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems."
(Second Ministerial Conference on the Protection of Forests in Europe, Helsinki 1993)

required in order to sustain the sector through times of economic change, to ensure resilience of the resource through future climatic changes, and to maximise benefits to society, the economy and environment. Ireland has already signed up to the implementation of SFM, and the Environmental Pillar is calling for its full implementation in Ireland.

Whilst this document was developed through the processes of the Environmental Pillar it does not necessarily represent the policies of all its members.

2.0 Main Policy Priorities

- The new Forestry Bill must incorporate a revision of both the Forestry Acts of 1946 and 1988.
- In Afforestation, semi-natural woodland should be developed as the key option, composed mainly but not exclusively of native species
- There must be a ban on the sale of public lands if this contributes to deforestation. Where such a sale takes place then the full value of a sale must be reinvested in afforestation only.
- Cross border co-operation on implementing EU measures to eliminate the import of illegally harvested timber.
- Stabilise funding and rationalise grant schemes through interdepartmental and international co-operation on RDP and climate change strategies
- The Inventory and Research branches of the Forest Service need sufficient resourcing in order to meet international obligations.
- All Forest Service Guidelines need to be revised to ensure protection of biodiversity and water quality as part of all new planting and forest management operations and should be given statutory effect under the New Forestry Bill. Revised guidelines and a new 'National Forest Standard' need to fully incorporate the requirements of the Birds' and Habitats' Directives and the protection and improvement of the aquatic environment as per the Water Framework Directive.
- Ancient and semi natural woodlands of conservation merit, other than those designated as part of the Natura 2000 network, need to be awarded strong legal protection and managed for their conservation interest and long term protection
- Clearly defined limits on areas for clear-fell must be agreed.
- These limits and the promotion of Continuous Cover Silviculture in conifer stands must be linked to improved Carbon Accounting.
- The Social Partners must be involved at all stages in the development and review of Coillte, and Forestry Policy and Legislation.
- Ireland must be kept free of genetically modified trees.
- All identified old/ancient woodland sites should be reinstated after first rotation.
- Plantation Forests must be redesigned and restructured to avoid clear-felling.
- The administration of public Tree-Cover must be restructured while maintaining public ownership of Coillte's Forest Assets – Consider a multi stakeholder leasing model.
- The use of Glyphosate (Roundup) as a management tool for controlling Scrub etc must not be permitted. A proper SFM management plan involving CTF and coppicing should always be the preferred option.

3.0 Detailed Priorities

The Environment Pillar calls for increased protection of and sustainable management of forest, woodland, hedgerows, copses, scrub and individual trees, with an emphasis on continuous cover forest management methods, coppicing, pollarding, selective felling, and diversification and transformation of existing forest stands. The Environmental Pillar believes that a new comprehensive National Forest Standard is a key requirement for achieving SFM in Ireland. This new National Forest Standard will enable delivery and integration of multiple objectives, including existing European and International commitments. A targeted set of criteria and indicators that focus on achieving SFM that conform to the Rio blueprint is essential in order to create a new National Forest Standard, based on input from a wide range of stakeholders. Such a standard should form the main body of any new Forestry Legislation, making it legally binding. A new independent Forestry/Tree-cover regulatory agency must be created to enforce and ensure this Act is adhered to.

In turn this must be underpinned by a national SFM training programme for farmers, for various elements of the forest industry including foresters and contractors, and for regulators. A full SEA (Strategic Environmental Assessment) should be carried out on the new National Forest Standard. As part of this process the Environmental Pillar recommends a review of the ancillary processes, such as timber processing facilities, (and including a review of IPPC[4] licensing monitoring reports) to ensure high environmental standards will be applied throughout the forest industry chain. This is important to improve the sustainability performance of the whole sector.

Recognition of the significance of Forestry and Tree-cover and its sustainable expansion within the National Sustainable Development Strategy (NSDS) needs to be prioritised as a matter of urgency. This should be co-ordinated on an all island basis. The Environmental Pillar will play an active part in the review and development of legislation, policy and Coillte Teoranta, the state forestry company.

3.1. Deforestation and Timber trade internationally

Deforestation remains one of the most significant factors in destabilising human life on Planet Earth. Efforts to eliminate the resulting flow of illegally felled timbers into Ireland/EU have been inadequate to date. Ireland ranks worst in Europe in its import of illegally felled timber (WWF 2007). The Environmental Pillar is calling for the state to take leadership on this issue by the cessation of imports of illegal felled timber in to Ireland in accordance with commitments under the European Forest Law Enforcement, Governance and Trade Action Plan (FLEGT), and the new EU Council Regulation of 28/1/10.

The illegal burning of scrub in farmed and forested areas with the resultant loss of forestry and biodiversity must be halted.

The first step towards implementing FLEGT is by developing our own hardwood resources which will take pressure off tropical and other hardwood imports and associated social and environmental impoverishment in source countries.

The Environmental Pillar welcomes the current development of the Green Procurement Strategy by the Department of the Environment and recommends that this be translated in to ethical timber procurement policies[5] for all government departments, semi-state bodies and local authorities as a priority. Measures are also needed to bring the private sector along with this move. This will require regulation and enforcement, which can be provided by the new Forestry/ Tree-cover Agency proposed above, whose remit will incorporate FLEGT.

The Environmental Pillar wishes to see cross border co-operation on implementing new EU regulations[6] designed to eliminate the import of illegally harvested timber, as part of an all Island approach to managing Forestry/Tree-cover

3.2 Review of Coillte Teoranta

In developing a new Forestry Act, it would appear that the 1988 Act is being left out of the review and will remain on the statute book unamended. This Act established Coillte and predates the Rio, Helsinki, and Lisbon agreements. Without incorporating the 1988 Act the new bill will not be able to comprehensively deliver SFM or FLEGT. This glaring omission needs to be corrected. As recently as 2006, at the last opportunity for public consultation, it was stated that the Acts (plural) 1946/1988 would be reviewed. The Environmental Pillar is calling for this commitment to be upheld.

3.3 Climate change and Irish forestry

Deforestation and forest degradation, in all forests, need to be tackled urgently and rigorously in the international climate policy framework. The Environmental Pillar calls for urgent agreement to develop effective full carbon accounting measures, in particular to counteract the negative impacts linked to agro-fuels and the conversion to monoculture plantations. Measures to address climate change must not damage biodiversity and supporting natural systems but should be designed to enhance them through protection and restoration. They must respect the rights of local communities and be fair to developing countries. The Environmental Pillar calls for integration of the work of the Convention on Biodiversity and the UNFCCC so as to develop a global system of biodiversity accounting linked to improved carbon accounting systems.

The Environmental Pillar calls for the potential for biomass energy production from sustainably managed forestry and tree-cover to be given serious consideration and supported with research and development by the Department of Energy. Firewood from SFM can reduce our dependency on fossil fuels as well as contribute towards our Kyoto

[5] 'National Timber Procurement Policy' check the latest details at www.forestfriends.ie
[6] http://www.europarl.europa.eu/en/pressroom/content/20100706IPR77920/

commitments. Wood is a renewable resource when SFM is employed. Carbon sequestration is an intrinsic part of primary production[7].

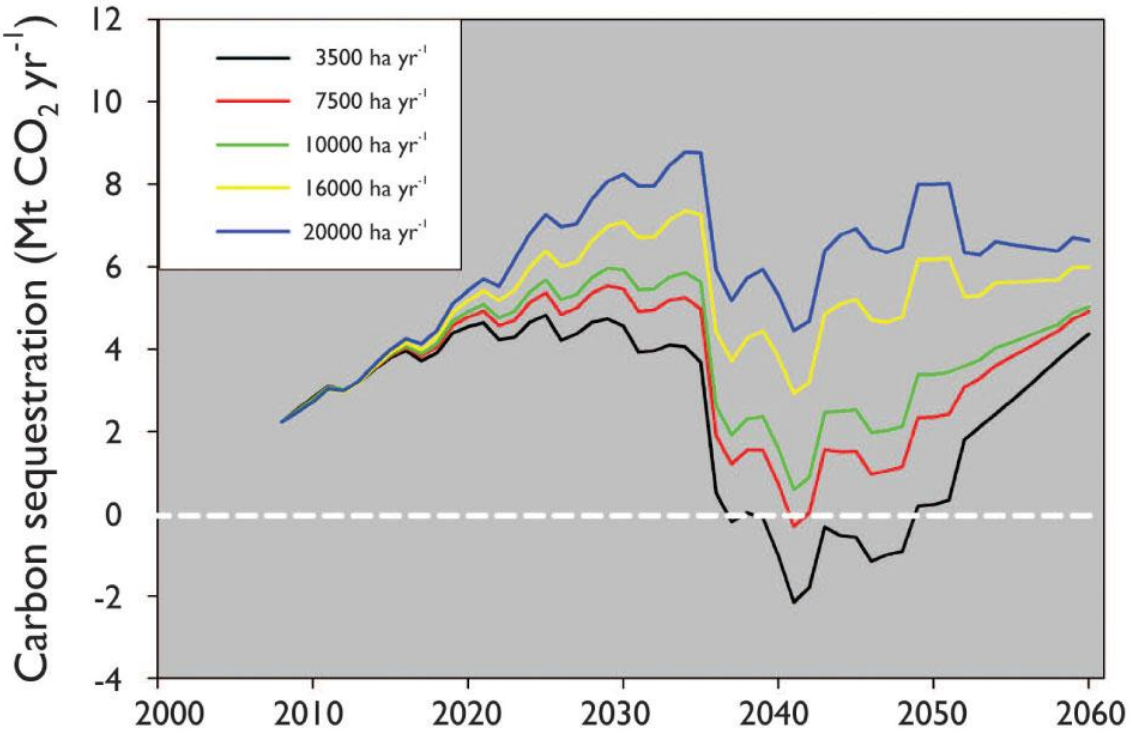

Figure 1. Irish Forestry to become net emitters of carbon dioxide by 2035.

Source: **http://www.coford.ie/iopen24/pub/ccn09-env09.pdf**

The Coford graph above illustrates the point that an annual afforestation rate of 10,000 hectares is required in order to avoid our forests becoming net emitters of CO2 before 2050.

SFM represents the recognition of the habitats and food chains associated with natural forests. When managed in a sustainable way this natural system locks the carbon up in a continuous cycle, whilst providing timber and other needs. Management systems such as the 'clear-fell and replant' system that prevail in Ireland create structurally homogenous forests made up mainly of alien tree species which are dependent on chemical pesticides and fertilisers. Plantations with low species and structural diversity are also extremely vulnerable to the climate change impacts, including wind-throw from increased storm frequency and intensity as well as increased susceptibility to disease and fire. Continuous Cover Forestry (CCF) approaches to forest management result in structurally diverse forests that are, according to a recent study in Scotland[8], much more resistant to strong storms and heavy winter rains, attacks by pests and diseases, and are far better for carbon

[7] The synthesis and storage of organic molecules during the growth and reproduction of photosynthetic organisms

[8] Stokes, V. and Kerr, G. 'The evidence supporting the use of CCF in adapting Scotland's forests to the risks of climate change' The Forestry Commission, Scotland 2009

storage and biodiversity benefits. Transformation to CCF increased carbon stocks in one study by between 45.4 and 74.0 tonnes Carbon per hectare over a 100 year period.

The Environmental Pillar is concerned that the scientific data supporting Ireland's use of often poorly managed and vulnerable plantation forestry as carbon sinks and sequestration is too narrow in its parameters and calls for independent analysis based on SFM. The Pillar also calls for the transformation of pilot stands of existing forestry CCF stands and the development of associated training, support, and grant restructuring.

The following are the main points from *Analysis of Forests and Climate change* by Coford (The Programme of Competitive Forest Research for Development).

- Deforestation (loss of forest cover) is one of the major contributors to climate change, and currently accounts for 17% of global greenhouse gas emissions.
- On the other hand, the forestry sector provides a range of opportunities to mitigate rises in greenhouse gas levels, including:
  - afforestation/reforestation;
  - forest management;
  - reduced deforestation (land use change from forest to non-forest);
  - increased use of wood products;
  - use of forest products for bioenergy to replace fossil fuel use.
- Maintaining the climate change benefits of Irish forests will require continuation of the national afforestation programme at a rate exceeding 15,000 ha per annum over the next two decades.

The Environmental Pillar sees the combined effect of decline in Ireland's afforestation in recent years, coupled with the overharvesting scenario cited by the Irish Forestry contractors before an Oireachtas Agriculture Committee on 14th April 2010, as a very worrying development.

"*When Coillte applied for certification, it stated the annual growth rate would exceed the volume of timber it would take out of the forest. We now have a shortage of clear-fells. Obviously, Coillte depleted the crop for short-term monetary gain and long-term disaster.*"

Christy Nolan, Chairman IFCA (Irish Forest Contractors Association).[9]

A statement by Donal Whelan of the Irish Timber Growers Association in a Sunday Tribune article on the 22 Aug. 2010, supports the trend, " *Currently approximately 44% of all forest in Ireland is privately owned and in that sector there has been a massive upswing in felling licenses, up 85%*[10] *on last year. It's an excellent thing for Ireland because it shows that good planning in the industry is now coming to fruition,*"

[9] http://debates.oireachtas.ie/DDebate.aspx?F=AGJ20100414.xml&Ex=All

[10] This refers to 9,500ha of thinning and 1,050ha of clear-fell. The current allowable cut under the sustainable yield concept is 3.5million cubic metres. Harvesting, between the public and private sectors, is set to reach about 3million m2 in the current year. – Forest Services

The Environmental Pillar are calling for detailed reporting on an annual basis by the Forest Service and verification from an independent (all island) regulator to ensure compliance with all aspects of SFM.

3.4 Sustainable Development of the Forestry Industry

This worrying situation has been compounded by the decision to reduce the funding for afforestation from 10,000 ha agreed in the 2009 programme for government to 2,000 ha[11] (calculation based on proposed cuts and assumption that grant rates per hectare remain the same) If such drastic cuts are allowed this will move us even further from our Kyoto commitments which the pillar considers to be highly irresponsible. This decision will greatly accelerate problems in the sector which is already under enormous pressure and exacerbate rising unemployment. In particular nurseries that have been stocking up with plants of indigenous genetic origin and investing in infrastructure such as cold storage etc., to meet the previous afforestation targets, are facing ruin. Contractors and others dependent on a vibrant industry are also in the same situation.

The Convention on Biological diversity ad hoc technical expert group on Biodiversity and Climate change concluded that the adoption of ecosystem based management can deliver multiple benefits for biodiversity and society, including flood control, enhanced carbon sequestration and storage and support for local livelihoods[12]. The Environmental Pillar is strongly advocating that ecosystem based management be applied through full application of SFM in Ireland, it is very clear industrial forestry methods as currently practiced cannot deliver the benefits described above. A recent study of emissions given off by fertilisers by DR Detlef Schulze of the Max Planck Institute for Biogeochemistry[13], underlined the importance of not turning to fast growing trees reliant on fertilisers to produce biomass, as it wipes out the carbon sink benefits. Fertilisers increase emissions of nitrous oxide, which is a powerful greenhouse gas.

3.5 The National Forest Inventory and Research

The Environmental Pillar acknowledges that as in all aspects of serious planning, without having access to comprehensive, correct and up to date information, one is left in the dark and reliant on unreliable figures and assumptions. It is therefore unfortunate that despite it being part of the Forest Service remit to regulate and monitor the forest estate on an annual basis, there remains a severe lack of information to work with. To Quote, Professor Peter Clinch in his summary and conclusions from his book, Economics of Irish Forestry, 1997. "Information on most aspects of Irish forest industry is extremely difficult to acquire. The flow of information has deteriorated since the transfer of state forestry from the Forest Service to Coillte in 1989. The Forest Service is failing in its duty to provide information such as the size and location of the forest estate, the location of planting, the species planted, and annual average timber prices. The difficulty of obtaining such basic

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[11] Dept Finance capital review of august 2010 p.73 table 9.2' refers to 2000ha (89million including on-going annual premium payment commitments) in the budget for the year 2011

[12] *www.cbd.int/doc/publications/cbd-ts-41-en.pdf* -

[13] http://www.nature.com/ngeo/journal/v2/n12/full/ngeo686.html

information, and the reliance on Coillte to provide information regarding state forestry where it is the duty of the Forest Service to make such information available, seriously hampers research efforts."[14]

Despite Coillte providing information on its website in recent years (a requirement of their FSC certification) the public have no way of ascertaining the veracity of this information. Whilst Coillte is subject to the Access to Information on the Environment Regulation (SI No 133 of 2007) it remains outside the FOI Act, and ts employees are subject to the Official Secrets Act.

The Environmental Pillar considers annual monitoring of all aspects of forestry to be essential for the sustainable development of the sector. This should include regulatory reporting on breaches of the Forestry Acts, fines issued and follow up actions including reinstatement of lands. The same applies for the Forestry guidelines, the National forest standard, licencing compliance, harvesting data, afforestation and reforestation figures, species planted, fertiliser and pesticide use , the monitoring of same and their effects on soil and water, the sustained yield figures (to show if there is an increase in forest cover or deforestation), direct and downstream employment figures in forestry. All of the above are part of the Forest Service remit and responsibility and should be included in the annual published report referred to above.

An up-to-date inventory based on UN land use categories, is essential to verify the accuracy of our carbon figures. The deforestation figures in the NFI 2007 are based on a period from 2000 to 2004. It will not be possible to show whether the trend is increasing or decreasing until the results of the next inventory emerge. There is also inconsistent information regarding the definition and extent of our hedgerow resource.
In the NFI the land use type 'Hedgerow' (3.9%) is defined as: Linear features (< 20m wide) that have tree and/or shrub species present.
This is in contrast with the accepted methodology and the recent county hedgerow surveys where they consist of:
"Linear strips of woody plants with a shrubby growth form that cover more than 25% of the length of a field or property boundary. They often have associated banks, walls, ditches (drains), or trees".[15]
If the carbon sequestration potential of hedges and other Tree Cover, derived from land-use surveys, are to be included in a future inventory, in a way that is acceptable to UN requirements, then compatible methodologies should be applied. There is a pressing need to maintain satisfactory resourcing of Inventory and Research branches of Forest Service or its successor in order to meet international obligations.

[14] Things have moved on somewhat with the publishing of the National Forestry Inventory (NFI) in 2007 and the more recent Native Woodland Survey (NPWS) which have given a useful update to the 1973 publication of data.

[15] *Tearmann: Irish journal of agri-environmental research,* 5, 79-94, 2006
A. Murray and N. Foulkes, A Methodology for the recording of hedgerow extent, species composition, structure, and condition in Ireland

3.6 Flooding

The Environmental Pillar wish to see an integrated use of Forestry and Tree-cover measures to start to address the major issue of flooding. This will involve a riparian tree planting programme to stabilise river banks and streams, create nature corridors and restoration of fish stocks. Targeted planting above water aquifers to assist with the provision of safe filtered fresh water supplies and soil stabilisation planting in our vulnerable uplands to prevent landslides and provide more seepage[16]. The Environmental Pillar also wishes to see greater recognition of and investigation in to the role of wetlands in flood attenuation. In many areas wetlands have been drained to plant forestry, a practice which has contributed to the reduced resilience of many landscapes to flooding. Current replanting requirements oblige replanting of such forestry, even where its removal and wetland restoration would greatly augment the capacity of the landscape to absorb floodwaters and reduce flood peaks. This is particularly relevant with the increasing frequency and intensity of flooding associated with Climate Change.

Increased and restored tree cover in appropriate locations, particularly in the Shannon and Lee basins, has a role to play in lessening the severity of flooding in future years. Individual trees, hedges and woodlands can significantly reduce sediment run off and forest systems can hold and recycle more water than grazing or croplands. Research results from the Flood Risk Management Research Consortium, from the Pontbren experiment in Wales, reveal that '*introducing optimally placed tree shelter belts to the current land use (upland sheep farming) is to reduce peak flow by 29%; introducing full woodland cover would reduce flows by 50%.*'[17]
Installation of swales (horizontal channels) on afforested slopes allows for collection of water at times of high rainfall, with slow percolation, thereby allowing more time to adjust levels in water courses to accept additional run-off. Swales should be incorporated into all forest management plans.
The restoration and proper management of hedgerows and hedge banks and ditches can provide similar benefits. There is too much reliance on hard engineering solutions, coupled with a lack of understanding of natural systems, to provide solutions to problems caused by the same thinking.

3.7 Securing funding for the future

The Environmental Pillar believes the 270 million euro established carbon fund should be directed towards Forestry and Tree-cover projects that target famers, communities and private growers who adhere to a new SFM National Forest Standard. This fund can provide the seed capital towards establishing a new Forestry and Tree-cover culture. All funding should be stabilised and grant schemes rationalised through interdepartmental and international co-operation on the RDP (Rural Development Programme)[18]. There are serious risks to seed collection, the nursery sector and afforestation contractors (c.2000 green collar jobs), if the rate of cuts proposed in the capital review goes ahead. Stabilizing

[16] the ability of Native broadleaf trees roots and leaf litter to store water and release it slowly
[17] FRMRC Research Report UR 16. Project Web: www.floodrisk.org.uk
[18] The case of Ireland Funding Forests into the Future - How the European Fund for Rural Development affects Europe's forests 2003. The Woodland League

funding now is critical as the stop/start approach has been disastrous, particularly with the Native Woodland Scheme.

Re-entering the RDP, to stabilise funding for the forestry programme, would mean accepting a 40% contribution from the EU, a 40% cost to the Exchequer and 20% to be derived from non-government sources.

The Credit union movement, who remain buoyant amidst the banking carnage, could be facilitated and encouraged to provide some of the 20% as a long term investment.

The establishment of a Tree Cover Agency on an All Island basis would co-ordinate resilience towards the impact of climate related future events.

Agroforestry[19] can then be fully explored and expanded in relation to CAP reform and its contribution to achieving the recent EU Health Check objectives, Water Management, Climate Change, Biodiversity, and Alternative Energy (See 3.9 below). Agroforestry systems are based on designed planting of appropriate trees within the agricultural system to give added value. This is not catered for in current 'main-stream' policies which only consider plantation forestry and separate agricultural systems.

3.8 Biodiversity

Current forest management in Ireland has a range of damaging impacts on biodiversity, the provision of ecosystem services, and on water quality. The new EU target for the protection of biodiversity, set by the Council of the European Union, is as follows: '*The EU intends to halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, restore them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss*'. The Council conclusions also '*call for reinforced mainstreaming of biodiversity objectives in crosscutting EU policies and strategies'*. One of the key failures of previous attempts in Ireland to halt the loss of biodiversity has been the poor integration of biodiversity policy in to the policies of other sectors, such as forestry. The environmental Pillar is calling for a review of the Forest Service Guidelines to reflect recent case law and policy objectives; full incorporation of biodiversity and water quality laws in to a revised National Forest Standard'; and for a commitment that European Nature and Water Quality laws and policies will be fully reflected in the new Forestry Bill and in the revision of Forest Policy.

Priorities for woodland sites that form part of the Natura 2000 network must be set, including the setting of conservation objectives for such sites and the development and implementation of management plans for the sites. The management and establishment of corridors for the movement and dispersal of species between Natura 2000 sites, in accordance with Article 10 of the Habitats Directive, is also required for Natura 2000 woodlands and for the establishment of function ecological connections between these and other landscape elements.

Conservation objectives and site management plans are also needed for a range of sites that are impacted by forestry, including the many upland SACs and SPAs where

[19] Agroforestry systems are based on designed planting of appropriate trees within the agricultural system to give added value. This is not catered for in current 'main-stream' policies which only consider plantation forestry and separate agricultural systems.

afforestation and forest management is on-going, and headwaters of aquatic SACs impacted by forestry.

In addition, the Environmental Pillar wish to see the enhancement, conservation and restoration of the existing pockets of native and semi-natural woodlands prioritized as these form the gene pools for restoring biodiversity in the future. Many ancient and semi-natural woodland sites have been assessed as part of the National Survey of Native Woodlands. The environmental Pillar calls for urgent protection of the top ranking sites identified in this survey to be allocated legal protection as well as the management required for their long term protection. Many of these woodlands are in private ownership and currently do not receive any support or recognition. Various funding instruments recommended for use in financing Natura 2000 should be accessed for this purpose.

Ireland has one of the lowest areas of land designated for protection in the EU. According to UNEP, Ireland protects 1.17% of its land mass for nature conservation. According to a recent Irish report under Article 17 of the Habitats Directive[20], the conservation status of old oak woodlands, wet woodlands and bog woodland were found to be poor, along with a number of habitat types impacted by forestry planting and replanting (blanket and raised bogs and Freshwater Pearl Mussel habitats).

The continuing destruction and degradation of upland Biodiversity through inappropriately located wind-farm development within existing afforestation sites may cause peat instability leading to slides and significant environmental destruction. Landslide events such as witnessed in Derrybrien, Co. Galway, in 2003, Stacks Mountains, County Kerry in 2008 and Corrie Mountains, Co Leitrim in 2008 are proof of the high risks that these developments may cause to protected areas. The Derrybrien incident caused some 450,000 cubic meters of peat to slide down the mountainside, which was eventually washed down into the local river systems. This effectively destroyed the ecology of a 20km section of river system, killed approximately 50,000 fish, seriously affected the water supply to the local town of Gort and caused significant damage to the Loch Cutra SAC site. The economic benefits from providing alternative energy and protecting the environment are too often ignored in favour of short term profit-led initiatives which include plantation forestry.

The Environmental Pillar proposals:

- The creation of new native woodlands and the conversion of unviable conifer plantations to natural or semi natural status should be pursued. Improvement is required for other commercial woodlands and plantations etc., which comprise a mix of hardwood and softwood. Management plans for the valuable woodlands in possession of the NPWS, need to be implemented which recognise International best practice.
- Any afforestation and wind-farm developments in SACs or SPAs must undergo an appropriate assessment before licences or permission for these developments are issued by the Department and the relevant local authority.
- REPS and Agri Environment Options Scheme hedge planting stocks need to be of 'source identified' indigenous genetic origin. All tree and shrub species used in state supported, licensed and grant aided schemes should be non GMO, in keeping with the broad objective to 'Keep Ireland GMO free'. Monitoring and regulation of SPA's,

[20] http://www.npws.ie/en/media/NPWS/Publications/Media,5187,en.pdf

SAC's, NHA's and woodland sites as well as adjacent lands, (including hedgerows) should be prioritised.

3.9 Agroforestry

The Environmental Pillar believes the benefits of agroforestry[21] in terms of aiming to plant up an average of 10% of all suitable farms for biodiversity and energy biomass would be enormous. This could be achieved by a combination of increasing the existing hedgerow resource, the renewal of old coppices and the planting of new coppice. In this context, agroforestry utilising coppice management needs to be prioritised, so that it becomes an essential part of agriculture with great potential for job creation. The positive links to increased food production via windbreaks, increased soil fertility and biodiversity as well as improved incomes for farmers need to be addressed. This is important as food security remains a major worry for the future. A survey and mapping of trees on all farms to create an inventory to integrate them into a new Forestry/Tree-cover programme will ensure that we have a more accurate picture to enable sustainable spatial planning. Currently, farmers with substantial semi natural and natural woodlands are not encouraged to manage these under the current REPS criteria.
There are a number of systems available as options for agroforestry: Silvo-pastoral; Silvo-arable; Riparian 'Buffer' Zone; Forest Garden. These all involve designed planting of appropriate trees based on permaculture and 'companion-planting' techniques and all offer a wide range of benefits along with added economic value (from timber and non-timber products). There is much scope for research and experimentation and the Pillar would propose the establishment of a number of pilot projects around the country which could become centres of excellence for awareness, education and training, whilst adding to the job creation potential of agroforestry.

3.10 Long term management of publicly owned forests

The Environmental Pillar wish to see wider benefits for society from publicly owned forestry and woodlands. This includes diversification and restructuring of state owned forestry to increase benefits for biodiversity, ecosystem services, carbon store, recreation, and a range of non-timber forest products. There is a need for annual public reporting on SFM performance and corporate governance of Coillte by the Forest Service. This would be in the absence of the complete reform of Coillte, who have not fulfilled their mandate to manage the public forest estate of 1.1 million acres wisely. The practice of selling public lands and so contributing to deforestation must cease.

Coillte as the state forest company should be required to plant a high proportion of native species, and should be implementing CCF forest management practices across the forest estate in order to maximise public benefits of this publicly owned resource. The Environment Pillar wishes to see the phasing out of exotic monoculture forestry which is particularly vulnerable to the pressures of climate change and disease, and the phasing out of clear-fell in state owned forestry. The Pillar envisages that transformation to CCF

[21] Agroforestry Research Trust http://www.agroforestry.co.uk/
World Agroforestry Centre http://www.worldagroforestry.org/

management methods will also address the need for Coillte to cease practicing environmentally damaging operations and will greatly enhance the resilience of the state forest estate to climate change, its amenity and recreational values, its biodiversity benefits, and even its contribution to the creation of more diverse forest product industries in Ireland. In this context the use of environmentally harmful substances including pesticides and herbicides must be tightly restricted,

The development of comprehensive operative and technician level training in modular format needs to be implemented. All identified old/ancient woodland sites should be reinstated.
The current primacy of profit mandate given to Coillte in 1988 is incompatible with the protection of public goods and the best interests of the environment and must become only one strand by which any future arrangements are judged.

"It (Coillte) was established under the Forestry Act 1988, which set out its objectives and duties. The objectives are purely commercial; to operate on a commercial basis in accordance with efficient practices, to manage the resources available in a manner consistent with the company's objectives, and to establish woodland industries and participate with others in forestry to enhance the profitable operation of the company. It is important to emphasise that because there is often a misunderstanding as to the nature of our mandate. We do not provide a public service as that is not in the legislation. We are a commercial entity." Quote by the former Coillte chairman Mr Martin Lowery, before the Oireachtas Agriculture Committee 2003.

This out-dated mandate states very clearly that it has no obligation to protect the environment or have any social responsibilities. This needs to be understood in the context of the fact that SFM involves the balancing of the social, environmental and economic aspects of forest management. David Gunning is the current chairman of Coillte and in 2009 before an Oireachtas committee stated:

"*The traditional forestry model in Ireland is no longer valid*".

Coillte were 179 million euro in debt when this statement was made, despite managing 1.1 million acres of public land rent free. (Coillte Annual Report, 2009)

The practice of Coillte's land sales is also of serious concern to the Environmental Pillar. Many of the land sales have been made to facilitate poorly planned and designed wind farms, including those at Derrybrien (subject of ECJ Court Ruling[22]), Corry Mountains in Leitrim, and in the Smearlagh mountains in Kerry, all of which caused major peat landslides and severe environmental damage. Collie's current plans to develop wind farms in unsuitable upland locations is also of serious concern to the Environmental Pillar and must be subject to SEA as a matter of urgency.

It is interesting to note in this context that in 2003 Ireland identified the following as its priorities for implementing the expanded programme of work under the Convention on Biological Diversity ad hoc technical expert group[23].

- *Implement the Forestry Acts 1946 and 1988, the Wildlife Act 1976 and 2000, and relevant EU Directives;*
- *Identify and give statutory protection to the most valuable semi-natural woodlands;*
- *Promote and implement the Native Woodland Scheme to conserve and expand Ireland's native woodland;*
- *Ensure that sustainable forest management is the core of forest planning and operations;*
- *Implement Forest Biodiversity Guidelines (2000) and the Code of Best Forest Practice (2000) for all forest types and all forest operations;*
- *Adapt the forest inventory to include biodiversity;*
- *Develop an inventory and classification of broadleaf woodlands;*
- *Afforestation to consist of 30% broadleaf by 2006;*
- *Encourage local provenances of native species;*
- *Review and upgrade forest legislation as appropriate to provide for conservation and sustainable use of biodiversity*
- *Expand research to obtain information on biodiversity of plantation forests and semi-natural woodlands*

3.11 Forestry and Agriculture

Forests and agriculture are intricately linked. Forestry is the most extensive, productive rural land use after agriculture. By creating opportunities for farm diversification, it broadens land use opportunities. The economic value of farm woodlands is often not fully realised by their owners, partly because the particular skills needed to manage them or market the produce have not been a part of the training of most farmers.

The most important economic uses for farm woodlands are country sports, timber, non-timber forest products, and tourism. Revenue from tourism in rural areas can often exceed the revenues from farming. The importance of rural tourism needs to be taken into account in both the management of existing forestry and new planting.

There are clear links between the value of forests for recreation and as habitats. Wildlife is an important attraction for visitors, either as a specialist interest (e.g. photographing red squirrels or hen harriers in the wild), or, more generally, where first-hand experience of wildlife can be an important part of a visit or holiday. Country sports also generate income – many farm woodlands owe their continued existence to their value for sport.

3.12 Urban and Amenity Tree Cover

[23] UNEP/CBD/AHTEG-FBD.REV/1/3

"The Government Department with overall responsibility for local authorities, the Dept of the Environment and Local Government, has yet to recognise urban forestry and its potential for Ireland's towns and cities" Eco-Unesco 1999[24]. According to the author, the situation remains the same today. The NeighbourWood Scheme is only available intermittently to develop 'Close-to-home' woodland amenities. This reinforces the perception that Urban and Amenity Tree Culture is not a priority of government yet. Urban Centres should be given support and encouragement to develop urban forestry. In this context a coordinated approach should be taken to establish and manage motorway, railway and waterway tree planting to create linear native woodlands which can act as national nature corridors. EU funding for motorways would be available to the NRA for such a development.[25]

4.0 Conclusion

The Environmental Pillar see the need for a more inclusive, broad spectrum sharing of the economic, social and environmental benefits from a new Forestry and Tree-cover policy. This can be achieved through creating a sustainable forest management culture in partnership with farmers and local communities, whilst referencing and acknowledging the rich indigenous forest tradition as an essential component to inspire, instil pride and guide such a culture.

Key to achieving much of the recommendations to this Policy Paper is the development of the new Forest Management Standard for Ireland. This must be subject to SEA. The national resource of state forestry must remain in public ownership to provide the energy and other multiple benefits that are needed now and in the future based on the wise use and management of a most versatile natural resource.

The potential for a model based on coppicing of mainly native species for biomass could be established in the sector within five to ten years, creating many employment opportunities.

The transformation of the resource through CCF management practices, including increased use of coppicing for biomass, would deliver far greater multiple benefits, including economic, social, and environmental benefits. If concerted action is taken over the next 2-10 years, many employment opportunities will be created in the medium term. The creation of a new Forestry and Tree-cover model of SFM for Ireland would bring with it biodiversity enhancement and restoration; improved water quality and aquatic ecosystems; cleaner air; enhanced soil fertility; erosion and flooding held in check; greater fuel security; and long-term employment based on timber processing, renewable energy, new agricultural crops and leisure retailing coinciding with viable sustainable rural communities.

[24] Ref: Cost Action E12: Research and development in urban forestry in Europe. 1999

[25] http://www.comharsdc.ie/_files/Comhar%20Green%20infrastructure%20report%20final.pdf

5.0 Appendix I

Proposal for Sustainable Forestry and Tree Cover in Ireland 2010

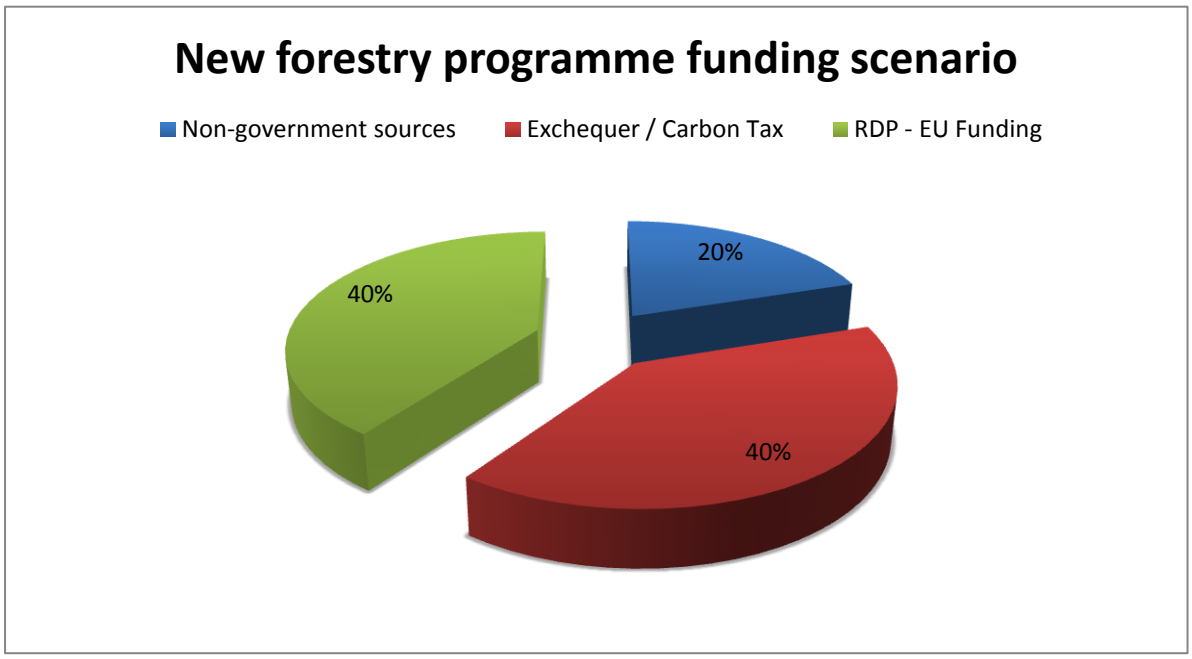
It is composed of 5 interlocking points which are:

- Stabilising Funding
- Tree Cover definition to be adapted
- Tree Cover Agency on an All Island basis
- Annual published report by the Forest Services
- Implementing all 4 by 2013

5.1 Stabilising Funding

The new funding equation could include 40% from the RDP, 40% from the Exchequer, in part to be derived from the existing carbon tax and 20% from non-state sources, which could be in part derived from reciprocal agreements with other territories of (UN definition) low forest cover such as Northern Ireland and Wales, linked to Climate Change strategies.

A levy could be placed on the sale of Clear-fell timber to contribute to the cost of the afforestation programme.



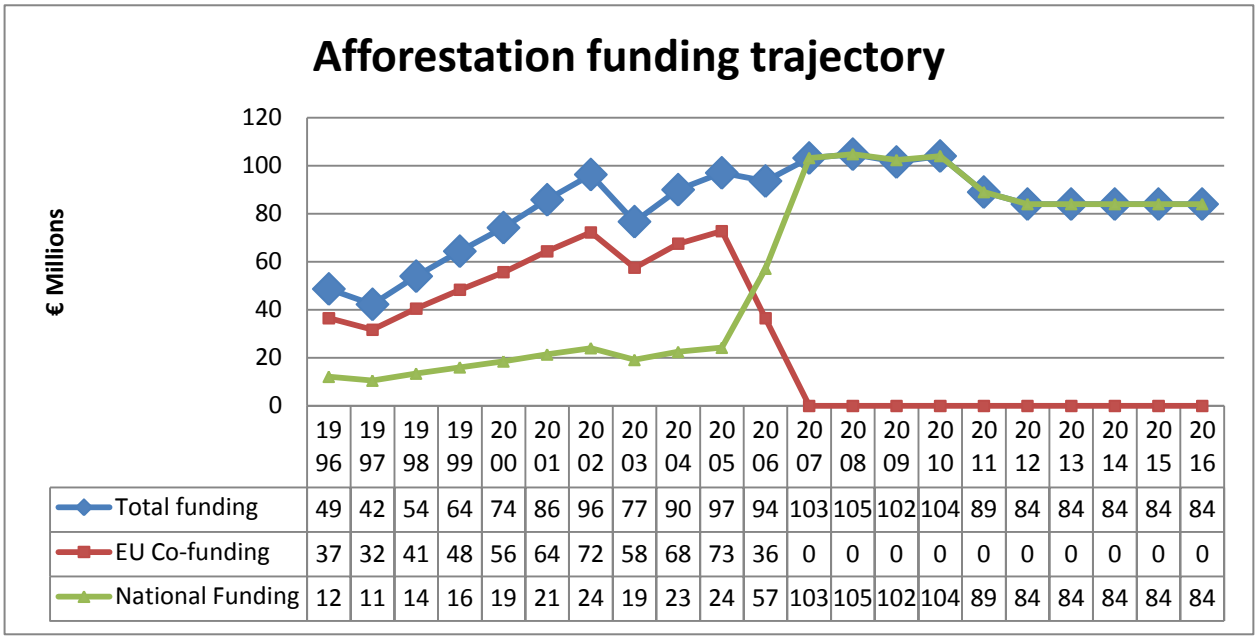


Figure 2 2010 Dept. Finance Capital Review Projected budget and Forest Service historic figures

See:http://www.scs.ie/publications/press_releases/press_release_files_10/capitalreview table 9.2 and the contradictory text on the following page.

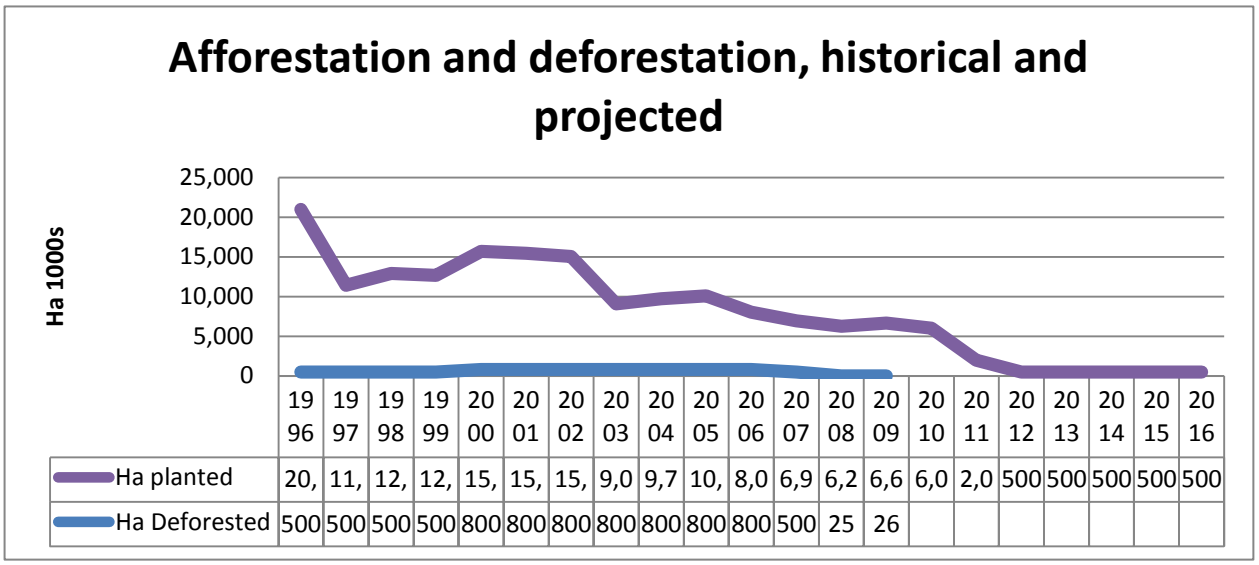


Figure 3 Will deforestation exceed afforestation from 2012 onwards? The coalition government is accelerating the decline in forest expansion

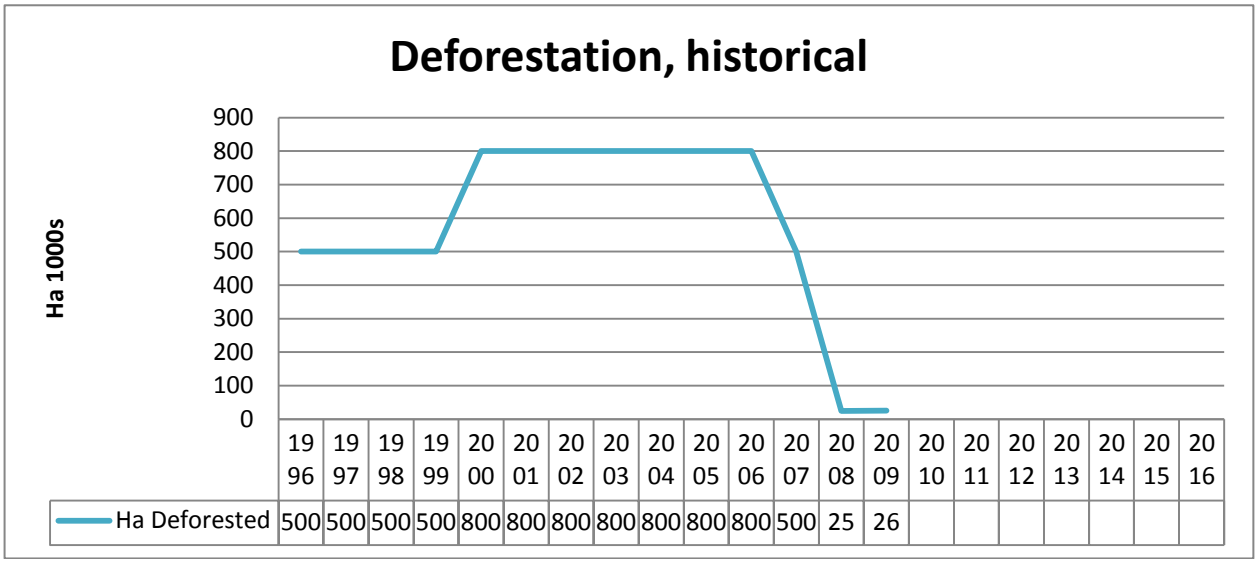


Figure 4 Only the figures for 2000-6 can be relied on for accuracy, due to cut backs in the NFI

5.2 Tree Cover definition to be adapted

Tree Cover definition to be adapted by all parties to agreement on the basis that continued EU support and monitoring would be sought until the low forest cover (UN definition) territories concerned, reached the EU average tree cover (greater than 30%) and that all RDP forestry measures applicable to these territories should be made available to the citizens there in (includes agro-forestry and water quality measures).

Reference: http://home.comcast.net/~gyde/LFCreport.html
RDP ref: http://ec.europa.eu/agriculture/rurdev/countries/index_en.htm

5.3 Tree Cover Agency on an All Island basis

Tree Cover Agency on an All Island basis to carry out role of an Independent Regulator / ombudsman and to deal with overarching issues of mitigating the effects of climate change, contributing to strategies on flood risk reduction, wood fuel standardisation, sustainable yield, measurable carbon sinks and sequestration, hedgerow conservation and management, urban and amenity issues, availability of indigenous genetic stock, Silviculture and Arboriculture training and recruitment etc.

5.4 Annual report published by the Forest Services

Annual published report by the Forest Service on their regulatory role - of the public and private sectors in terms of the UN CBD, Habitats and other Directives, National Forest Standard and Guidelines, Felling Control, Deforestation, Water quality, Pests etc.

5.5 Implementing all 4 by 2013

Exploration of (EU) funding sources
The first step may be to organise a 3 day all island (with international guests) conference on the interlocking issues in Northern Ireland, as soon as possible. This is compatible with the Social Partnership objectives of 'Towards 2016' and the North South Consultative Forum.

5.6 Will deforestation exceed afforestation from 2012 onwards?

Table: Data for figures 1, 2, 3, 4 above

**Red ink indicates the years that we are failing to meet the minimum afforestation levels (7500ha net of deforestation) to maintain compliance with our Kyoto commitments.*
See Coford graph above
Source: Forest Service and National Forestry Inventory (NFI) and Dept. Env. UNFCC report

Year	€m	EU Co-funding received	National Funding	Ha planted	Ha Deforested
1996	48.7	75%	25	20,981	unknown
1997	42.3	75%	25	11,434	c.500
1998	54	75%	25	12,928	c.500
1999	64.4	75%	25	12,668	c.500
2000	74.2	75%	25	15,695	800
2001	85.8	75%	25	15,464	800
2002	96.3	75%	25	15,054	800
2003	76.7	75%	25	9,097	800
2004	90	75%	25	9,739	800
2005	97	75%	25	10,096	800
2006	93.6	36.47	57.13	8,037	800
2007	103.17	0	103.17	6,947	c.500
2008	104.77	0	104.78	6,249	25ha?
2009	101.51	0	102.33	6,648	26ha?
2010	104	0	104	6,400	unknown
2011	89	0	89	2000	
2012	84	0	84	500?	
2013	84	0	84	500?	
2014	84	0	84	500?	
2015	84	0	84	500?	
2016	84	0	84	500?	

Note: the NFI are unable to give reliable annual figures on deforestation currently, because of Budget cuts. Ireland's figures reported to the UNFCC annually will be amended after a 4 year period of data collection

6.0 Appendix II

Extract from Ireland's Fifth National Communication under the UNFCCC

As produced by the Dept. Environment Heritage and Local Government 2010

1.9 Forestry Profile

Ireland's national forest estate is very small when compared to other European Union countries. Consequently, an active afforestation programme has been in place for many years in an effort to increase the national forest resource. Ireland will continue to increase its level of afforestation under the National Development Plan for at least the next two decades. Since 1990, some 265,219 hectares of new forest has been established. During the same period the annual rate of deforestation is estimated to have been 500 hectares per year. Despite this rate of planting, however, Ireland remains one of the least forested countries in the EU. At the end of the year 2008, the national forest estate stood at 730,000ha. This represents about 10.60% of the area of the country, compared to the 35% average throughout the other EU Member States.

1.9.1 Afforestation Programme

The Strategic Plan for the Development of the Forestry Sector in Ireland (Growing for the Future) envisages 20,000 hectares of new afforestation per annum up to 2030. If achieved, these proposals will increase forest area to almost 1.2 million hectares by 2030, thereby increasing Ireland's forest cover from 7% (1990) to 17% of the national land territory. Afforestation rates in the 4 years from 2005-2008 averaged 7,832 hectares per annum. While conifer species still represent a considerable portion of the national planning programme, there has been a marked increase in the level of broadleaf species being planted since 2000, when broadleaves accounted for c.13% of total afforestation. In 2007 broadleaf species accounted for 31% of new afforestation carried out in that year.

The Irish wood harvest in 2007 was 3 million cubic metres, comprised mainly of conifer species, predominantly Sitka spruce[26]. The wood is used in wide range of products from structural sawn-wood to fencing products, pallet products and panel products including OSB (oriented strand board) MDF and door panels. COFORD, (National Council for Forest Research and Development), has forecast a potential doubling of wood production to 5 million cubic metres per annum by 2015[27]. There is close liaison between the Forest Service and environmental and planning agencies in relation to forest development, especially in the area of forest establishment.

[26] Source: *Estimated Woodflow for the Republic of Ireland in 2007* (Coford Connects - Processing/Products No. 18, COFORD, 2008)
[27] Source: Forecast of Roundwood Production from the Forests of Ireland (Gallagher, O'Carroll) COFORD, 2001

1.9.2 Carbon Sequestration

The Irish afforestation programme will play an important role in carbon sequestration during the first and any subsequent Kyoto carbon reporting periods. With the levels of afforestation that have occurred since 1990, it is forecast that between 2008 and 2012 the average rate of sequestration in qualifying forests over the Kyoto first commitment period as result of Article 3.3, will be 2.236 Mt CO_2 per annum. This revised forecast is based on approaches and methodologies for accounting of sequestration agreed to by Kyoto Protocol parties, particularly in the Marrakech Accords, the Good Practice Guidance of the Intergovernmental Panel on Climate Change, and on research and modelling of carbon sequestration in Irish forests undertaken by COFORD. Current afforestation will have little effect on levels of sequestration during the first commitment period 2008 - 2012, because forests grow relatively slowly as they establish themselves over the first five years or so. However, in the post 2012 period, these forests will make a substantial contribution to climate change mitigation.

The total carbon stock in forest biomass (excluding soil carbon) is estimated to be circa 30 million tonnes for the year 2006[28]. Forest soils represent a very significant carbon pool; current estimates are that the total carbon stock in forest soils is in the region of 290 million tonnes[29].

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[28] Source: National Forest Inventory Results (Forest Service, 2007)
[29] Source: National Forest Inventory Results (Forest Service, 2007)