



Ireland's Draft National Allocation Plan 2008 – 2012

Public Consultation

12 May 2006

INTRODUCTION

Background

The European Union (EU) and its Member States are signatories to the Kyoto Protocol, which requires reductions in emissions of greenhouse gases by specific amounts over the period from 2008 to 2012 and beyond. The EU committed to an average reduction of greenhouse gas emissions by 8% below 1990 levels for the then 15 Member States. Similar reductions are required for the 10 new Member States. Decision 2002/358/EC apportioned this 8% reduction among the 15 and requires Ireland to limit the growth in emissions for the period 2008-2012 to 13% above base year emissions. **The EU Emissions Trading Directive (Directive 2003/87/EC) has been implemented to assist in achieving these targets.** The Directive establishes an EU wide allowance-trading scheme to promote reductions of greenhouse gas emissions, in particular carbon dioxide, initially for a pilot phase 2005-2007, and continuing into the first Kyoto phase 2008-2012.

The Directive has been transposed into Irish law by the European Communities (Greenhouse Gas Emissions Trading) Regulations 2004 (S.I. 437 of 2004)¹ under which the Environmental Protection Agency (EPA) has been assigned responsibility for its implementation in Ireland. The remit involves the design and implementation, in accordance with the direction of the Minister for Environment, Heritage and Local Government, of a **National Allocation Plan** for the trading period which will indicate

- (i) what proportion of national emissions will be assigned to emissions trading; and
- (ii) how the portion assigned to emissions trading will be distributed among those covered by the scheme.

The first National Allocation Plan (NAP1) covering the period 2005-2007 was forwarded to the EU Commission on 31 March 2004 and subsequently approved on 7 July 2004. The second National Allocation Plan covers the period 2008-2012 and is due to be forwarded to the EU Commission by 30 June 2006.

(Directive 2003/87/EC was subsequently amended by Directive 2004/101/EC and this has been transposed into Irish law by the European Communities (Greenhouse Gas Emissions Trading) (Amendment) Regulations 2005, S.I. 706 of 2005)

The EPA was required to establish the National Emissions Trading Registry to track the holding and transfer of allowances. In addition the EPA has been designated the Competent Authority for issuing greenhouse gas emissions permits and for overseeing the monitoring, reporting and verification of emissions from participating companies.

The EPA had previously appointed *Indecon International Economic Consultants* and *ENVIROS Consulting* to assist it in determining the distribution of national greenhouse gas emissions to the various industrial sectors and participants involved for NAP1. They were asked to update the previous report to cover the 2008-2012 period. Parts 2-8 of this document essentially relate to this aspect. The original and updated reports are available on the EPA website at <http://www.epa.ie/Licensing/EmissionsTrading>

A National Allocation Advisory Group (NAAG) was appointed by Government to advise the EPA on how best to discharge its obligations in formulating the National Allocation Plan. The Group comprises the Chief Executives (or their senior nominees) of the Commission for Energy Regulation, Forfás, the National Treasury Management Agency and Sustainable Energy Ireland, together with the Director General of the EPA, under the chairmanship of Dr. E. Walsh.

¹ Hereinafter referred to as the "Regulations"

The Government has decided what proportion of national greenhouse gas emissions to assign to the trading sector. This issue was the subject of a separate study led by the Department of the Environment, Heritage and Local Government (the *ICF Consulting/Byrne Ó Cléirigh (ICF/BOC)* report which is available on the EPA website at <http://www.epa.ie/Licensing/EmissionsTrading> and Part 1 of this document essentially relates to this aspect. On 10 April 2006 the Government conveyed its decision to the EPA (see Appendix 1), which includes a number of additional items to be taken into account in making the allocations to sectors and to individual installations.

In reaching its conclusions on this draft National Allocation Plan for 2008-2012 the EPA has taken into account the many submissions made to it concerning the issues involved as well as the recommendations of the *ICF/BOC* reports 2004 and 2006, the *Indecon/Enviros* report 2004 and update 2006, the NAAG and the Government Decision conveyed to EPA on 10 April 2006.

Process

The draft National Allocation Plan 2008-2012 (NAP2), contained in this document, has been prepared by the Environmental Protection Agency and the Department of the Environment, Heritage and Local Government (DEHLG) in accordance with Articles 9 and 10 and Annex III of the EU Emissions Trading Directive.

Article 9 of the Directive requires that the Plan, based on objective and transparent criteria including those listed in Annex III, be submitted to the Commission by 30/06/2006. Article 10 requires that at least 90% of the allowances be issued free of charge. Annex III of the Directive lists the criteria (some mandatory; some optional) to be considered in the development of the National Allocation Plan.

A Communication from the Commission [COM(2003) 830], issued on 7 January 2004, contained guidance, pursuant to Article 9 of Directive 2003/87/EC, on the completion of National Allocation Plans by Member States, and in particular on the application of the criteria listed in Schedule 3 of the Regulations. This guidance document is available from the EPA website at <http://www.epa.ie/Licensing/EmissionsTrading>. This document outlined the Commission's interpretation of the Schedule 3 criteria and suggested a common format for National Allocation Plans. This common format, which has been applied in the preparation of this Draft National Allocation Plan, takes the form of a series of questions addressing the fulfilment of the mandatory criteria and the application of the optional criteria. The answers to these questions describe how the EPA considers the criteria have been met.

A further Communication from the Commission [COM(2005)703 final] was issued on the 22 December 2005 supplementing the previous guidance, in particular in relation to ensuring increased harmonisation among Member States in the interpretation of various issues as well as incorporating a twelfth criterion requiring NAP2 to specify the maximum amount of allowances from the project mechanisms which may be used by operators. This further guidance is also available on the EPA website at:
<http://www.epa.ie/Licensing/EmissionsTrading>

Input to the draft National Allocation Plan is now sought from the public (including operators of installations covered by the requirements of the Directive). Developing the draft NAP2 has been a challenging task involving the consideration of many complex issues. The EPA and DEHLG have endeavoured to do this in the fairest and most transparent manner taking into account the environmental integrity of the scheme and the potential effects on the economy. The purpose of this public consultation phase is to provide a means of facilitating the public in expressing their views on the draft plan. All submissions will be considered with a view to improving and finalising the NAP before sending it to the Commission.

Submissions (preferably in electronic format as it is intended to place them on our web site) should be sent to the following address, **to arrive not later than 5.00 p.m. on 12 June 2006:**

NAP2 Public Consultation,
Emissions Trading Unit,
Environmental Protection Agency,
Regional Inspectorate,
McCumiskey House,
Richview,
Clonskeagh Road,
Dublin 14.

E-mail: NAP2Consultation@epa.ie

Summary of Basis on Which Allocations will be Made	
1.	Under the National Allocation Plan 115.07 million allowances will be allocated to Emissions Trading for the Commitment Period 2008-2012.
2.	Allocations of allowances will be made in a two-stage approach that allocates allowances at sector level in the first instance and subsequently allocates to installations within each sector (after due adjustments have been made for New Entrants as described below). The sectors to be used are General; Cement; and Powergen.
3.	Allocations at sector level will be made on the basis of historic emissions in 2003 adjusted for National Energy Policy and relevant legislation, and taking into account the Government Decision conveyed to EPA on 10 April 2006.
4.	<p>Allocations at installation level will be issued annually and will be made on the basis of average historic emissions in 2003 and 2004 except where this is less than 90% of the average of the emissions in the four years of 2001-2004. In this case the average of the emissions in the four years of 2001-2004 will be applied.</p> <p>In the case of installations that first produced emissions in 2000 or 2001, the allocation will be based on the highest emissions in any year 2001–2004.</p> <p>Where any installation (or part thereof) only commenced operations after 1 January 2002, an allocation for the installation (or part thereof) will be based on either:</p> <ul style="list-style-type: none"> a) a <i>pro rata</i> approach based on emissions during the appropriate month(s) since start-up; or (and only in situations where the EPA considers it appropriate), b) agreed projected emissions where the installation has not completed initial ramp-up².
5.	<p>Allocations will be made to new entrants, as defined in the European Communities (Emissions Trading) Regulations 2004 (S.I. 437 of 2004), on a free-of-charge basis from one of four separate set-asides as follows:</p> <ul style="list-style-type: none"> (i) For the General sector: A separate New Entrant Set-Aside of 748,000 allowances will be established by taking this amount from the General Sector allocation as determined at 3 above. No individual installation will be entitled to secure more than 50,000 allowances of this amount in any year, except for applications received in the final year. (ii) For the Powergen sector: A separate New Entrant Set-Aside of 3,942,000 allowances will be established by taking this amount from the Powergen sector allocation as determined at 3 above. (iii) For the Cement sector: A separate New Entrant Set-Aside of 500,000 allowances will be established by taking this amount from the Cement sector allocation as determined at 3 above. No individual installation will be entitled to secure more than 100,000 allowances in any year, except for applications received in the final year. (iv) For CHP: A set-aside for new (high efficiency) CHP of 450,000 allowances will be established by taking this amount from the Powergen sector allocation as determined at 3 above. Where the thermal output from a new CHP plant is: <ul style="list-style-type: none"> a) displacing energy plant previously in receipt of an allocation, additional allowances for installations with such CHP plants will be calculated by the EPA from agreed emissions associated with its anticipated electricity generation as if it were a best new entrant CCGT gas fired power plant; or b) in cases other than (a) above, agreed projected increased emissions will be used with a fraction assigned to electricity generation and a fraction calculated for thermal energy production both coming from the CHP set-aside of 450,000 allowances. <p>For (i), (ii) and (iii) above, no allocation will be proportionately greater (adjusted for period of operation) than that which the existing installations in the same sector were allocated, nor will an allocation be greater than 88% of projected emissions. Any allowances remaining unused in the set-asides at the end of the period will be cancelled.</p>
6.	For existing CHP plants up to 20 MW electrical, allocations will be determined as part of the total installation allocation as at 4 above. Existing CHP plants greater than this size will receive part of their allocation from their own sector based on thermal output and the remainder from the Powergen sector based on electricity generation as for a best new entrant CCGT gas fired power plant.
7.	A total of 0.5% of allowances will be sold by EPA to defray the expense of administering the Emissions Trading Scheme (as per paragraph 3 (c) of the Government Decision conveyed to EPA on 10 April 2006).
8.	<p>Allowances allocated in respect of “existing installations” shall be issued by February 28th each year. The issuing of such allowances shall be subject to holding of a valid Greenhouse Gas Permit on January 1st of the year of issue.</p> <p>Allowances allocated in respect of “new entrants” shall be issued within one month after commencement has been completed to the satisfaction of the EPA.</p>
9.	Where an installation is deemed by the EPA to have closed in the years 2008 - 2011, allowances in respect of future years will be withheld and issued in the same manner as at 5 above (by adding them to the appropriate set-aside), subject to allowing installations that close retain 75% of their annual allocation, up to a maximum of 25,000 allowances per annum, for the remainder of the period.
10.	Calciners used in the production of alumina are to be excluded pending clarification which the Minister for the Environment, Heritage and Local Government will seek from the European Commission on the treatment of such equipment across the EU; the allocation which would be due to Aughinish Alumina in this regard will be set-aside and retained by the EPA pending further direction from the Minister.
11.	The Minister for the Environment, Heritage and Local Government, following consultation with the EPA, will decide on the total amount of credits from the Kyoto Protocol flexible mechanisms, expressed as a percentage of the allocation to each installation, that can be used by operators in the scheme for the period 2008 – 2012. The amount specified shall not exceed 50% of the allocation to each installation.

² This condition is specifically for installations which have recently commenced and are still in an initial start-up phase and where application of (a) would unfairly discriminate against them.

The questions on the development of the NAP in Ireland, as set out in the EU Guidance, are listed in the boxes below with relevant responses shown underneath.

1. DETERMINATION OF THE TOTAL QUANTITY OF ALLOWANCES

1.1 What is the Member State's emission limitation or reduction obligation under Decision 2002/358/EC or under the Kyoto Protocol (as applicable)?

Ireland is required by Decision 2002/358/EC to limit greenhouse gas emissions to an average of 13% above base year emissions in the period 2008-2012. Base year emissions for Ireland reflect emissions of carbon dioxide (CO₂), nitrous oxide (N₂O) and methane (CH₄) in 1990 and emissions of industrial greenhouse gases (perfluorocarbons, hydrofluorocarbons, and sulphur hexafluoride) in 1995. The latest estimate of base year emissions for Ireland (EPA 2006) is 55.780 Mt of CO₂ equivalent (CO₂e). Emissions in the period 2008-2012 must therefore be limited to 315.158 Mt: an average of 63.032 Mt per annum. Recent data (EPA 2006) shows emissions for Ireland in 2004 at 123% of base year.

1.2 What principles, assumptions and data have been applied to determine the contribution of the installations covered by the emissions trading Directive to the Member State's emission limitation or reduction obligation (total and sector historical emissions, total and sector forecast emissions, least-cost approach)? If forecast emissions were used, please describe the methodology and assumptions used to develop the forecasts.

In determining the total quantity of allowances to allocate to those installations covered by Schedule 1 of the Regulations, Ireland has used a combination of forecasted total and sector emissions and an assessment of the costs of emission reductions in each sector. The methodology employed for emissions forecasts was a combination of top-down macroeconomic assessment, bottom-up surveys and detailed modelling of the Irish electricity market. Each key emission source used in the compilation of Ireland's national greenhouse gas inventory has been identified and projected to 2012 on a comparable basis. The annual projections (2005-2012) by sector are included at Appendix 5. A detailed description of the forecasting methodology is contained in the 2006 ICF/BOC report and the key methods are detailed below on a sector-by-sector basis.

Energy

Future emissions from electricity generation are derived from the ICF Consulting Integrated Power Model (IPM), which is a full model of the European electricity market including data on all generating units and transmission systems in the EU. The projections are the result of both the IPM and the imposition of the following exogenous variables:

- a) Base case electricity demand is imposed, to ensure consistency with projections for all other sectors. This demand is modelled by the ESRI as part of their Medium Term Review of the Irish economy and predicts annual demand increases of 3.4% until 2009 and 2.3% thereafter, derived from ESRI projected economic growth rates. These are the same projections used to underpin the Transmission System Operator's Generation Adequacy Report,
- b) The three peat-fired power stations, supported by a Public Service Obligation Levy for security of supply purposes, are imposed as "must-run" generating units,
- c) The achievement of Ireland's target under the RES-E Directive (2001/77/EC) of 13.2% of gross national electricity consumption being supplied by renewable sources by 2010.
- d) Capacity on the electricity inter-connector between Northern Ireland and Ireland increasing from 330 MW to 600 MW by 2011.

Emissions from mineral oil refining, peat briquetting and natural gas production were derived from detailed discussions with the individual installations all of which are or will be included within the Emissions Trading Scheme. Projections include the commencement of natural gas production from the Corrib gas field in 2009.

Fugitive emissions from the distribution of natural gas are based on consumption in the industrial, commercial and residential sectors. The leakage rate is assumed to reduce from 0.25% currently to 0.15% by 2012 due to the replacement of old cast iron pipelines.

Industry (including commercial and services sector)

The majority of emissions from manufacturing industry are accounted for by installations covered by the EU-ETS. Projections for these sources are based on detailed bottom up analysis at the individual installation and / or sector level. For those emissions not covered by the Emissions Trading Scheme, projections are based on the ESRI economy-wide model of energy demand.

Future emissions from the use of solvents and 'F' gases are projected to remain at the present level throughout the period to 2012.

Emissions in the commercial and services sector are projected in accordance with the ESRI economy-wide model of energy demand.

Agriculture

Full decoupling of agricultural subsidies from production has taken place in Ireland from 1 January 2005. Teagasc, the national agricultural research and advisory body, have estimated the effects of this policy on agricultural activity projections, which formed the basis for the calculation of emission projections.

Residential

Emissions from the residential sector are projected in accordance with the ESRI economy-wide model of energy demand. Although the number of households is forecast to increase from 1.33 million in 2003 to 1.74 million by 2012 due to demographic change and projected population growth to 4.55m by 2012, this is counteracted by improved thermal performance of new and existing buildings and continued fuel switching from solid fuels to natural gas. Average emissions over the 2008-2012 period are projected to be 6.833 Mt CO₂e, or 7% below the 1990 level.

Transport

Emissions are reported on the basis of national fuel sales rather than on the basis of national fuel consumption. This is of major significance for Ireland in relation to road transport emissions. Because of the differential in levels of excise duty on road transport fuel, approximately 25% of diesel and 10% of petrol sold in Ireland is consumed outside the State, mainly in Northern Ireland. The projections assume that this excise differential and consequent level of retail exports will continue through the Kyoto commitment period.

Emissions are projected based on total fuel sales, which are then split between those for domestic consumption and those for retail export. Using 2003 as a base year, the level of petrol exports were held constant while diesel exports were assumed to grow at 2% per annum. Domestic consumption was forecast to grow in line with current National Roads Authority projections for total car and HGV kilometres travelled to 2040. Separate projections were applied for passenger cars / light goods vehicles and for heavy goods vehicles. The impact of the following policies and measures on the projections were then taken into account:

- Agreements between the European Commission and the ACEA (European Automobile Manufacturers Association) to reduce carbon dioxide emissions per km travelled.

- Infrastructure improvements, in line with the National Development Plan, to primary routes such as the Dublin Port Tunnel.
- Road tax rebalancing for private cars.
- Exemption from excise duties for biofuels.

Emissions from rail, domestic civil aviation, navigation and gas transmission were projected on the basis of a bottom-up analysis of railways, ESRI projections of aviation growth, recent trends in navigation and future gas consumption forecasts respectively.

Waste

The volume of waste arising is projected to grow as a result of both population and economic growth. However, this growth will be mitigated by the National Waste Prevention Programme and associated initiatives. In addition the volume being sent to landfill will be reduced through, amongst other measures, recycling, biological treatment and alternative treatment of residual wastes. The extent and timing of these alternative treatments has been informed by the preparation of the National Biodegradable Waste Management Strategy and an assessment of the targets contained in the Waste Management Plans for the various Regions / Counties which have been adopted by Local Authorities. Finally, not all methane generated from landfill is lost to the atmosphere: a proportion will be used for power generation or flared to reduce its climate change effect. The effect of these two measures has been estimated for the 2008-2012 period.

Forestry

The production of removal units (RMUs) in Ireland under Articles 3.3 and 3.4 of the Kyoto Protocol have been modelled by the Irish Forestry Research and Development Council (COFORD) using the CARBIWARE model based on extensive Irish research and consistent with IPCC good practice guidelines.

Distance to target

The base case described above, i.e. the absence of additional policies and measures, would result in Ireland exceeding its Kyoto obligations by an average 7.174 Mt CO₂e per annum, compared to 9.225 Mt per annum as described in the National Allocation Plan for the pilot phase of the Emissions Trading Scheme. Based on updated analysis by ICF/BOC, a carbon price of €15 per tonne is now assumed, at which level, ICF/BOC estimate that the emissions trading sector will deliver abatement of 0.98 Mt per annum and the non-trading sector of the economy will deliver additional abatement of 0.514 Mt per annum. The remaining distance to target, 5.680 Mt per annum, would be met through use of the flexible mechanisms by the State or by purchase of allowances by ETS participants. A *pro rata* split of the required purchases between ETS participants and the remainder of the economy has been considered to be the most equitable. In the period 2008-2012 the State will therefore purchase 3.606 Mt per annum of the distance to target on behalf of the non-trading sectors of the economy, while ETS participants will be expected to purchase 2.074 Mt per annum (or find additional low cost abatement options not identified by ICF/BOC).

The allocation requires Irish ETS participants to avail of all abatement options costing up to €15 per tonne, and is ~12% lower than base case projections.

Figure 1.1 Based on: ICF/BOC Report

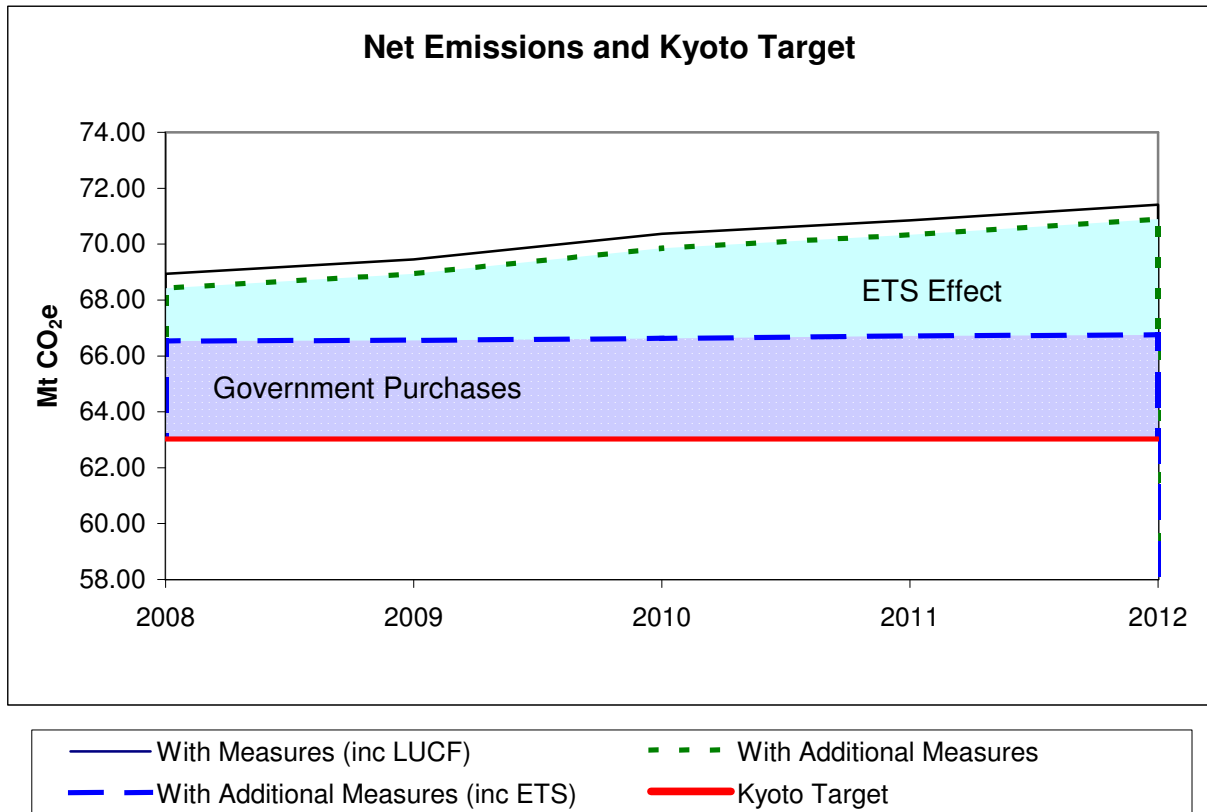


Figure 1.1 above shows the national emission projections, as estimated in the 2006 ICF/BOC report, and the pathway to meeting Ireland's commitment under Decision 2002/353/EC.

- With measures* incorporates all existing policies and measures, including Ireland's renewable energy obligations, reform of the Common Agricultural Policy, certain public transport measures and vehicle efficiency improvements, fiscal measures to promote the use of biofuels and the estimated impacts arising from eligible land use change and forestry activities in Ireland.
- With additional measures* indicates the effect of additional abatement identified by ICF/BOC that is cost-effective up to €15 per tonne of CO₂.
- With additional measures, including ETS* indicates the combined effect of the ETS, and all the other measures referred to above, on Irish emissions. This is to be achieved by a combination of emission reductions and allowance purchases.
- This level of emissions reduction leaves Ireland with a remaining distance to target of 3.606 Mt CO₂e per annum, which Government has indicated it will close by the purchase of allowances through the Kyoto Protocol's flexible mechanisms as discussed in section 1.4 below.

1.3 What is the total quantity of allowances to be allocated (for free and by auctioning), and what is the proportion of overall emissions that these allowances represent in comparison with emissions from sources not covered by the emissions trading Directive? Does this proportion deviate from the current proportion of emissions from covered installations? If so, please give reasons for this deviation with reference to one or more criteria in Annex III to the Directive and/or to one or more other objective and transparent criteria.

The total quantity of allowances to be allocated to the trading sector in the period 2008-2012 is 23.014 million per annum; 0.5% of these allowances will be made available for purchase. Total national greenhouse gas emissions in the period are projected to be 70.206 Mt per annum with existing measures. The allocation therefore represents 32.8% of projected national emissions over the period. Emissions from participants in 2003 were 32.2% of total national emissions. The allocation does not deviate significantly from the current proportion of emissions from installations covered by Emissions Trading.

1.4 What policies and measures will be applied to the sources not covered by the emissions trading Directive? Will use be made of the flexible mechanisms of the Kyoto Protocol? If so, to what extent and what steps have been taken so far (e.g. advancement of relevant legislation, budgetary resources foreseen)?

With existing policies and measures, emissions (net of removals from Land Use Change and Forestry) from non-ETS sectors and gases are projected to average 44.139 Mt CO₂e per annum over the period 2008-2012. The allocation plan is based on a reduction in these emissions of 0.514 Mt CO₂e per annum in the Kyoto period. The precise mix of additional policies required to achieve this reduction is still to be finalised in the review of the National Climate Change Strategy. The Irish Government has announced its intention to purchase 18.035 million allowances through the flexible mechanisms of the Kyoto Protocol (see Government Decision at Appendix 1), as this is the level of emissions abatement necessary to ensure that non-ETS sectors comply with their portion of the national target at or below the expected market price. This figure is in line with that indicated in Ireland's first National Allocation Plan of 18.5 million allowances. In Budget 2006 the Minister for Finance announced the creation of a multi-annual Carbon Fund, with an initial allocation of €20 million, to be administered by the National Treasury Management Agency for purchasing carbon credits through the Kyoto flexible mechanisms. Government is currently bringing forward the necessary primary legislation to establish this fund and will publish the National Purchasing Strategy in due course.

1.5 How has national energy policy been taken into account when establishing the total quantity of allowances to be allocated? How is it ensured that the total quantity of allowances intended to be allocated is consistent with a path towards achieving or overachieving the Member State's target under Decision 2002/358/EC or under the Kyoto Protocol (as applicable)?

The forecasted emissions for the energy sector are consistent with national energy policy and assume a contribution of 13.2% of electricity production from renewable sources by 2010 in line with Ireland's commitment under the RES-E Directive (2001/77/EC). The forecasted emissions also assume the entry of new gas-fired generation capacity in the period to ensure generation adequacy.

The assessment of emissions and emission reductions for the sector are also consistent with the continuing liberalisation of the Irish electricity market and the introduction of the new All-Island Single Electricity Market in 2007.

1.6 How is it ensured that the total quantity of allowances to be allocated is not more than is likely to be needed for the strict application of the criteria of Annex III? How is consistency with the assessment of actual and projected emissions pursuant to Decision 93/389/EEC ensured?

The total quantity of allowances to be allocated in the period 2008-2012 is 88% of forecasted emissions with existing measures. All assessments of emissions, both projected and actual, are consistent with Decision 280/2004/EC.

1.7 Please explain in Section 4.1 below how the potential, including the technological potential, of activities to reduce emissions was taken into account in determining the total quantity of allowances.

See Section 4.1 below.

1.8 Please list in Section 5.3 below the Community legislative and policy instruments that were considered in determining the total quantity of allowances and state which ones have been taken into account and how.

See Section 5.3 below.

1.9 If the Member State intends to auction allowances, please state the percentage of the total quantity of allowances that will be auctioned, and how the auction will be implemented.

The Government decision of 10 April 2006 stated that up to a maximum of 0.5% of the total allowances might be sold to defray the costs of administering the emissions trading scheme. The EPA has determined that 0.5% is the appropriate amount based on expected costs and trading prices, though some element of uncertainty is attached to this estimate. It is proposed that such sales will be open to all (i.e. EU wide). Unused allowances from the new entrants set-aside will be cancelled rather than sold.

2. DETERMINATION OF THE QUANTITY OF ALLOWANCES AT ACTIVITY LEVEL

2.1 *By what methodology has the allocation been determined at activity level? Has the same methodology been used for all activities? If not, explain why a differentiation depending on activity was considered necessary, how the differentiation was done, in detail, and why this is considered not to unduly favour certain undertakings or activities within the Member State.*

The EPA proposes to allocate allowances to participants based on a two-stage approach. First, an allocation is determined at the sector level. Subsequently allocations are calculated for all of the installations within each sector.

The following sectors, taking into account the Government Decision of 10 April 2006, have been used in this National Allocation Plan: *General, Cement, and Powergen.*

The sector allocation is determined based on recent historical emissions. An emissions based approach has been selected because it has the advantage of utilising a common measurement across all sectors and installations. Recent emissions data were selected for their overall accuracy and availability. Annual emissions for the year 2003 from installations permitted (or likely to be permitted) on or before 30 June 2006 were used for the sector allocation. The use of 2003 data means that recent emissions data are being used while action taken after 2003 is not unduly penalised. The EPA verified 2003 emissions data in the preparation of NAP 1.

The historical emissions used to calculate the sector allocations have been adjusted with respect to national energy policy, which assumes achievement of Ireland's target under the RES-E Directive (2001/77/EC), in order to implement the requirements of the Government Decision (see Appendix 1) regarding the special characteristics of the Power Generation sector including its ability to recoup costs. The pathway towards achievement of this target has been applied in determining the total quantity of allowances to be allocated and therefore in calculating the sector allocations.

The *Sector Allocation* (SA) is calculated as follows:

- a) For each permitted installation that has not notified the EPA of closure a *Historical Baseline* (HB) is calculated for 2003 using actual 2003 emissions.
- b) For each sector a *Historical Sector Total* (HST) is calculated as the sum of all HBs.
- c) For the Powergen sector an *Adjusted Sector Total* (AST) is calculated from the HST in line with changes to reflect national energy policy. For all other sectors AST equals HST.
- d) A total for all sectors combined, the *Combined Adjusted Sector Total* (CAST), is calculated as a sum of all ASTs.

The *Sector Allocation* is then calculated as follows:

$$SA = AST * NTA / CAST$$

Where NTA is the *Net Trading Allocation* calculated from the total amount assigned by Government to emissions trading less the set-aside for sale.

The Sector Allocation available to incumbent installations (IA) is calculated as:

$$IA = SA - SSA$$

Where SSA is the sector specific new entrant set-aside (See Section 5.2.1).

Table 2.1 contains the proposed average annual allocations for each of the three sectors for the period 2008 - 2012.

Table 2.1 Proposed Average Annual Sector Allocations

Sector	<i>Trading Participants Historic Sector Total (HST)</i>	<i>Adjusted Sector Total (AST)</i>	<i>Sector Allocation (SA)</i>	<i>Incumbent Allocation (IA)</i>
General	3,124,914	3,124,914	3,835,258	3,685,658
Cement	3,504,074	3,504,074	4,300,608	4,200,608
Powergen	13,419,111	12,028,735	14,763,064	13,884,664
Sector total	20,048,099	18,657,723	22,898,930	21,770,930
<i>Sale</i>	-	-		115,070
<i>CHP Set-Aside</i>				90,000
<i>General SSA</i>				149,600
<i>Cement SSA</i>				100,000
<i>Powergen SSA</i>				788,400
Overall Total				23,014,000

2.2 If the potential, including the technological potential, of activities to reduce emissions was taken into account at this level, please state so here and give details in Section 4.1 below.

The potential of activities to reduce emissions was taken into account in determining the total quantity to allocate (ICF/BOC report) but not taken into account in determining sector level allocation. Further information is contained in section 4.1 below.

2.3 If Community legislative and policy instruments have been considered in determining separate quantities per activity, please list the instruments considered in Section 5.3 and state which ones have been taken into account and how.

Achievement of Ireland's targets under Directive 2001/77/EC³ has been assumed in calculating the sector allocations.

2.4 If the existence of competition from countries or entities outside the Union has been taken into account, please explain how.

In accordance with criterion 11 of Schedule 3 of the Regulations the relevance of competition from outside the European Union was assessed to determine its likely impact on the competitive position of Irish companies in the sectors covered. A detailed analysis is included in both the Indecon/Enviros and ICF/BOC reports.

³ See Appendix 6.

3. DETERMINATION OF THE QUANTITY OF ALLOWANCES AT INSTALLATION LEVEL

3.1 *By what methodology has the allocation been determined at installation level? Has the same methodology been used for all installations? If not, please explain why a differentiation between installations belonging to the same activity was considered necessary, how the differentiation by installation was done, in detail, and why this is considered not to unduly favour certain undertakings within the Member State.*

Following the Government's determination of the total quantity of allowances to be made available to the ETS, the EPA has decided to allocate allowances to participants based on a two-stage approach. The calculation of the sector allocation has been described in Section 2 above. This section describes the methodology used to determine the allocation at the installation level.

Allocations at installation level will be made on the basis of average emissions in 2003 and 2004 (the *Relevant Emission*) except where this equals less than 90% of the average of the emissions in 2001-2004 inclusive. In this case, the average of the emissions in the four-year period 2001-2004 will be the *Relevant Emission (RE)*. In the case of installations that first produced emissions in 2000 or 2001, the RE will be based on the highest emissions in any year 2001–2004 inclusive. Where any permitted installation (or part thereof) only commenced operations on or after 1 January 2002 the *Relevant Emission* for the installation (or part thereof) will be based on either:

- a) a *pro rata* approach based on emissions during the appropriate month(s) since start-up
- or (and only in situations where the EPA considers it appropriate),**
- b) agreed projected emissions where the installation has not completed initial ramp-up⁴

The *Allocation to Installations (AI)* is calculated from the *Relevant Emission* for each permitted installation within each sector by first calculating the *Sector Total of Relevant Emissions (STRE)* for all the installations in that sector:

$$AI = RE * IA / STRE$$

STRE is calculated as the sum of all REs within each sector. This figure will differ from the Adjusted Sector Total (AST) given in Table 2.1 above as the STRE is based on the average of 2003 and 2004 emissions and accounts for recent entrants, installations in ramp-up and anomalous years of activity. These variables are accounted for at the installation rather than the sector level.

The proposed relevant emissions (RE) and associated allocation for each installation are listed in Appendix 7 and 8 respectively. All REs in this document are provisional and allocations will be finalised subsequent to the current public consultation.

Table 3.1 Proposed STRE for each sector

Sector	<i>Incumbent Allocation (IA)</i>	<i>Sector Total Relevant Emissions (STRE)</i>
General	3,685,658	3,597,172
Cement	4,200,608	3,898,345
Powergen	13,884,664	18,873,537

Once the allocation of allowances for each installation has been calculated for the entirety of the initial period, it will be divided into five equal parts and issued to the relevant operator(s)

⁴ This condition is specifically for installations which have recently commenced and are still in an initial start-up phase and where application of (a) would unfairly discriminate against them.

by February 28th in each year of the scheme⁵. The issuing of such allowances will be subject to holding of a valid Greenhouse Gas Permit on January 1st of the year of issue. The issue of allowances will only be carried out provided the installation is considered to be operational and is not deemed to have closed. Where an installation is deemed by the EPA to have closed in the years 2008 - 2011, allowances in respect of future years will be withheld, subject to allowing installations that close retain 75% of their annual allocation, up to a maximum of 25,000 allowances per annum, for the remainder of the period. Unused allowances arising from installation closure will be transferred into the relevant sector specific new entrant set-aside (SSA).

3.2 If historical emissions data were used, please state whether they have been determined in accordance with the Commission's monitoring and reporting guidelines pursuant to Article 14 of the Directive or any other set of established guidelines, and/or whether they have been subject to independent verification.

All existing permitted installations have an approved monitoring and reporting plan in place. This plan is based on the Commission Decision on Monitoring and Reporting (2004/156/EC). All new applicants for greenhouse gas permits are asked to determine their historical emissions where applicable in accordance with the monitoring and reporting guidelines. This historical data has been used in compiling the draft allocation plan. A detailed site-by-site verification of this baseline data will be made over the coming months. It should be noted that the quantity of allowances to be allocated to each operator as per Appendix 8 is indicative and is subject to change as a result of this consultation and the verification of data, prior to a final decision being taken under Article 11 of the Regulations.

3.3 If early action or clean technology were taken into account at this level, please state so here and give details in Sections 4.2 and/or 4.3 below.

Subject to the explanations in Sections 4.2 and 4.3, neither early action nor clean technology have been explicitly taken into account in determining the allocation at installation level.

3.4 If the Member State intends to include unilaterally installations carrying out activities listed in Annex I below the capacity limits referred to in that Annex, please explain why, and address, in particular, the effects on the internal market, potential distortions of competition and the environmental integrity of the scheme.

Ireland does not propose to unilaterally include installations carrying out activities listed in Schedule 1 of the Regulations below the capacity limits referred to in that Schedule as provided for in Article 22 of the Regulations.

3.5 If the Member State intends temporarily to exclude certain installations from the scheme until 31 December 2007 at the latest, please explain in detail how the requirements set out in Article 27(2)(a)-(c) of Directive 2003/87EC are fulfilled.

This does not apply in the 2008-2012 period.

⁵ Except in certain cases where projections have been used.

4. TECHNICAL ASPECTS

4.1. Potential, including technological potential

4.1.1 Has criterion (3) been used to determine only the total quantity of allowances, or also the distribution of allowances between activities covered by the scheme?

This criterion has been applied in the updating of 'Determining The Share of National Greenhouse Gas Emissions for Emissions Trading in Ireland 2008-12' (ICF/BOC March 2006) and consequently in determining the total quantity of allowances allocated for the ETS.

4.1.2 Please describe the methodology (including major assumptions made) and any sources used to assess the potential of activities to reduce emissions. What are the results obtained? How is it ensured that the total quantity of allowances allocated is consistent with the potential?

Following projections of emissions under existing policies and measures and quantification of Ireland's distance to target, an assessment was made of the potential for emissions reductions from all sources. This included an identification of all greenhouse gas emission reduction options proposed in international studies and an assessment of their technical applicability to Ireland. These were then ranked on a cost effectiveness basis, with all sectors expected to undertake reduction action with a marginal cost per tonne of less than the expected market price for allowances of €15.00. The remaining distance to target is to be achieved through access to international emissions trading markets (directly, by ETS participants, and indirectly, by Government on behalf of non-participants). The total quantity allocated for the 2008-2012 phase is based on an assessment of the technical and economic potential of participants to reduce CO₂ emissions during this phase.

4.1.3 Please explain the method or formula(e) used to determine the quantity of allowances to allocate at the total level and/or activity level taking the potential of activities to reduce emissions into account.

This matter is examined in detail in the ICF/BOC report.

4.1.4 If benchmarking was used as a basis for determining the intended allocation to individual installations, please explain the type of benchmark used, and the formula(e) used to arrive at the intended allocation in relation to the benchmark. What benchmark was chosen, and why is it considered to be the best estimate to incorporate achievable progress? Why is the output forecast used considered to be the most likely development? Please substantiate the answers.

Benchmarking was not used to decide on the allowances to be allocated to installations with historical emissions. However for installations in some sectors benchmarks were taken into account in agreeing projections for new or recently commenced plant. Examples of this are in lime manufacture and power generation.

4.2. Early action (if applicable)

4.2.1 *If early action has been taken into account in the allocation to individual installations, please describe in which manner it is accommodated. Please list and explain in some detail the measures that were accepted as early action and what the criteria for accepting them were. Please demonstrate that the investments/actions to be accommodated led to a reduction of covered emissions beyond what followed from any Community or national legislation in force at the time the action was taken.*

4.2.2 *If benchmarks are used, please describe on what basis the grouping of installations to which the benchmarks are applied was made and why the respective benchmarks were chosen. Please also indicate the output values applied and justify why they are considered appropriate.*

According to Schedule 3 of the Regulations early action may be taken into account. The Commission's guidance document [COM(2003) 830] stated in relation to this criterion:

“Early action’ is to be understood as actions undertaken in covered installations to reduce covered emissions before the national allocation plan is published and notified to the Commission. In line with criterion 4, only measures that operators undertook beyond requirements arising from Community legislation can qualify as early action. More stringent national legislation, applying to all covered installations in total or carrying out an activity, will be reflected in the potential to reduce emissions (cf. criterion 3). Thus, early action is limited to reductions of covered emissions beyond reductions made pursuant to Community or national legislation, or to actions undertaken in the absence of any such legislation.”

The guidance also stated that early action, if used, should be applied in determining the quantity of allowances to be allocated to individual installations.

As discussed in the first National Allocation Plan it is difficult to identify clear cases of early action and then to devise a defensible mechanism within the NAP to reward this early action.

In relation to the first of these issues it is evident from the Commission's guidance that the justification of credit for early action is dependent on the motivation behind the emission reduction action. Any action undertaken for involuntary reasons, such as compliance with legislation, is excluded. Where a reduction has been achieved accruing a net economic benefit, which would arise even in the absence of future carbon constraints, there would appear to be little justification for rewarding early action. It is difficult to identify any significant early action that was not related to one or both of these two factors.

In December 2004 the Commission published *“Further guidance on allocation plans for the 2008 to 2012 trading period of the EU Emission Trading Scheme”*. This suggested that allocation metrics should be as simple as possible to allow for greater transparency and in relation to early action stated:

“By not relying on first phase emissions or other first phase data, early action is adequately recognised, which substitutes therefore for the set-up of an early action set-aside or any other means of accommodating early action.”

This draft NAP does not use data later than 2004 (except in some cases where emissions were first produced after 1/1/2002) and is therefore in line with this most recent guidance from the Commission.

Furthermore, the metric used implicitly takes early action into account at an installation level, by using the four-year average for 2001-2004 to determine the allocation whenever 2003/2004 average emissions for any installation is less than 90% of average 2001-2004.

In conclusion, while this NAP does not specifically purport to reward early action, the use of earlier years for historical emissions, where there has been a significant decrease in emissions, provides some reward for early action during that period.

4.3 Clean technology (if applicable)

4.3.1 How has clean technology, including energy efficient technologies, been taken into account in the allocation process?

4.3.2 If at all, which clean technology has been taken into account, and on what basis does it qualify as such? Have any energy production technologies intended to be taken into account been in receipt of approved State aid for environmental protection in any Member State? Please state whether any other industrial technologies intended to be taken into account constitute “best available techniques” as defined in Council Directive 96/61EC, and explain in what way it is particularly performing in limiting emissions of covered greenhouse gases.

Criterion 8 effectively extends criterion 3 to the installation level and states that a National Allocation Plan shall contain information on the manner in which clean technologies, including energy efficient technologies, are taken into account. As in the case of criterion 7, the Commission has stated in its guidance document that applying this criterion is optional.

According to the Commission, this criterion will be deemed to be fulfilled if a Member State clearly explains in its NAP whether it intends to take clean technologies into account and, if so, how.

While a clear definition of what constitutes clean technologies is not provided in the Regulations, in its guidance document, the Commission states that clean or energy efficient technologies are those that have resulted in a lower level of direct emissions covered by the Regulations than the alternative technologies that could realistically have been deployed by installations.

The EPA considers that one of the main results of implementing Directive 2003/87/EC, by putting a cost on emissions of greenhouse gases, will be an automatic incentive, or driver, for the use of clean, energy efficient technologies. Therefore it is not considered necessary to further promote the use of clean technologies in the allocation process to existing installations.

Future high efficiency Combined Heat and Power plants (CHP⁶)

In regard to CHP, a set-aside is to be taken from the Powergen sector allocation (on the basis of 450,000 allowances for the five year trading period⁷) to be used for high efficiency CHP plants which qualify as new entrants for the second phase of the scheme. Allocations for installations with such CHP plants will be calculated as described under 5.2 (iv) below.

⁶ The definition of “High efficiency CHP” will take into account the requirements of Directive 2004/8/EC

⁷ This set-aside is sufficient for new CHP capacity of around 10 MW electrical/a for each of the five years.

The creation of this set-aside of free allowances (from the Powergen sector allocation) for future high efficiency CHP conversions/installations will ensure that this technology is incentivised rather than face possible disadvantages through the introduction of the trading scheme. This is also in accordance with the Government's Decision as conveyed to EPA on 10 April 2006

Existing CHP

For existing CHP plants up to 20 MW electrical, allocations will be determined as part of the total allocation as described in Section 3. Existing CHP plants greater than this size will receive part of their allocation from their own sector based on thermal output and the remainder from the Powergen sector based on electricity generation as for a best new entrant CCGT gas fired power plant.

Since the use of an historical emissions approach will automatically include the additional emissions associated with previously installed on-site CHP systems, it is not proposed to incentivise existing CHP in any other way.

5. COMMUNITY LEGISLATION AND POLICY

5.1. Competition policy (Articles 81-82 and 87-88 of the Treaty)

5.1 If the competent authority has received an application from operators wishing to form a pool and if it is intended to allow it, please attach a copy of that application to the National Allocation Plan. What percentage of the total allocation will the pool represent? What percentage of the relevant sector's allocation will the pool represent?

No application has been made by any operator or group of operators wishing to form a pool.

5.2. Internal market policy – new entrants (Article 43 of the Treaty)

5.2.1 How will new entrants be able to begin participating in the EU emissions trading scheme?

Allocations will be made to new entrants, as defined in the European Communities (Emissions Trading) Regulations 2004 (S.I. 437 of 2004), on a free-of-charge basis from one of four separate set-asides as follows:

- (i) For the General sector: A separate New Entrant Set-Aside of 748,000 allowances will be established by taking this amount from the General Sector allocation. No individual installation will be entitled to secure more than 50,000 allowances of this amount in any year, except for applications received in the final year.
- (ii) For the Powergen sector: A separate New Entrant Set-Aside of 3,942,000 allowances will be established by taking this amount from the Powergen sector allocation.
- (iii) For the Cement sector: A separate New Entrant Set-Aside of 500,000 allowances will be established by taking this amount from the Cement sector allocation. No individual installation will be entitled to secure more than 100,000 allowances in any year, except for applications received in the final year.
- (iv) For CHP: A set-aside for new (high efficiency) CHP of 450,000 allowances will be established by taking this amount from the Powergen sector allocation. Where the thermal output from a new CHP plant is:
 - a) displacing energy plant previously in receipt of an allocation, additional allowances for installations with such CHP plants will be calculated by the EPA from agreed emissions associated with its anticipated electricity generation as if it were a best new entrant CCGT gas fired power plant; or
 - b) in cases other than (a) above, agreed projected increased emissions will be used with a fraction assigned to electricity generation and a fraction calculated for thermal energy production both coming from the CHP set-aside of 450,000 allowances.

For (i), (ii) and (iii) above, no allocation will be proportionately greater (adjusted for period of operation) than that which the existing installations in the same sector were allocated, nor will an allocation be greater than 88% of projected emissions. Any allowances remaining unused in the set-asides at the end of the period will be cancelled. Further detail on the allocation of allowances from the set-asides is given in Appendices 2 and 3.

5.2.2 In the case that there will be a reserve for new entrants, how has the total quantity of allowances to set aside been determined and on what basis will the quantity of allowances be determined for each new entrant? How does the formula to be applied to new entrants compare to the formula applied to incumbents of the relevant activity? Please also explain what will happen to any allowances remaining in the reserve at the end of the trading period. What will apply in case the demand for allowances from the reserve exceeds the available quantity of allowances?

Allocations will be made to new entrants, as defined in the Regulations, on a free-of-charge basis from the relevant sector new entrant set-aside. (See section 5.2.3 for estimation of this quantity). Applications for allowances from the relevant new entrant set-aside will be restricted to installations which receive a new or updated GHG permit in accordance with the Regulations. Decommissioned plant which is re-commissioned may qualify for an allocation from the new entrant set-aside provided it results in an overall increase in the capacity of the installation. Allowances may only be allocated based on BAT regardless of the age and technology of the plant.

All New Entrant set-asides will be established and maintained on the following basis:

- i) If there are any surplus allowances in the set-aside at the end of 2012 these will be cancelled in accordance with the Government Decision (Appendix 1).
- ii) Allocations made on the basis of projections but not issued due to delay, cancellation or non-development will be returned to the relevant set-aside.
- iii) Allowances retained by the EPA due to closure of installations will be added to the relevant sector specific set-asides.

Allocation of allowances from all New Entrant set-asides except the CHP set-aside will be made as described in Appendix 2. The rules for allocating allowances from the CHP set-aside are given in Appendix 3.

5.2.3 Is information already available on the number of new entrants to expect (through applications for purchase of land, construction permits, other environmental permits etc.)? Have new or updated greenhouse gas emission permits been granted to operators whose installations are still under construction, but whose intention it is to start a relevant activity during the period 2008 to 2012?

In their report for the 2008-2012 period *Indecon/Enviros* identify a need for between 100,000 and 500,000 tonnes of CO₂ emissions per annum to meet the needs of Enterprise Ireland, IDA clients and other installations included in the *General* sector. This is consistent with the findings of the ICF/BOC report submitted to the DEHLG. Following consultation with the National Allocation Advisory Group (NAAG) the EPA will reserve 748,000 allowances for the General Sector New Entrant Set-Aside.

In addition, the ICF/BOC report and the NAAG have identified the need for some increased capacity in the Cement sector. A specific set-aside of 500,000 allowances will be created for this sector for the 2008-2012 period.

In the Powergen sector, *Indecon/Enviros* assessed that plans to replace plant with 400 MW baseload and a new 400 MW plant were relevant. Considering the return of unused allowances due to closure to the relevant set-aside (as outlined in section 3.1 above) a total of 3,942,000 allowances will be reserved for the Powergen Sector New Entrant Set-Aside.

A separate set-aside for new (high efficiency) CHP of 450,000 allowances will be established based on approximately 10 MW additional electrical output per annum for each of the five years. These allowances will also be taken from the Powergen sector.

5.3. Other legislation or policy instruments

- 5.3.1 *Please list other Community legislation or policy instruments that were considered in the establishment of the National Allocation Plan and explain how each one has influenced the intended allocation and for which activities.*
- 5.3.2 *Has any particular new Community legislation been considered to lead to an unavoidable decrease or increase in emissions? If yes, please explain why the change in emissions is considered to be unavoidable, and how this has been taken into account.*

Relevant legislative requirements were factored into the assessment of the total number of allowances for the Emissions Trading sector carried out by ICF/BOC. A list of legislation considered in this regard is given in Appendix 4.

The Commission's guidance document of January 2004 states that only significant increases or decreases should be considered and suggests that a change of 10% should be considered as significant. In particular they state in relation to this criterion:

“Criterion 4 concerns the relationship between allocations under Directive 2003/87/EC and other Community legislative and policy instruments. Consistency between allowance allocations and other legislation is introduced as a requirement in order to ensure that the allocation does not contravene the provisions of other legislation. In principle, no allowances should be allocated in cases where other legislation implies that covered emissions had or will have to be reduced even without the introduction of the emissions trading scheme. Similarly, consistency implies that if other legislation results in increased emissions or limits the scope for decreasing emissions covered by the Directive account should be taken of this increase.”

In the pilot phase NAP (2005-2007) it was found that no legislative requirements were expected to result in a change in emissions above 10%. It was therefore considered that no special provisions needed to be made for legislative requirements.

If an operator knows of changes to the installation which will come about in the period 2008-2012 as a result of EU legislation and will cause an unavoidable increase of 10% or more in CO₂ emissions, a submission to the EPA giving full details of the projected increase should be made during the first public consultation period (no later than 5.00 pm on 12 June 2006). An indicative listing of community legislation that may be relevant is contained in Appendix 4.

It should be noted that where additional permissible capacity is installed in order to meet legislative requirements the operator of the installation will be eligible to apply to the relevant sector specific new entrant set-aside for allowances and will not in such a case be eligible for allowances from any special legislative set-aside.

6. PUBLIC CONSULTATION

- 6.1 *How is this national allocation plan made available to the public for comments?*
- 6.2 *How does the Member State provide for due account to be taken of any comments received before a decision on the allocation of allowances is taken?*
- 6.3 *If any comments from the public received during the first round of consultation have had significant influence on the national allocation plan, the Member State should summarise those comments and explain how they have been taken into account.*

The total quantity of allowances to be allocated and a number of high level allocation principles have been determined by Government. These decisions were made by Government in line with national climate change policy and the criteria laid out in the Directive, and following consideration of the reports prepared by ICF/BOC.

ICF/BOC engaged in consultations with various industry groups and undertook a number of site visits in one key sector. In addition they consulted with the Industrial Development Authority on possible future growth in the PharmaChem and ICT sectors. An Interim Report and a consultation paper were published (advertised in the national press in early October 2005), and the main interest groups were invited to an information seminar which was well attended by a wide-ranging representation. The DEHLG received 20 submissions through the consultation which were subsequently published on their website.

The public was invited by way of national newspaper advertisements to make any comments they wished to the EPA's consultants *Indecon/Enviros* during the preparation of their reports. A participant's workshop was held in December 2005 followed by individual meetings for all sector groups with both Indecon Consultants and EPA in attendance.

The National Allocation Plan will be made available to participants and the public for comment over a period of at least one month. National newspaper advertisements together with a press release will alert the public, and each known participant will be e-mailed. All submissions arising from this consultation will be placed on the EPA web site.

The submissions will be assessed and any resulting amendments proposed will be considered by the Board of EPA. The National Allocation Plan to be submitted to the EU Commission will contain a summary of any changes resulting from the submissions.

7. CRITERIA OTHER THAN THOSE IN ANNEX III TO THE DIRECTIVE

Have any criteria other than those listed in Annex III to the Directive been applied for the establishment of the notified National Allocation Plan? If yes, please specify which ones and how they have been implemented.

Please also justify why any such criteria are not considered to be discriminatory.

No other criteria have been applied.

8. LIST OF INSTALLATIONS

Please submit a matrix containing the following information:

- Identification (e.g. name, address) of each installation*
- The name of the operator of each installation*
- The number of the greenhouse gas emissions permit*
- The unique (EPER) identifier of the installation*
- The main activity, and, if applicable, other activities carried out at the installation*
- Total quantity of allowances to be allocated for the period, and the annual breakdown, for each installation*
- Whether the installation has been unilaterally included or temporarily excluded and whether it is part of a pool*
- Annual data per installation, including emission factors if emissions data are used, which have been used in the allocation formula(e)*
- A subtotal per activity of data used and number of allowances allocated*

The above information, where applicable, is contained in Appendices 7, 8 and 9.

Appendix 1 Government Decision conveyed to EPA on 10 April 2006

- 1) Pursuant to national obligations under Directive 2003/87/EC, the Government has decided to make available 115.07 million allowances for allocation by your Agency through the National Allocation Plan (NAP) to participants in the EU Emissions Trading Scheme (ETS) in the commitment period 2008-2012 inclusive, an average of 23.014 million per year.
- 2) In the allocation process, the Government considers that the following matters are relevant to the Agency's consideration:
 - a) the need to endeavour to ensure the protection of competitiveness in those sectors exposed to global competition is reflected in the allocation to such sectors and, in this regard, take into account of the characteristics of the powergen and the cement sectors and the extent of their capacity to recoup the marginal cost increases arising. The Agency shall ensure that the requirements of the Directive, in particular Annex III Criterion 5, are strictly observed.
 - b) in the context of (a) and generally, the need to have regard to the ICF Consulting/Byrne O'Cléirigh 2004 and 2006 reports on Determining the Share of Greenhouse Gas Emissions for Emissions Trading in Ireland which were prepared for Government and which informed the Government's decision.
- 3) Government has directed that:
 - a) at least 89.5% of the total allowances made available by Government be allocated free of charge to installations to which you have issued greenhouse gas emissions permits by 30 June 2006;
 - b) you are to provide an appropriate quantity, not greater than 10%, of the allowances at (1), for issue free of charge to installations which obtain a greenhouse gas emissions permit after 30 June 2006 and to cancel any allowances unused for this purpose at the end of the commitment period;
 - c) you are to make available for sale not greater than 0.5% of the allowances at (1) sufficient to defray the expense of administering the emissions trading scheme;
 - d) you are to withhold the issue of allowances in respect of future years to installations that close in the years 2008 to 2011 and to issue allowances withheld on this basis in the same manner as at b) above, subject to allowing installations that close to retain 75% of their annual allocation, up to a maximum of 25,000 allowances per annum, for the remainder of the commitment period;
 - e) you are to have due regard, in respect of power generation, to Government policy on fuel diversity in constructing the National Allocation Plan; and
 - f) you are to exclude calciners used in the production of alumina pending clarification which the Minister will seek from the European Commission on the treatment of such equipment across the EU; the allocation which would be due to Aughinish Alumina, in this regard, shall be set aside and retained by the Agency pending further direction from the Minister.
- 4) Government has agreed that the Minister for the Environment, Heritage and Local Government, following consultation with the Agency, will decide on the total amount of credits from the Kyoto Protocol flexible mechanisms, expressed as a percentage of the allocation to each installation, that can be used by operators in the Scheme for the period 2008-2012. The amount to be specified shall not exceed 50% of the allocation to each installation.
- 5) Government has decided, having regard to obligations under the EU Directive and the Kyoto Protocol, to announce an indication of intent to purchase allowances on the international market to ensure that Ireland is in possession of sufficient allowances to comply with Kyoto commitments for those sectors of the economy not directly engaged in emissions trading. A total quantity of 18.035 million allowances (3.607 million per annum) is estimated to be sufficient for this purpose.

Appendix 2 New Entrant Set-Asides

Allocation of allowances from the New Entrant set-asides will be made on the following basis:

- a) Allocations will be made sequentially on the basis of an established priority.
- b) Upon receipt of a completed application for allowances from a Sector Specific Set-Aside (SSA) an installation will be provisionally placed on a Register of New Entrants specific to the sector in which it plans to operate.
- c) Where the EPA deems an application for an allocation from the SSA incomplete, the application shall be rejected and priority shall not be assessed.
- d) Applications to the set asides from new developments should be made as soon as possible in advance of the development taking place and allocations will be calculated on the basis of a 'start date' occurring no sooner than three months after the completed application has been made.
- e) Late applicants (including installations or parts of installations operating without a GHG permit after the NAP has been submitted to the Commission in accordance with Article 9 of the Regulations) will be subject to a reduced allocation. The reduction factor applied will be up to 50% of the amount otherwise due from the SSA. The amount of this reduction will be decided by the Board of the EPA on a case-by-case basis.
- f) The EPA will verify that the operator of the installation has obtained all the necessary consents to commence construction of the facility including, but not confined to, planning permission, a licence to construct (if required from the appropriate authority) and, in the case of electricity generation, has signed a connection agreement with ESB National Grid or ESB Networks.
- g) The installation must have a substantiated start date.
- h) Applications will be prioritised chronologically according to the date on which all consents were obtained or the date of receipt of the completed application, whichever is the later.
- i) Where an installation is found *not* to have all necessary consents or a substantiated start date during the verification of the application it shall be removed from the appropriate *Register of New Entrants* and may reapply when the necessary consents or a substantiated start date have been obtained.
- j) Installations qualifying as new entrants due to a permit update will retain their existing allocations. Only the additional portion of any new allocation will be taken from the *New Entrant set-aside*.
- k) Allocations will be based on agreed projected emissions, assuming use of best available technology, except for installations (or parts thereof) that have appropriate historical emissions, which will then be used as the basis for allocation.
- l) For each set-aside no individual permit holder will be entitled to an allocation of more than the following number of allowances for each year 2008 to 2011 inclusive:
 - i) General New Entrant Set-Aside – 50,000 allowances/annum
 - ii) Cement Sector New Entrant Set-Aside – 100,000 allowances/annum.
- m) No allocation will be proportionately greater (adjusted for period of operation) than that which the existing installations in the same sector were allocated, nor will allocations be greater than 88% of agreed projected emissions.
- n) No allowances will be allocated in respect of new sources of emissions occurring as a replacement for sources of the same or greater capacity on the same site previously in receipt of allowances in respect of the trading period.

- o) Allocations from each of the New Entrant Set-Asides will be subject to the amount available in the set-aside at the time of the allocation decision by the Board of the EPA and will not be altered should the amount in the set-aside increase subsequently.
- p) The allocation will be issued within one month after commencement of the plant has been verified as satisfactory by the EPA.
- q) Where delays or cancellations occur the allocation will be recalculated accordingly and unissued allowances will be returned to the set-aside as described above.
- r) Issuing of allowances will be subject to holding a valid Greenhouse Gas Permit and a valid Operator Holding Account in the Irish National Emissions Trading Registry.

Appendix 3

CHP Set-Aside

Allocation of allowances from the CHP Set-Aside will be made as follows:

- a) Allocations will be made sequentially to on the basis of an established priority.
- b) Upon receipt of a completed application for allowances from the CHP Set-Aside an installation will be provisionally placed on a Register of CHP Set-Aside applications.
- c) Where the EPA deems an application for allowances from the CHP Set-Aside to be incomplete, the application shall be rejected and priority shall not be assessed.
- d) The EPA will verify that the operator of the installation has obtained all the necessary consents to commence construction of the facility including, but not confined to, planning permission, a licence to construct (if required from the appropriate authority) and, in the case of electricity export, has signed a connection agreement with ESB National Grid or ESB Networks.
- e) The installation must have a substantiated start date.
- f) Applications will be prioritised chronologically according to the date on which all consents were obtained or date of receipt of completed application, whichever is the later.
- g) Where an installation is found *not* to have all necessary consents or a substantiated start date during the verification of the application it shall be removed from the appropriate *Register of New Entrants* and may reapply when the necessary consents/ substantiated start date have been obtained.
- h) Installations qualifying for CHP Set-Aside due to a permit update will retain their existing allocation. Only the additional portion of any new allocation will be taken from the CHP Set-Aside.
- i) Allocations will be based on projected emissions assuming use of state of the art CCGT.
- j) No allowances will be allocated in respect of new sources of emissions occurring as a replacement for sources of the same or greater capacity on the same site previously in receipt of allowances in respect of the trading period.
- k) Allocations will be subject to the amount available in the set-aside at the time of the allocation decision by the Board of the EPA and will not be altered should the amount in the set-aside increase subsequently.
- l) Where the thermal output from a new CHP plant is:
 - i) displacing energy plant previously in receipt of an allocation, additional allowances for installations with such CHP plants will be calculated by the EPA from agreed emissions associated with its anticipated electricity generation as if it were a best new entrant CCGT gas fired power plant; or
 - ii) in cases other than (i) above, agreed projected increased emissions will be used with a fraction assigned to electricity generation and a fraction calculated for thermal energy production both coming from the CHP set-aside of 450,000 allowances
- m) The allocation will be issued within one month after commencement of the plant has been verified as satisfactory by the EPA. including demonstration that the plant satisfies the definition of high-efficiency CHP.
- n) Where delays or cancellations occur the allocation will be recalculated accordingly and unissued allowances will be returned to the CHP Set-Aside.
- o) Issuing of allowances will be subject to holding a valid Greenhouse Gas Permit and a valid Operator Holding Account in the Irish National Emissions Trading Registry.

Appendix 4 Legislative and Policy Instruments

Policy Instrument/Legislation used in calculating the total for Emissions Trading
Agriculture CAP reform (Luxembourg Agreement) <i>pp 42-43</i> Nitrates Directive (91/676/EEC) <i>page 44</i>
Energy RES-Directive (2001/77/EC) Large Combustion Plants Directive (2001/80/EC) National Emissions Ceiling Directive (2000/60/EC) Community legislation opening up the electricity market would be implicitly taken into account, See http://europa.eu.int/comm/energy/electricity/legislation/index_en.htm Sulphur content of fuels Directive 2003/17/EC
Industry, Commercial and Services F-Gases Regulation (Adopted by Council on 25 April, but not published in Official Journal yet, so no reference)
Waste Landfill Directive (99/31/EC)
Transport Biofuels Directive (2003/30/EC) EU voluntary agreement with European, Korean and Japanese car manufacturers (ACEA/JAMA/KAMA) Car Labelling Directive (1999/94/EC) Community legislation to encourage the development of Trans-European Transport Networks - framework under which transport investments such as the Dublin Port Tunnel and other National Development Plan infrastructure measures were developed
Residential Energy Performance in Buildings Directive (2002/91/EC)
Sinks Co-funding of afforestation grants under EU forestry policy

Potential List of Legislation to be considered for sector/ installation level allocations	
Legislative or policy instrument	Summary
Directive 96/61/EC concerning Integrated Pollution Prevention and Control	Minimising pollution from industrial point sources.
Directive 2003/96/EC on the restructuring of the Community framework for the taxation of energy products and electricity	Widens the scope of the EU's minimum rate system for energy products, previously limited to mineral oils, to all energy products including coal, natural gas and electricity
Directive 2003/17/EC on the quality of petrol and diesel fuels (amending directive 98/70/EC)	The Directive introduces “zero” sulphur fuels to the European market from 1 January 2005 with complete market availability from 1 January 2009.
Directive 2002/91/EC on the energy performance of buildings	Sets minimum requirements for the energy performance of all new buildings and existing large buildings subject to major renovation. Provides for energy certification of all buildings and for regular mandatory inspection of boilers and air conditioning systems in buildings.
Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market	The purpose of this Directive is to promote an increase of the contribution of renewable energy sources to electricity production in the internal market for electricity and to create a basis for a future Community framework.
Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants	Limits pollutant emissions from large combustion plants, i.e. those with a rated thermal input equal to or greater than 50 MW, irrespective of the type of fuel used. In order to gradually reduce the annual emissions of sulphur dioxide and oxides of nitrogen from existing plants and to lay down emission limit values for sulphur dioxide, nitrogen oxides and dust in the case of new plants.
The Solvents Directive: (Council Directive 1999/13/EC)	This Directive limits the emission of volatile organic compounds (VOCs) from the use of organic solvents, and is intended to reduce air pollution and protect human health.
Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants.	Sets national emission ceilings for pollutants causing acidification and eutrophication and for ozone precursors in order to provide fuller protection for the environment and human health against their adverse effects.

Appendix 5 - Projected Greenhouse Gas Emissions by Sector (million tonnes CO₂e)

	2005	2006	2007	2008	2009	2010	2011	2012
Energy Sub-total	17.407	16.822	17.397	18.064	18.432	18.841	19.039	19.365
<i>Electricity Generation</i>	16.713	16.122	16.688	17.351	17.654	18.051	18.233	18.547
<i>Oil Refining</i>	0.420	0.433	0.443	0.454	0.465	0.476	0.488	0.499
<i>Solid Fuel Production</i>	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124
<i>Gas Production</i>	0.089	0.079	0.074	0.074	0.124	0.124	0.124	0.124
<i>Fugitive</i>	0.061	0.064	0.068	0.061	0.065	0.066	0.070	0.071
Industry Sub-total	12.517	12.522	12.771	13.505	13.747	14.284	14.570	14.862
<i>Manufacturing Industry</i>	5.353	5.149	5.217	5.518	5.660	5.953	6.098	6.247
<i>Process</i>	2.627	2.703	2.787	3.148	3.184	3.365	3.453	3.550
<i>Commercial</i>	3.726	3.859	3.956	4.028	4.092	4.155	4.208	4.254
<i>Industrial Solvents</i>	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111
<i>F-Gases: Other</i>	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700
Agriculture Sub-total	19.595	18.837	18.294	17.976	17.801	17.630	17.477	17.336
<i>Combustion</i>	0.840	0.841	0.821	0.802	0.787	0.775	0.766	0.760
<i>Enteric Fermentation</i>	9.153	8.758	8.493	8.341	8.251	8.156	8.070	7.987
<i>Manure Management</i>	2.170	2.087	2.023	1.988	1.969	1.950	1.932	1.914
<i>Soils</i>	7.432	7.151	6.957	6.845	6.794	6.749	6.709	6.675
Residential Sub-total	7.324	7.457	7.271	7.040	6.882	6.788	6.743	6.713
Waste Sub-total	1.974	1.923	1.852	1.843	1.845	1.840	1.834	1.790
<i>Landfill</i>	1.841	1.788	1.715	1.704	1.703	1.696	1.688	1.642
<i>Wastewater</i>	0.133	0.135	0.137	0.139	0.142	0.144	0.146	0.148
Transport Sub-total	12.295	12.377	12.490	12.578	12.822	13.063	13.259	13.421
<i>Civil Aviation</i>	0.116	0.118	0.122	0.126	0.130	0.132	0.139	0.143
<i>Road</i>	11.809	11.876	11.976	12.050	12.279	12.506	12.686	12.837
<i>Railways</i>	0.147	0.151	0.155	0.158	0.162	0.166	0.171	0.175
<i>Navigation</i>	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066
<i>Gas</i>	0.157	0.166	0.171	0.178	0.185	0.193	0.197	0.200
Gross National Emissions	71.112	69.938	70.075	71.006	71.529	72.446	72.922	73.487
<i>Domestic LULUCF</i>	-	-	-	2.074	2.074	2.074	2.074	2.074
Net National Emissions	71.112	69.938	70.075	68.932	69.455	70.372	70.848	71.413
<i>Of which:</i>								
ETS Emissions	23.651	22.906	23.600	24.897	25.403	26.244	26.637	27.164
Non-ETS emissions	47.461	47.032	46.475	44.035	44.052	44.128	44.211	44.249

Source: DEHLG

Appendix 6 Methodology for Adjustment of Sector Totals

The EPA is employing an historical approach for the determination of allocations to sectors and installations, as recommended by the EPA's consultants Indecon/Enviros. One of the primary advantages of using an historic emissions based approach is the overall accuracy, availability and potential for verification of the data and therefore it treats all sectors equally.

However as the top-down total allocation determined by Government is based on emissions forecasts it is necessary to adjust sector historic emissions where implementation of a legislative or policy requirement during the pilot phase has been used in determination of the base case emissions.

Assessment of the sectors and the ICF/BOC forecasting methodology indicates that national energy policy, in particular that on renewable energy sources, is the only such factor likely to have a significant impact on emissions trends. A base case adjustment (BCA) has therefore been calculated for the powergen sector, which takes account of the requirement to increase the penetration of renewable energy sources.

In the relevant historic period (2003) renewables contributed⁸ 4.3% of gross national electricity consumption in an average of 26,037 GWh/a. National energy policy and Directive 2001/77/EC will result in a contribution of 13.2% by 2010 (taken as an average for the 2008-2012 period) and current trends indicate that this will be achieved. Using a displacement factor of 0.6 tonnes of carbon dioxide per MWh of electricity produced by renewable sources, the required adjustment for powergen is therefore calculated as:

$$[26,037*(1-0.043) - 26,037*(1-0.132)]*0.6*1,000$$

which equals 1.39Mt.

Failure to take this adjustment into account before final allocation would result in an over allocation to the powergen sector.

⁸ SEI communication.

Appendix 7 Proposed relevant emissions (RE)

Permit ID	Relevant Emission (RE)	RE Method *
GHG001	13,133	A
GHG002	42,611	A
GHG003	22,942	A
GHG004	6,072	A
GHG005	25,462	A
GHG007	900,542	A
GHG008	78,779	A
GHG009	49,216	A
GHG011	12,862	A
GHG012	12,241	A
GHG013	356,622	A
GHG013	6,500	D
GHG014	35,772	A
GHG014	15,576	D
GHG015	17,160	A
GHG016	1,131,166	C
GHG017	6,890	A
GHG017	100	D
GHG018	11,578	A
GHG019	8,727	A
GHG020	63,657	A
GHG020	4,001	D
GHG021	2,940	A
GHG022	4,510	C
GHG023	12,667	A
GHG024	70,668	A
GHG025	8,397	A
GHG025	9,917	D
GHG026	22,348	C
GHG027	8,236	A
GHG028	6,531	A
GHG031	7,681	A
GHG032	20,187	A
GHG032	3,391	D
GHG035	8,950	A
GHG037	5,937	A

* A - Historical Basis
B – *pro rata* (2004 Data)
C – *pro rata* (2005 Data)
D - Projections

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit ID	Relevant Emission (RE)	RE Method *
GHG038	698,064 ⁹	A
GHG038	0 ¹⁰	D
GHG038	87,950	D
GHG038	460,923	D
GHG038	33,801	D
GHG041	7,990	A
GHG041	330	D
GHG042	827,069	B
GHG042	35,156	D
GHG043	1,423,126	B
GHG043	12,468	D
GHG043	11,613	D
GHG044	104,623	A
GHG045	214,909	A
GHG045	42,462	D
GHG047	8,827	A
GHG048	8,776	A
GHG049	27,790	A
GHG050	56,145	A
GHG051	30,456	A
GHG054	7,604	A
GHG057	16,218	C
GHG057	19,531	D
GHG058	36,360	A
GHG059	2,381	C
GHG061	5,008	A
GHG062	471,772	C
GHG063	772,112	A
GHG063	4,095	B
GHG066	516,293	A
GHG068	612,694	C
GHG069	389,376	A
GHG070	5,460,712	A
GHG071	478,715	A
GHG072	2,256,007	A

⁹ Adjusted by subtracting 369,673 in accordance with Government Decision

¹⁰ Adjusted by subtracting 39,682 in accordance with Government Decision

* **A - Historical Basis**

B – pro rata (2004 Data)

C – pro rata (2005 Data)

D - Projections

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit ID	Relevant Emission (RE)	RE Method *
GHG075	1,469,917	A
GHG076	14,312	B
GHG077	888,107	C
GHG078	10,705	A
GHG079	16,095	A
GHG080	1,061,320	B
GHG081	3,501	B
GHG081	199	D
GHG082	3,724	A
GHG083	7,938	A
GHG085	17,576	A
GHG086	21,121	A
GHG088	18,355	A
GHG089	346	A
GHG090	4,508	A
GHG090	110	D
GHG091	1,210,690	D
GHG093	1,021,224	A
GHG093	95,917	D
GHG094	13,724	A
GHG094	8,453	B
GHG095	5,023	A
GHG096	4,753	A
GHG096	1,044	D
GHG097	6,969	A
GHG098	11,877	A
GHG099	33,401	D
GHG101	81,977	A
GHG102	6,201	A
GHG103	23,397	A
GHG105	64,538	A
GHG106	63,306	A
GHG108	2,854	A
GHG109	37,859	A
GHG123	20,855	A
GHG126	3,664	A
GHG126	1,928	D

- * A - Historical Basis
 B – *pro rata* (2004 Data)
 C – *pro rata* (2005 Data)
 D - Projections

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit ID	Relevant Emission (RE)	RE Method *
GHG127	9,009	A
GHG127	669	D
GHG128	8,698	A
GHG129	23,766	A
GHG130	7,892	A
GHG130	780	D
GHG130	413	D
GHG131	5,019	A
GHG132	13,128	A
GHG132	1,605	D
GHG133	19,051	A
GHG134	3,331	A
GHG136	3,975	A
GHG137	13,294	A
GHG138	5,801	A
GHG139	4,258	C
GHG140	17,545	A
GHG141	16,296	A
GHG142	14,883	A
GHG143	14,068	A
GHG144	29,229	D
GHG145	91,276	D
GHG146	8,706	A
GHG148	1,139	A
GHG149	4,003	A
GHG149	4,390	D
GHG150	5,712	D
GHG151	3,255	D
GHG152	1,183,527	D
GHG153	8,033	A
GHG154	24,155	A

* A - Historical Basis
 B – *pro rata* (2004 Data)
 C – *pro rata* (2005 Data)
 D - Projections

Appendix 8 Proposed allocation to installations

Permit Register Number	Sector	Annual Allocation (2008-2012)
GHG001	General	13,456
GHG002	General	43,659
GHG003	General	23,506
GHG004	General	6,222
GHG005	General	26,088
GHG007	Powergen	662,500
GHG008	General	80,717
GHG009	General	50,426
GHG011	General	13,178
GHG012	General	12,542
GHG013	General	372,054
GHG014	General	52,611
GHG015	General	17,582
GHG016	Powergen	832,163
GHG017	General	7,161
GHG018	General	11,863
GHG019	General	8,941
GHG020	General	69,322
GHG021	General	3,012
GHG022	General	4,621
GHG023	General	12,978
GHG024	General	72,406
GHG025	General	18,764
GHG026	General	22,898
GHG027	General	8,438
GHG028	General	6,692
GHG031	General	7,870
GHG032	General	24,158
GHG035	General	9,170
GHG037	General	6,083
GHG038	General / Powergen	1,169,302*
GHG041	General	8,525
GHG042	Cement	929,079
GHG043	Cement	1,559,418
GHG044	General	107,197
GHG045	General	263,702

*GHG038 Allocation reduced by 419,424 in accordance with Government Decision regarding the treatment of calciners used in alumina production.

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit Register Number	Sector	Allocation to Installations (AI)
GHG047	General	9,044
GHG048	General	8,992
GHG049	General	28,474
GHG050	General	57,526
GHG051	General	31,205
GHG054	General	7,791
GHG057	General	36,628
GHG058	General	37,254
GHG059	General	2,440
GHG061	General	5,131
GHG062	Cement	508,351
GHG063	Powergen	571,031
GHG066	Powergen	379,820
GHG068	Powergen	450,740
GHG069	Powergen	286,452
GHG070	Powergen	4,017,273
GHG071	Powergen	352,175
GHG072	Powergen	1,659,673
GHG075	Powergen	1,081,371
GHG076	Powergen	10,529
GHG077	Powergen	653,352
GHG078	General	10,968
GHG079	General	16,491
GHG080	Powergen	780,779
GHG081	General	3,791
GHG082	General	3,815
GHG083	General	8,133
GHG085	General	18,008
GHG086	General	21,640
GHG088	General	18,807
GHG089	General	354
GHG090	General	4,731
GHG091	Powergen	890,666
GHG093	Cement	1,203,760
GHG094	General	22,723
GHG095	General	5,146
GHG096	General	5,940
GHG097	General	7,140
GHG098	General	12,169
GHG099	General	34,223

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit Register Number	Sector	Allocation to Installations (AI)
GHG101	General	83,993
GHG102	General	6,353
GHG103	General	23,972
GHG105	General	66,125
GHG106	General	64,863
GHG108	General	2,924
GHG109	General	38,790
GHG123	General	21,367
GHG126	General	5,730
GHG127	General	9,916
GHG128	General	8,911
GHG129	General	24,351
GHG130	General	9,308
GHG131	General	5,142
GHG132	General	15,095
GHG133	General	19,520
GHG134	General	3,412
GHG136	General	4,073
GHG137	General	13,621
GHG138	General	5,944
GHG139	General	4,363
GHG140	General	17,977
GHG141	General	16,697
GHG142	General	15,249
GHG143	General	14,414
GHG144	Powergen	21,503
GHG145	General	93,521
GHG146	General	8,920
GHG148	General	1,167
GHG149	General	8,599
GHG150	General	5,853
GHG151	General	3,335
GHG152	Powergen	870,684
GHG153	General	8,231
GHG154	General	24,749
Total		21,351,506*

* Allocation total of 21,770,930 allowances reduced by 419,424 in accordance with Government Decision regarding the treatment of calciners used in alumina production.

Appendix 9: Installation Details and Associated Operator

Permit Register Number	Site Name	Site Location	Operator Name
GHG001	Kingscourt Bricks	Drumgill, Kingscourt, County Cavan	Kingscourt Bricks Limited
GHG002	Kingscourt Works	Gypsum Industries Limited, Kingscourt, County Cavan	Gypsum Industries Limited
GHG003	Arrabawn Cooperative Society Limited	Stafford Street, Nenagh, County Tipperary	Arrabawn Cooperative Society
GHG004	Weyerhaeuser Europe Limited	Redmondstown, Clonmel, County Tipperary	Weyerhaeuser Europe Limited
GHG005	Midleton Distilleries	Irish Distillers Limited, Midleton, County Cork	Irish Distillers Limited
GHG007	Edenderry Power Plant	Edenderry Power Ltd., Ballykilleen, Edenderry, County Offaly	Edenderry Power Limited
GHG008	Kerry Ingredients (Listowel)	Tralee Road, Listowel, County Kerry	Kerry Ingredients Ireland Limited
GHG009	Carbery Milk Products	Ballineen, County Cork	Carbery Milk Products Limited
GHG011	Elan	Monksland, Athlone, County Westmeath	Elan Corporation plc
GHG012	Merck Sharp & Dohme (Ireland) Ltd.	Ballydine, Kilsheelan, Clonmel, County Tipperary	Merck Sharp & Dohme (Ireland) Ltd.
GHG013	ConocoPhillips Whitegate Refinery	Whitegate, Midleton, County Cork	ConocoPhillips Whitegate Refinery Ltd.
GHG014	Wyeth Nutritionals Ireland	Askeaton, County Limerick	AHP Manufacturing B.V. t/a Wyeth Nutritionals Ireland
GHG015	Bailieboro Foods Limited and Bailie Foods Ireland Limited	Lear, Bailieborough, County Cavan	Bailieboro Foods Limited and Bailie Foods Ireland
GHG016	Dublin Bay Power Plant	Pigeon House Road, Ringsend, Dublin 4	Synergen
GHG017	Premier Proteins	Poolboy, Ballinasloe, County Galway	Premier Proteins {2000} Limited
GHG018	Schering-Plough (Brinny) Company	Brinny, Innishannon, County Cork	Schering-Plough (Ireland) Company
GHG019	Mallinckrodt Medical Imaging Ireland	Damastown Industrial Estate, Mulhuddart, Dublin 15	Tyco Healthcare Dublin
GHG020	Kinsale Head Gas Field	Marathon Oil Ireland Limited, Platforms Alpha & Bravo, Kinsale Head Gas Field, Celtic Sea	Marathon Oil Ireland Limited
GHG021	Beamish & Crawford	South Main Street, Cork	Beamish & Crawford plc
GHG022	Genzyme Ireland Limited	IDA Industrial Estate, Old Kilmeaden Road, Waterford	Genzyme Ireland Limited
GHG023	Eli Lilly S.A. (Irish Branch)	Dunderrow, Kinsale, County Cork	Eli Lilly S.A. (Irish Branch)
GHG024	St. James's Gate Brewery	St. James's Gate, Dublin 8	Diageo Ireland

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit Register Number	Site Name	Site Location	Operator Name
GHG025	Pfizer Ireland Pharmaceuticals Ringaskiddy API Plant	Ballintaggart, Ringaskiddy, County Cork	Pfizer Ireland Pharmaceuticals
GHG026	Wyeth Medica BioPharma Campus at Grange Castle	Grange Castle International Business Park, Kilmahudrick, Nangor Road, Clondalkin, Dublin 22	AHP Manufacturing B.V. trading as Wyeth Medica Ireland
GHG027	St. Francis Abbey Brewery	Parliament Street, Irishtown, Kilkenny	Diageo Ireland
GHG028	Dundalk Brewery	Carrick Road, Dundalk, County Louth	Diageo Ireland
GHG031	Killeshandra Site	Killeshandra, County Cavan	Lakeland Dairies Co-operative Society Limited
GHG032	Lough Egish Site	Lough Egish, Tullynahinera, Castleblaney, County Monaghan	Lakeland Dairies Co-operative Society Limited
GHG035	Schering-Plough (Avondale) Company	Rathdrum, County Wicklow	Schering-Plough (Ireland) Company
GHG037	Meath Proteins	Crossdoney, County Cavan	Meath Proteins
GHG038	Aughinish Alumina	Aughinish Island, Askeaton, County Limerick	Limerick Alumina Refining Limited
GHG041	St. James's Hospital	James's Street, Dublin 8	St. James's Hospital Board
GHG042	Irish Cement Ltd. (Limerick Works)	Irish Cement Ltd., Limerick Works, Castlemungret, County Limerick	CRH plc
GHG043	Irish Cement Limited, (Platin Works)	Irish Cement Limited, Platin Works, Drogheda, County Meath	CRH plc
GHG044	Clogrennane Lime Ltd.	Clogrennane, County Carlow	CRH plc
GHG045	Premier Periclase Limited	Boyne Road, Drogheda, County Louth	CRH plc
GHG047	Ormonde Brick Ltd.	Ardra, Castlecomer, County Kilkenny	CRH plc
GHG048	United Fish Industries	Killybegs, County Donegal	United Fish Industries
GHG049	Cognis Ireland Ltd	Inchera and Wallingstown, Little Island, County Cork	Cognis Ireland Limited
GHG050	Dairygold Co-Operative Society Ltd	Castlefarm, Mitchelstown, County Cork	Dairygold Co-Operative Society Ltd
GHG051	Dairygold Co-Operative Society Ltd. Mallow	Annabella, Mallow, County Cork	Dairygold Co-Operative Society Ltd
GHG054	Swords Laboratories	Watery Lane, Swords, County Dublin	Swords Laboratories
GHG057	Wyeth Medica Ireland	Buckley's Cross Roads, Old Connell, Newbridge, County Kildare	AHP Manufacturing B.V Trading as Wyeth Medica Ireland
GHG058	Intel Ireland	Collinstown Industrial Park, Leixlip, County Kildare	Intel Ireland Limited
GHG059	Bristol-Myers Squibb Cruiserath	Cruiserath Road, Mulhuddart, Dublin 15	Swords Laboratories t/a Bristol Myers Squibb Cruiserath
GHG061	Midleton Compressor Station	Ballinacurra West, Midleton, County Cork	Bord Gais

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit Register Number	Site Name	Site Location	Operator Name
GHG062	Lagan Cement	Lansdown, Killaskillen, Kinnegad, County Westmeath	Lagan Cement Limited
GHG063	ESB Aghada Generating Station	ESB Aghada Generating Station, Whitegate, Middleton, County Cork	Electricity Supply Board
GHG066	ESB Great Island Generating Station	ESB Great Island Generating Station, Campile, New Ross, County Wexford	Electricity Supply Board
GHG068	ESB Lough Ree Power	ESB Lough Ree Power, Lanesboro, County Longford	Electricity Supply Board
GHG069	ESB Marina Generating Station	Centre Park Road, County Cork	Electricity Supply Board
GHG070	ESB Moneypoint Generating Station	ESB Moneypoint Generating Station, Kilrush, County Clare	Electricity Supply Board
GHG071	ESB North Wall Generating Station	ESB North Wall Generating Station, Alexandra Road, Dublin 1	Electricity Supply Board
GHG072	ESB Poolbeg Generating Station	ESB Poolbeg Generating Station, Pigeon House Road, Dublin 4	Electricity Supply Board
GHG075	ESB Tarbert Generating Station	ESB Tarbert Generating Station, Tarbert, Co. Kerry	Electricity Supply Board
GHG076	ESB Generating Station Tawnaghmore	ESB, Tawnaghmore, Ballina, County Mayo	Electricity Supply Board
GHG077	ESB West Offaly Power	ESB West Offaly Power, Shannonbridge, County Offaly	Electricity Supply Board
GHG078	Novartis Ringaskiddy Limited	Ringaskiddy, County Cork	Novartis Ringaskiddy Limited
GHG079	Pfizer Ireland Pharmaceuticals Loughbeg API Plant	Loughbeg, Ringaskiddy, County Cork	Pfizer Ireland Pharmaceuticals
GHG080	Huntstown Power Station	Huntstown Power Station, Huntstown Quarry, Ashbourne Road, Finglas, Dublin 15	Huntstown Power Company Limited
GHG081	Dublin City University	Dublin City University, Dublin 9	Dublin City University
GHG082	Pfizer Ireland Pharmaceuticals Little Island	Pfizer Ireland Pharmaceuticals (Little Island), Wallingstown, Little Island, County Cork	Pfizer Ireland Pharmaceuticals
GHG083	Flemings Fireclays Manufacturing Ltd.	The Swan, Athy, County Laois	Flemings Fireclays Manufacturing Ltd.
GHG085	Waterford Crystal (Kilbarry)	Kilbarry, Waterford	Waterford Crystal Ltd.
GHG086	Tipperary Co Operative Creamery Ltd.	Station Road, Tipperary, Co. Tipperary	Tipperary Co Operative Creamery Ltd.
GHG088	Finsa Forest Products	Scarriff, County Clare	Finsa Forest Products Ltd
GHG089	Masonite Ireland	Derryoughter, Drumsna, Carrick on Shannon, County Leitrim	Masonite Ireland
GHG090	IBM Technology Campus	Damastown Industrial Estate, Mulhuddart, Dublin 15	IBM International Holdings BV

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit Register Number	Site Name	Site Location	Operator Name
GHG091	Tynagh 400MW CCPP	Derryfrench, Tynagh, Loughrea, County Galway	Tynagh Energy Limited
GHG093	Scotchtown Cement Works	Scotchtown Cement Works, Scotchtown, Ballyconnell, County Cavan	Quinn Cement Ltd.
GHG094	Dublin Airport	Dublin Airport, County Dublin	Dublin Airport Authority
GHG095	SmithKline Beecham (Manufacturing) Ltd.	Currabinny, Carrigaline, County Cork	GlaxoSmithKline
GHG096	University of Dublin	Trinity College, Dublin 2	Provost, Fellows and Scholars University of Dublin
GHG097	Cadbury Ireland Coolock Factory	Malahide Road, Coolock, Dublin 5	Cadbury Ireland Limited
GHG098	Cadbury Ireland Rathmore Factory	Rathmore, County Kerry	Cadbury Ireland Limited
GHG099	Abbott Ireland Cootehill	Drumore West, Cootehill, County Cavan	Abbott Ireland
GHG101	Glanbia Ingredients - Ballyragget	Ballyragget, County Kilkenny	Glanbia plc
GHG102	Glanbia Kilmeaden	Kilmeaden, County Waterford	Glanbia plc
GHG103	Glanbia Virginia	Burrenrea, Kells Road, Virginia, County Cavan	Glanbia plc
GHG105	Bord na Móna Derrinlough Briquette Factory	Fivealley, Birr, County Offaly	Bord na Móna Fuels Limited
GHG106	Bord na Móna Littleton Briquette Factory	Littleton, Thurles, County Tipperary	Bord na Móna Fuels Limited
GHG108	Smartply Europe	Belview, Slieverue, County Kilkenny	Smartply Europe Ltd
GHG109	Kerry Ingredients (Golden Vale plc)	Kilmallock road, Charleville, County Cork	Kerry Ingredients Ireland Limited
GHG123	College Proteins Limited	College, Nobber, County Meath	College Proteins Limited
GHG126	Janssen Pharmaceutical Ltd.	Janssen Pharmaceutical Ltd., Little Island, County Cork	Janssen Pharmaceutical Ltd.
GHG127	UCD, Belfield	University College Dublin, Belfield, Dublin 4	University College Dublin
GHG128	Moy Isover Ltd.	Ardfinnan, Clonmel, County Tipperary	Moy Isover Ltd.
GHG129	Fruit of the Loom International Limited Ballymacarry	Ballymacarry Lower, Bunrana, County Donegal	Fruit of the Loom International Limited
GHG130	University College Cork	Western Road, Cork City	University College Cork
GHG131	Drogheda Concentrates	Industrial Estate, Drogheda, County Louth	Atlantic Industries
GHG132	Minch Malt Limited	Greencore Malting Group, The Maltings, Athy, County Kildare	Minch Malt Limited
GHG133	Baxter Healthcare SA	Moneen Road, Castlebar, County Mayo	Baxter Healthcare SA
GHG134	Waterford Regional Hospital	Dunmore Road, Waterford	Health Service Executive - South Eastern Area

Ireland's Draft National Allocation Plan 2008 - 2012
Public Consultation – May 2006

Permit Register Number	Site Name	Site Location	Operator Name
GHG136	EMC Facilities Co. Cork	IDA Industrial Estate, Ovens, County Cork	EMC Corporation
GHG137	Ballymun Boiler House	Ballymun, Dublin 11	Dublin City Council
GHG138	University College Hospital Galway	University College Hospital, Newcastle, Galway	Health Service Executive, Western Area
GHG139	Cork University Hospital	Wilton, County Cork	Health Service Executive, Southern Area
GHG140	Nutricia Infant Nutrition Ltd. Macroom	Castleview, Macroom, County Cork	Nutricia Infant Nutrition Ltd
GHG141	Nutricia Infant Nutrition Ltd. Rocklands	Rocklands, Wexford, County Wexford	Nutricia Infant Nutrition Ltd
GHG142	Waterford Proteins / AIBP Waterford	Christendom, Ferrybank, County Waterford	AIBP
GHG143	Munster Proteins / AIBP Cahir	Kilcommon, Cahir, County Tipperary	AIBP
GHG144	ESB Rhode Generating Station	Coolcor, Rhode, County Offaly	Electricity Supply Board
GHG145	Clogrennane Lime Ltd., Toonagh Lime Works	Ballybrody, Ennis, County Clare	CRH plc
GHG146	Dublin Products Ltd	Dunlavin, County Wicklow	Dublin Products Ltd
GHG148	Slaney Proteins	Ryland, Bunclody, County Wexford	Slaney Proteins
GHG149	Beaumont Hospital	Beaumont Road, Dublin 9	Beaumont Hospital Board
GHG150	Vitra Tiles	IDA Business Park, Ballynattin, Arklow, County Wicklow	Vitra (Ireland) Ltd
GHG151	Centocor Biologics (Ireland) Limited	Barnahely, Ringaskiddy, County Cork	Centocor Biologics (Ireland) Limited
GHG152	Huntstown Power Station (Phase 2)	Huntstown Quarry, Ashbourne Road, Finglas, Dublin 15	Viridian Power Limited
GHG153	Allergan Pharmaceuticals Ireland	Castlebar Road, Westport, County Mayo	Allergan Pharmaceuticals (Ireland) Ltd.
GHG154	Shannonside Milk Products Ltd	Dublin Road, Ballaghaderreen, County Roscommon	Shannonside Milk Products Ltd