





Gníomhaireacht Bainistíochta an Chisteáin Náisiúnta National Treasury Management Agency

30 June 2011

Mr. Phil Hogan TD Minister for the Environment, Community and Local Government Custom House Dublin 1

Dear Minister

I have the honour to submit to you the Report and Accounts of the Carbon Fund for the period ended 31 December 2010.

Yours sincerely

John C. Corrigan Chief Executive

John C. Corregan





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Legal Framework

Under the terms of the Kyoto Protocol, Ireland has undertaken to limit its average annual emissions of greenhouse gases in the period 2008–2012 to a maximum of 13 per cent more than the level of emissions in 1990. Ireland's strategy to achieve this target is set out in The National Climate Change Strategy 2007-2012 published by the Department of the Environment, Community and Local Government. The strategy includes the purchase of carbon credits in respect of emissions reductions achieved elsewhere as an offset for any emissions by Ireland in excess of its Kyoto limits. It was estimated that it would be necessary for the Government to purchase carbon credits for 3.6 million tonnes of excess emissions in respect of each year of the 2008-2012 period. Following the rapid and severe deterioration in economic conditions and the anticipated lower rate of growth in the Irish economy over this period, the estimated requirement to purchase credits has been significantly reduced.

A Carbon Fund was established for the purchase of carbon credits by the Carbon Fund Act 2007 and the management of the Fund was delegated to the National Treasury Management Agency, which has also been designated the purchasing agent for the acquisition of these credits. Carbon credits are referred to in the legislation as Kyoto Units.

Section 6 of the Carbon Fund Act 2007 states: "As soon as may be, but not later than 6 months after the end of each financial year of the [National Treasury Management] Agency, the Agency shall make a report to the Minister [for the Environment, Community and Local Government] of its activities in relation to the performance during the year concerned of the functions delegated to it under this Act, and the Minister shall cause copies of the report to be laid before each House of the Oireachtas."

This report is the fourth report to the Minister for the Environment, Community and Local Government under the Act, and covers the year which ended 31 December 2010.



The Background to the Kyoto Protocol



Against the background of increasing concern as to the effect of human activity on the environment, the United Nations established the Intergovernmental Panel on Climate Change (IPCC) and the World Meteorological Organisation (WMO) in 1988. Two years later, the First Assessment Report of the IPCC confirmed the scientific basis for concerns about climate change. Subsequent reports expanded on this, while the Fourth Assessment Report in 2007 concluded that warming of the climate system is "unequivocal".

A major step in addressing the concerns about the global climate was taken at the UN conference held in Rio de Janeiro in 1992 when a Framework Convention on Climate Change was agreed. This has subsequently been ratified by 194 countries¹. Under the Convention, industrialised countries were expected to take the lead in reducing greenhouse gas emissions² to 1990 levels. However, the commitments by the industrialised countries were not legally binding. That was seen as a weakness, and it was decided accordingly that the convention should be augmented by a protocol with stricter and legally binding undertakings to reduce emissions. In 1995 negotiations on the protocol commenced and the Protocol to the Framework Convention on Climate Change was adopted in 1997 at the UN Climate Conference in Kyoto, Japan. The Kyoto Protocol, as it is commonly called, covers the period 2008–2012. Though the Kyoto Protocol was a significant achievement, and 192 countries ratified it (the USA being an important exception) negotiations have continued towards the development of a more comprehensive treaty. At the Climate Conference in Bali in 2007, terms were agreed for the negotiation of a further treaty. The work in preparation for this gained momentum throughout 2008 particularly at the Conference of

- 1 In March 2011 Andorra became the latest country to ratify the Convention
- 2 Carbon Dioxide (CO₂) is the most common greenhouse gas and a tonne of CO₂ is used as the common unit of measure. Emissions of other greenhouse gases are measured as equivalents of carbon dioxide in terms of their Global Warming Potential (GWP) over a 100-year period. By definition, CO₂ has the GWP of 1. Below is a list of the GWPs for the main gas types:

| | GWP-100 |
|----------------------------|---------------|
| Carbon dioxide (CO2) | 1 |
| Methane (CH4) | 21 |
| Nitrous Oxide (N2Os) | 310 |
| Hydrofluorocarbons (HFCs) | 150 – 11,700 |
| Perfluorcarbons (PFCs) | 6,500 – 9,200 |
| Sulphur Hexafluoride (SF6) | 23,900 |

Parties (COP) at its 14th session held in Poznan, Poland in December 2008 and through the Climate Change Talks in March and June 2009 held in Bonn, Germany. However the Copenhagen COP held in December 2009 proved to be a disappointment as agreement could not be reached on a comprehensive treaty to replace the Kyoto Protocol in 2012. Copenhagen resulted in a non-binding political declaration that failed to achieve consensus, with several countries dissenting. Strenuous efforts have continued since then and significant measures were agreed at COP 16 in Cancun to help developing nations deal with climate change but to date agreement on a general treaty to replace Kyoto has proved elusive.

The European Union had already agreed that it would set demanding targets for the post 2012 period and has committed unilaterally to reduce its own emissions by at least 20 per cent on the 1990 levels by 2020. The EU Commission's "Energy and Climate Package" came into force in June 2009. The "Effort Sharing Decision", one of four complementary pieces of legislation under the "package", sets a binding target for Ireland to reduce non-ETS greenhouse gas emissions by 20% relative to 2005 levels in the period to 2020.

It is estimated that Ireland's total non-ETS emissions will be 4.1-8.8 Mt⁴ of CO_{2e} above target in the year 2020 in the absence of forest sinks⁵. Debate continues on the use of offsets due to land use, land use change and forestry (LULUCF) and the Commission is to make an assessment during 2011 that will deal with how sources and sinks in this sector can be best integrated into the existing accounting structure. It is possible that this change would occur in the context of a step up to a reduction target of 30%.

- 3 See page 8 for an explanation of ETS and non-ETS sectors.
- 4 The projections are based on the Sustainable Authority of Ireland's (SEAI) 2010 energy forecasts which are in turn underpinned by the ESRI economic forecasts as published in "Recovery Scenarios for Ireland: An Update" (2010). The ESRI produced a number of scenarios and the SEAI used as a basis for its forecasts the "Low Growth" scenario. Should economic performance exceed the low growth scenario the distance to target forecast may have to be revised upwards.
- Forests absorb CO₂ and therefore increasing forestry reduces the amount of carbon emitted into the atmosphere, There has been considerable debate however as to the calculation of the offset provided by forestry.

Obligations under the Kyoto Protocol

The defining feature of the Kyoto Protocol, in contrast to the original Framework Convention, is that, whereas the Convention encouraged the reduction of greenhouse gas emissions, the Protocol has mandatory targets for reductions in these emissions for the world's leading economies. These, primarily the major industrialised countries and former Soviet bloc countries that are

undergoing the process of transition to a market economy, are known as Annex B countries.⁶ The targets range from reductions of 8 per cent to increases of 10 per cent on 1990 emissions levels, with the aim of reducing overall emissions by 5 per cent below the 1990 level. The commitment period for these reductions is 2008-2012.

Kyoto Greenhouse Gas Emissions Targets

| Country | Target for 2008-2012 by reference to 1990 levels |
|--|---|
| EU-15 ⁷ , Bulgaria, Czech Republic, Estonia, Latvia, Liechtenstein, Lithuania, Monaco, Romania, Slovakia, Slovenia and Switzerland | -8% |
| US ⁸ | -7% |
| Canada, Hungary, Japan and Poland | -6% |
| Croatia | -5% |
| New Zealand, Russian Federation and Ukraine | 0 |
| Norway | +1% |
| Australia | +8% |
| Iceland | +10% |

Annex B countries are those listed in Annex B of the Kyoto Protocol and are the 39 countries with quantified emission limitation or reduction commitments. However, there is some overlap in that the European Union (EU-15) is itself a signatory while the 15 countries that were Member States of the EU at that time, including Ireland, are also listed. (See Appendix 1 for greater detail).

⁷ The EU-15 decided to take advantage of a scheme under the Kyoto Protocol known as a "bubble" whereby countries have individual targets which are combined to make an overall target for that group of countries (Article 4).

⁸ The US did not ratify the Kyoto Protocol. This target is therefore void.

The European Union and the Kyoto Protocol

The EU-15 has an internal burden sharing agreement to meet its 8 per cent emissions reduction target by distributing different targets to its Member States. Ireland's target is to achieve emissions of no more than 13 per cent above the 1990 levels. The details for the EU-15 are:

Kyoto Greenhouse Gas Emissions Targets

| | T (2000 2042 I |
|-------------|--|
| Country | Target for 2008-2012 by reference to 1990 levels |
| | reference to 1930 levels |
| Austria | -13% |
| Belgium | -7.5% |
| Denmark | -21% |
| Finland | 0% |
| France | 0% |
| Germany | -21% |
| Greece | 25% |
| Ireland | 13% |
| Italy | -6.5% |
| Luxembourg | -28% |
| Netherlands | -6% |
| Portugal | 27% |
| Spain | 15% |
| Sweden | 4% |
| UK | -12.5% |
| EU-15 | -8% |
| | |

The EU-15 decided, as a major pillar of its climate policy, to collectively create a European-wide "cap and trade" scheme for major polluters – the **European Union Emissions Trading Scheme (EU ETS)**. Under the scheme, the carbon emissions of approximately 11,000 installations across the EU are controlled. Over 100 Irish installations participate in the scheme.



The European Union and the Kyoto Protocol [continued]

EU Emissions

TRADED SECTOR EU Emissions Trading Scheme 46% of EU CO2 emissions

- Combustion installations>20MW output
- Iron and steel
- Oil refineries
- Cement, lime, glass, ceramics
- Pulp/paper

NON-TRADED SECTOR 54% of EU CO2 emissions

- Residential
- Transport
- Agriculture, etc

This scheme is the largest multi-national emissions trading scheme in the world. It sets a cap on the level of emissions for individual installations. Installations are issued allowances – **European Union Allowances** (**EUAs**) - which give them the right to emit up to that level. To the extent that installations emit more than their allowances they must buy credits. Those who emit less than their allowances may sell their surplus.

For the period 2008–2012, the allocations of allowances to installations are made on a country-by-country basis within each country's overall National Allocation Plan. In the period after 2012 allocations of allowances will be done by sector across the EU ETS and there will be no national allocation plans. Airlines will be included in the EU ETS from 1 January 2012.

With the slowdown in the European economy carbon emissions have declined among the members of the EU ETS. During 2009 it became clear the EU ETS would have a surplus of EUAs in the period to 2012⁹. This was reflected in the Point Carbon survey¹⁰ published on the 3rd March 2010 where 28% of recipients said their company would have an EUA surplus in the 2008-2012 period. This contrasts with 15% of respondents in 2008 who felt they would have a surplus in the period. The power/ heat sector still has a demand for EUAs while the cement/ lime/glass and paper/pulp sectors have seen a significant decline in their carbon emissions.

In Ireland also the traded sector has seen a decline in emissions. Data submitted by the Environmental Protection Agency (EPA)¹¹ to the EU Commission show verified emissions of greenhouse gasses for the years 2008, 2009 and 2010 for companies in Ireland covered by the EU ETS are 54.96 Mt $\rm CO_{2e}$, compared to the total ETS Allocation of 66.84 Mt $\rm CO_{2e}$. This lower than anticipated level of emissions reflects the severity of the economic slowdown. It should be noted that not all of the 66.84 Mt $\rm CO_{2e}$ allocated to the ETS was allocated to firms. A certain amount was always to be held back to cover "New Entrants" to the EU ETS. If the "New Entrants" allocation is not fully utilised in the period 2008-2012 the units will revert to the State.

⁹ In the first test phase of the EU ETS to 2008 a surplus of EUAs led to a collapse in their price but this is unlikely to happen this time as any surplus can be banked for use in the post 2012 period.

¹⁰ See: http://www.pointcarbon.com/research/carbonmarketresearch/analyst/1.1414367

¹¹ See: http://www.epa.ie/downloads/pubs/air/airemissions/name,30810,en.html

[&]quot;New Entrants" are firms who set up following the commencement of the scheme and are subject to the EU ETS. So they would not be disadvantaged versus existing firms, a certain amount of the allocation was held back to be allocated to those firms.

Ireland's Strategy for Compliance with the Kyoto Protocol

Ireland's strategy for achieving its Kyoto target for reducing greenhouse gas emissions was set out in the *National Climate Change Strategy 2007-2012*, published in April 2007.¹³

Ireland's target under the Kyoto Protocol is to limit average annual emissions in the period 2008–2012 to 13 per cent above the baseline estimate of 55.60 million tonnes of CO₂ equivalent.¹⁴ Accordingly Ireland's total emissions limit for the period 2008–2012 is 314.180 million tonnes, or an average of 62.836 million tonnes per year. It was estimated that measures already taken would reduce emissions by some 8 million tonnes a year. However, in the absence of additional policies and measures, it was projected that Ireland would exceed its Kyoto obligations by an average of 8.4 million tonnes of emissions each year.

The following table summarises the measures for achieving Ireland's Kyoto target outlined in the *National Climate* Change Strategy 2007-2012:15

Annual Average, 2008-2012

8.4

| | | (Million Tonnes of CO ₂ equ | uivalent) |
|-----|-------|--|-----------|
| Ку | oto 1 | Target Target | 62.8 |
| | - | d Greenhouse Gas Emissions after of measures already taken. | 71.2 |
| Dis | tance | e to Kyoto Target | 8.4 |
| Ad | ditio | nal measures to achieve Kyoto T | arget |
| (1) | Emi | ssions abatement by: | |
| | (a) | EU Emissions Trading Scheme participants | 0.9 |
| | (b) | Non-traded sector of economy (including additional measures) | 1.9 |
| (2) | | chase of allowances and credits other reductions) by: | |
| | (a) | EU Emissions Trading Scheme participants | 2.0 |
| | (b) | Government | 3.6 |

The National Treasury Management Agency was designated the purchasing agent for the State in the acquisition of the required credits of 3.6 million tonnes of greenhouse gas emissions on average in respect of each year of the 2008–2012 period, purchased under the Flexible Mechanisms of the Kyoto Protocol¹⁶. The total credits required in the period were estimated at 18 million tonnes.

With the change in Ireland's economic circumstance the Environmental Protection Agency was asked in 2009 to apply a sensitivity analysis which might better reflect the changed economic situation. This analysis, based on the Economic and Social Research Institute's (ESRI) Economic Shock scenario, was published in March 2009¹⁷. In April 2011 the EPA published a further update in *Ireland's greenhouse gas emissions projections 2010-2020¹⁸*. It concluded that, under the most ambitious reduction scenario, the Government's requirement to purchase carbon credits would reduce to 1.3-1.6 million tonnes of CO₂ equivalents per annum for each of the five years 2008- 2012 as compared to the 3.6 million tonnes per annum anticipated in the National Climate Change Strategy.

In light of the revised estimates of the Government's need to purchase carbon credits, it was decided in February 2009 to cease purchases of carbon credits for the time being.

- 13 For details, see the full report published by the Department of the Environment, Community and Local Government available on the web at http://www.environ.ie/en/Environment/Atmosphere/ ClimateChange/NationalClimateChangeStrategy
- 14 The baseline estimate for Ireland is calculated as the sum of carbon dioxide, methane and nitrous oxide emissions in 1990 and the contribution from fluorinated gases in 1995, [Source: Environmental Protection Agency Press Release, 15 January 2008].
- 15 Source: Ireland's National Allocation Plan for Emissions Trading 2008-2012, Environmental Protection Agency, 4 March 2008.
- 16 See Annex 3 of the National Climate Change Strategy 2007-2012 in Appendix 2
- 17 See: http://www.epa.ie/news/pr/2010/april/name,28091,en.html
- 18 See: http://www.epa.ie/downloads/pubs/air/airemissions/ name,30810,en.html

Ireland's Greenhouse Gas Emissions in 2009

Total greenhouse gas emissions (GHG) in 2009 were 62.39 Mt CO_{2e} , which is 8.0% (5.42 Mt CO_{2e}) lower than the level of emissions in 2008¹⁹. This follows a decline of 0.3% in 2008.

The sources of greenhouse gas emissions in Ireland in 2009 were: Agriculture 29.2%

| 3 | |
|---------------------------|-------|
| Energy | 21.0% |
| Transport | 21.0% |
| Industrial and Commercial | 14.8% |
| Residential | 12.0% |
| Waste | 2.0% |

The reduction in greenhouse gas emissions compared to 2008 primarily reflects the downturn in economic activity in 2009. The effects were mainly felt in the Industry and Commercial sector where emissions fell 20.2% compared to 2008 and in the Energy sector where emissions fell 10.8%.

Ireland's total national emissions for 2009 are just below Ireland's Kyoto Protocol limit of 62.84 Mt CO_{2e} . However it must be remembered that any surplus among the EU ETS members remains with those members. The Carbon Fund relates to the non-ETS sectors and so the relevant target is the overall target less the allocation to EU ETS²⁰ (62.84 – 22.28 = 40.46 Mt CO_{2e}). Ireland's non -ETS emissions in 2009 were 45.18 Mt CO_{2e} , leaving a gap to target²¹.



- 19 The Final estimates for 2009 were published by the EPA on the 11th April 2011.

 See: http://www.epa.ie/downloads/pubs/air/airemissions/lreland's%20GHG%20Inventory%201990-2009.pdf
- 20 As mentioned above there may however be some units returned to the State from the "New Entrants" allocation in the EU ETS.
- 21 See Page 3 of Ireland's Greenhouse Gas Emissions in 2009 (EPA) at http://www.epa.ie/downloads/pubs/air/airemissions/Ireland's%20GHG%20Inventory%201990-2009.pdf

Flexible Mechanisms

The same

The Flexible Mechanisms are an integral part of the Kyoto Protocol and are based on the fact that emissions reductions have the same environmental benefit irrespective of where they are achieved. Therefore, countries can achieve their targets by contributing to or paying for the reduction in carbon emissions in other countries. The mechanisms help identify the lowest cost opportunities for reducing emissions and so help achieve the overall target in the most economically efficient fashion. They also promote the transfer of the latest technology to developing countries.

The Flexible Mechanisms are:

- (1) the Clean Development Mechanism (CDM) through which credits earned by sponsoring emissions reducing projects in developing countries may be used to meet the sponsors' Kyoto obligations in their home countries. These credits are Certified Emission Reductions (CERs);
- (2) the **Joint Implementation (JI) Mechanism**, under which an Annex B country implements a project in another Annex B country.²² The credits thereby earned are **Emissions Reductions Units (ERUs)**; and
- (3) International Emissions Trading whereby countries may acquire carbon credits from other countries whose emissions are below their target under the Protocol. The tradeable unit is an Assigned Amount Unit (AAU). AAUs are the units allocated to each Government under the Kyoto Protocol representing the total allowed level of emissions for a country. European Union Allowances (EUAs) are emissions allowances allocated to the installations who participate in the EU Emissions Trading Scheme and constitute part of the overall allocation of AAUs for each of the EU-15 countries.

CERs, ERUs and AAUs are each equivalent to one tonne of carbon dioxide emissions and may be surrendered in fulfilment of obligations under the Kyoto Protocol. These all count as Kyoto Units for the purpose of the Carbon Fund Act 2007.

There were concerns that the Flexible Mechanisms would effectively allow industrial countries to "buy the right to pollute". This concern was addressed in the **Marrakesh Accords** negotiated in 2001 which detailed rules for implementing the Kyoto Protocol. Under these rules, the Flexible Mechanisms must be used to supplement each country's own efforts to reduce emissions. Countries are thus only allowed use the mechanisms when their national plans for achieving their Kyoto target and the implementation of these plans are judged satisfactory by the **Compliance Committee of the Kyoto Protocol**.²³

Concerns were also raised about how one could verify that the various projects were actually generating emissions reductions. A number of UN bodies have been established to ensure that any units created under the Flexible Mechanisms are reflective of true emissions reductions and generate "additionality", i.e. they would not have occurred without the existence of the projects. For example, the Clean Development Mechanism (CDM) is managed by the CDM Executive Board. Each project, and the methodology used to calculate emissions reductions resulting from the project, has to be approved by the CDM Executive Board. Projects are monitored as they develop and the final emissions reductions are also certified by the **CDM Executive Board**. Only when the CDM Executive Board issues certificates of units of emissions reductions actually achieved are these units capable of being used for the purposes of meeting requirements under the Kyoto Protocol. There is a similar body, the Joint Implementation Supervisory Committee (JISC), which supervises units generated under the JI mechanism.

²² See Footnote 6 and Appendix 1 for details on Annex B countries.

²³ See http://unfccc.int/kyoto_protocol/compliance/items/2875.php for further details and examples of recent rulings.

The Market in Flexible Mechanism Units

Of the Flexible Mechanisms, the most developed is the CDM market where there are 3,176 registered projects as of June 2011²⁴ (compared to 2,246 registered projects as of mid May 2010). As a result of the number of CDM projects, there is greater clarity as to the methodologies and procedures to be followed for CERs to be issued. The CDM Executive Board has refused to issue CERs where it is not satisfied that the monitoring plan is in accordance with the approved methodology.²⁵

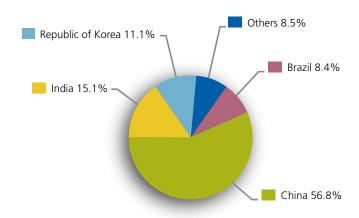
The issuance of CERs has gathered pace in recent years. By mid 2009 288m CERs had been issued while by mid 2010 this had grown to 420 million CERs. As of June 2011, the 3,176 approved CDM projects have generated more than 642.5 million CERs, and are forecast to generate a further 1.36 billion CERs in the period to 2012.²⁶ In comparison, it is estimated JI projects will issue 196m ERUs in the period to 2012. Total ERU issuance to date is 43m units²⁷.

As the charts opposite show, while there is a fairly wide dispersal of CDM projects among host countries, the larger projects are mainly in China. China has been, and is expected to be, the greatest source of CERs.²⁸

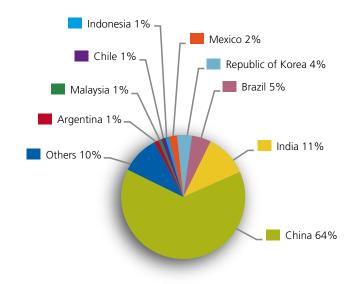
It is also interesting to note that the dominant sector for registered projects is unsurprisingly the Energy sector while some recognised sectors such as Construction and Energy Distribution have no projects. This reflects the difficulty in verifying improvements in emissions in some sectors. The full breakdown of projects by sector can be seen in the chart on the next page.

CERs can be acquired by investing directly in projects, or in funds that invest in projects, or by purchasing CERs which have already been issued and certified by the CDM Executive Board. Investment in a project at an early stage of its development involves a risk that the project may not be approved or that the number of certified units generated from it may be less than anticipated. To reduce these risks, Ireland has invested in three funds which use the expertise of the World Bank and the European Bank for Reconstruction and Development (EBRD) to invest in a number of projects.

CERs issued by host party²⁹



Expected issuance of CERs by host party



²⁴ Source: http://cdm.unfccc.int/

²⁵ See the UN website http://cdm.unfccc.int/lssuance/index.html for more details

²⁶ Source: http://cdm.unfccc.int/Statistics/index.html

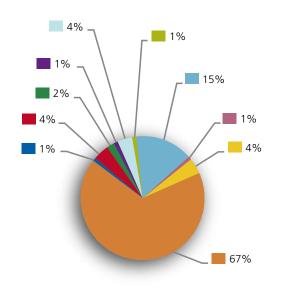
²⁷ Source: Point Carbon CDM-JI overview 2011-06-20

²⁸ The interactive map on the UN CDM website gives detail on the location and nature of CDM projects. See http://cdm.unfccc.int/Projects/MapApp/index.html

²⁹ Charts Source: UNFCCC



Distribution of registered project activities by scope



- Energy industries (renewable/non-renewable sources) (66.47%)
- Energy demand (1.07%)
- Manufacturing industries (4.47%)
- Chemical industries (1.87%)
- Transport (0.16%)
- Mining/mineral production (1.26%)
- Metal production (0.24%)
- Fugitive emissions from fuels (solid, oil and gas) (4.37%)
- Fugitive emissions from production and consumption of halocarbons and sulphur hexaflouride (0.7%)
- Waste handling and disposal (14.73%)
- Afforestation and reforestation (0.64%)
- Agriculture (3.75%)

Funding for the Purchase of Carbon Credits

Funding for the purchase of carbon credits is provided from the Central Fund to the Carbon Fund. Provision is made in the annual Vote of the Department of the Environment, Community and Local Government to repay the Central Fund.

In the National Development Plan 2007–2013 the Government designated €270 million for the purchase of carbon credits in the Kyoto commitment period 2008–2012. This is in addition to an initial investment of €20 million in 2006.



Investments by Ireland

The Government has undertaken investments in three funds which invest in projects to achieve carbon emissions reductions. The first investment was of €20 million made in December 2006³⁰ in the **Multilateral Carbon Credit Fund (MCCF)**³¹ of the European Bank for Reconstruction and Development (EBRD). Two further commitments of €10 million and \$12.88 million (€9.3 million approximately) were made respectively to the **World Bank Carbon Fund for Europe** and the **World Bank BioCarbon Fund in January 2007**.

The Multilateral Carbon Credit Fund was established by the EBRD in partnership with the European Investment Bank (EIB) in May 2006. The aim of the fund is "to promote much-needed energy savings projects in the EBRD countries of operation while at the same time helping those countries and corporate companies purchasing carbon credits to meet their emissions reductions targets".³² Projects are located in the 27 EBRD countries in Central and Eastern Europe and the Commonwealth of Independent States.³³ The full €20 million committed has been paid over to the EBRD. The fund uses both the JI and CDM flexible mechanisms. In 2010, 4,548 ERUs and 1,630,435 AAUs units were delivered from the EBRD Multilateral Carbon Credit Fund.

The Carbon Fund for Europe is jointly managed by the World Bank and the EIB, and was launched in March 2007. This fund, which is directed towards securing investments from EU Member States, acquires greenhouse gas reduction credits on behalf of the participants using

the World Bank's expertise and experience and the EIB's large project pipeline in developing countries. The five participants in the fund are Ireland, Luxemburg, Portugal, the Flemish Region of Belgium and Statkraft Carbon Invest AS (Norway). Of the €10 million committed to this Fund, €4.1 million has been paid in the period since its launch to 31 December 2010. 200,000 AAUs were also delivered from investments under the World Bank Carbon Fund for Europe in 2010.

The BioCarbon Fund is a World Bank fund which aims to achieve emissions reductions while promoting biodiversity, conservation and poverty alleviation. The Fund aims to:

- a) provide resources for projects which are intended to
 - (i) generate emission reductions; and
 - demonstrate how land use and forestry activities can create additional benefits which can be measured, monitored and certified, and contribute to the sustainable development of the host countries;
- endeavour to effect an equitable sharing between the participants and the host countries of any benefits, including any emissions reductions, arising from the projects; and
- c) disseminate broadly the knowledge gained in the development of the Fund and the implementation of projects.

This was before the establishment of the Irish Carbon Fund by the Carbon Fund Act 2007. The investment is administered by the Department of the Environment Community and Local Government.

³¹ The European Investment Bank is partnering the EBRD in managing the MCCF; Ireland's agreement is only with the EBRD.

Quotation from EBRD President Jean Lemierre at the launch of the Fund, 22 May 2006.

³³ The Commonwealth of Independent States is the international organisation consisting of eleven former Soviet republics: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Ukraine and Uzbekistan.

Ireland is committed to investing US \$12.88 million (€9.5m) in the second tranche of the BioCarbon Fund which commenced operations in March 2007 and has a total capital of US \$28.6 million. Just over €3.3 million of this commitment was paid since inception of the fund up to 31 December 2010. Projects in the current portfolio are in Brazil, Chile, China, India, Moldova, Congo, Trinidad and Tobago, and Uganda³⁴.

Based on risk adjusted projections from the Fund Managers, the Department of the Environment, Community and Local Government expects that the World Bank and the European Bank for Reconstruction and Development's funds will yield some 3 million Kyoto Units in the 2008-2012 period.

In 2008 the NTMA initiated its purchase of carbon units. It was decided to purchase CERs as the market in these units was the most developed and transparent. Purchases made in 2008 were detailed in the Carbon Fund Report 2008. In early 2009 further purchases of 0.9 million carbon units were made. In the light of the slowdown in the Irish economy and the subsequent revised estimate of Ireland's need to purchase carbon credits it was decided to cease purchase of credits for the time being. As a consequence there have been no purchases of carbon credits since early February 2009. In all, there have been 21 trades in which Ireland contracted to purchase 5.255 million CERs at an average price of €14.03 (excluding VAT).



Appendix 1

Annex B Countries of the Kyoto Protocol

Party Commitment to quantified emissions limitation or emissions reduction, expressed as percentage of emissions in base year 1990 Australia 108 Austria+ 92 Belgium+ 92 Bulgaria* 92 Canada 94 Croatia* 95 Czech Republic* 92 Denmark+ 92 Estonia* 92 European Union (EU-15) 92 Finland+ 92 France+ 92 Germany+ 92 Greece+ 92 94 Hungary* Iceland 110 Ireland+ 92 Italy+ 92 Japan 94 Latvia* 92 Liechtenstein 92 Lithuania* 92 Luxembourg+ 92 Monaco 92 Netherlands+ 92 New Zealand 100 101 Norway Poland* 94 Portugal+ 92 Romania* 92 Russian Federation* 100 Slovakia* 92 Slovenia* 92 Spain+ 92 Sweden+ 92 Switzerland 92 Ukraine* 100 United Kingdom⁺ 92 United States of America (not applicable) 93

^{*} Countries, mainly in the former Soviet bloc, that are undergoing the process of transition to a market economy.

⁺ See page 5 for details of the burden sharing agreement by EU-15 countries.

Appendix 2

Annex 3 of *National Climate Change Strategy 2007-2012*: Published by the Department of the Environment, Heritage and Local Government (April 2007)

Annex 3 – National policy for State purchase of Kyoto Units

NATIONAL POLICY FRAMEWORK FOR THE PURCHASE OF KYOTO UNITS BY THE STATE FOR THE PURPOSE OF COMPLIANCE WITH THE KYOTO PROTOCOL IN THE COMMITMENT PERIOD 2008-2012

Introduction

This document sets out the institutional arrangements and policy context within which Ireland will purchase Kyoto Units³⁵ sufficient to enable it to meet its greenhouse gas emissions limitation target for the purposes of the Kyoto Protocol in the commitment period 2008-2012.

Background

For the purposes of the Kyoto Protocol, Ireland is committed to limiting average annual greenhouse gas emissions in the period 2008-2012 to 13% above 1990 levels

Parties to the Kyoto Protocol may achieve their individual targets through domestic actions and use of Flexible Mechanisms provided for in the Protocol. The Protocol requires that use of the Flexible Mechanisms be supplemental to domestic actions.

The National Climate Change Strategy 2007-2012 provides the national policy framework for addressing greenhouse gas emission reductions and ensuring that Ireland meets its target for the purpose of the Kyoto Protocol.

The Government has decided that it will use the Kyoto Protocol Flexible Mechanisms to purchase up to 3.607 million Kyoto Units in respect of each year of the 2008-2012 period. This requirement will be revised as necessary in light of future projections and the impact of any additional measures to reduce greenhouse gas emissions.

Kyoto Protocol Flexible Mechanisms

A key component of the Kyoto Protocol was the introduction of three Flexible Mechanisms to reduce the overall costs of achieving emission reductions for those Parties with emission reduction or limitation targets. These mechanisms - Joint Implementation, the Clean Development Mechanism and International Emissions Trading – are described in more detail below. The mechanisms enable Parties to purchase Kyoto Units from other Parties or to invest in cost-effective opportunities to reduce emissions or increase sequestration through projects in other countries. While the cost of reducing emissions varies considerably between projects and between countries, the effect for the atmosphere of limiting emissions is the same irrespective of where the action occurs.

Joint Implementation (JI): provided for under Article 6 of the Protocol, enables Parties with reduction commitments or private investors to implement projects that reduce emissions in other Parties with reduction commitments, in return for credits. Credits generated using the JI mechanism can be used by the investing Party or private entity (particularly within the EU Emissions Trading Scheme) for compliance purposes. The tradable unit under the JI mechanism is an Emissions Reductions Unit (ERU).

Clean Development Mechanism (CDM): provided for under Article 12 of the Protocol, enables Parties with targets to participate in projects that reduce emissions or contribute to sequestration in those Parties that do not have targets under the Protocol. The mechanism is aimed primarily at developing countries and is intended

³⁵ A credit or allowance, equivalent to one metric tonne of carbon dioxide, issued pursuant to the Kyoto Protocol and the decisions adopted pursuant to the United Nations Framework Convention on Climate Change and to the Protocol. A credit is equivalent to one tonne of carbon dioxide that has already been removed. An allowance refers to a right to emit the equivalent of one tonne of carbon dioxide at some point in the future.

Appendix 2 [continued]

to assist them in achieving sustainable development through, for example, access to cleaner or more energy efficient technologies. Credits generated using the CDM mechanism can be used by the investing Party or private entity for compliance purposes. The tradable unit under the CDM mechanism is a Certified Emissions Reduction (CER).

International Emissions Trading: provided for under Article 17 of the Kyoto Protocol,³⁶ enables Parties that have a greenhouse gas emissions limitation or reduction target under the Protocol to acquire Kyoto Units from those Parties that have reduced their emissions beyond their target under the Protocol. The tradable unit under emissions trading is an Assigned Amount Unit (AAU).

National Focal Point for JI and National Authority for CDM

A requirement of Parties to the Kyoto Protocol is the designation of a Focal Point and a National Authority for the purpose of the JI and CDM mechanisms respectively. Under the Kyoto Protocol (Flexible Mechanisms)
Regulations 2006 (S.I. 244 of 2006), the Minister for the Environment, Heritage and Local Government has designated the Environmental Protection Agency as both the Focal Point and National Authority in Ireland. The role of the Agency will be to approve participation by private or public entities in JI or CDM project activities. The Agency will publish guidelines setting out its approval procedures for participation by Irish entities in JI and CDM projects. Decisions made by the Agency on individual proposals to participate in JI or CDM projects shall be final. Project approval must also be sought in the intended host country.

Establishment of registry under the Kyoto Protocol

In accordance with decisions adopted by Parties to the Kyoto Protocol, the 2006 Regulations (S.I. 244 of 2006) provide for the establishment of a national registry and the designation of the Environmental Protection Agency as the national registry administrator. The function of the national registry is to ensure accurate accounting of the issuance, holding, transfer, acquisition, cancellation and retirement of Kyoto Units.

National Purchasing Agent

The National Treasury Management Agency is the designated purchasing agent for the State and will administer and manage purchases of Kyoto Units on behalf of the Government. A dedicated Carbon Fund has been established for this purpose.

The role of the Agency as purchasing agent is established on a statutory footing under the Carbon Fund Act 2007. The Act provides for the purchasing agent to perform all functions associated with the management of the Carbon Fund, including appropriate accounting for expenditure having regard to public financial procedures, subject to guidelines and/or direction from the Minister for the Environment, Heritage and Local Government.

Funding of the purchase of Kyoto Units

Funding for the purchase of Kyoto Units will be provided from the Central Fund to the Carbon Fund, also established under the 2007 Act. In the course of the annual estimates process, provision will be made in the Vote of the Department of the Environment, Heritage and Local Government to repay the Central Fund.

The Government has designated €270 million for investment in the Flexible Mechanisms under the National Development Plan 2007-2013. This is in addition to an initial investment of €20m in 2006.

³⁶ Emissions trading under Article 17 of the Kyoto Protocol are distinct from the EU Emissions Trading Scheme. Operators in the EU Scheme may, however, use credits from the JI or CDM mechanisms for compliance with their obligations up to a percentage of their allocation, which is to be specified in the National Allocation Plan for the Member State in question.



Framework for the purchase of Kyoto Units

The National Treasury Management Agency shall purchase Kyoto Units on behalf of the State. All purchases shall be made in accordance with the following objectives:

- that they contribute to the ultimate objective of the United Nations Framework Convention on Climate Change, i.e. stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system;
- that risk is minimised, particularly in relation to the timely delivery of credits; and
- that they represent good value for money.

The National Treasury Management Agency may use the following mechanisms to purchase Kyoto Units:

- direct purchase of Kyoto Units from other Kyoto Protocol Annex B Parties;
- direct investment in joint implementation and clean development mechanism project activities;
- investment in managed funds; and
- direct market purchases of Kyoto Units;

or a combination of some or all of these, subject to ensuring that, in accordance with decisions adopted by the Parties to the Kyoto Protocol:

 any surplus Kyoto Units held by the State at the end of the 2008-2012 commitment period can be banked and used in a subsequent commitment period of the Kyoto Protocol or any successor treaty; and Ireland does not use emissions reduction units or certified emission reductions generated from nuclear facilities, for the purpose of meeting its Kyoto Protocol commitments.

The Minister for the Environment, Heritage and Local Government may, having regard to the objectives set out above, enter into bilateral agreements for the purpose of acquiring Kyoto Units pursuant to Article 17 of the Protocol. The Minister may direct the National Treasury Management Agency to purchase Kyoto Units that may become available on foot of any such agreements.

Subject to further direction from the Minister for the Environment, Heritage and Local Government, the Agency may sell Kyoto Units if this is necessary to ensure compliance with decisions adopted pursuant to the Kyoto Protocol for the accounting of assigned amounts under Article 7, paragraph 4 of the Protocol.

All Kyoto Units purchased by the National Treasury Management Agency shall be registered in the national registry managed by the Environmental Protection Agency. Kyoto Units entered into the national registry will be accounted for by the Environmental Protection Agency to ensure compliance with Ireland's commitments for the purposes of the Kyoto Protocol.

This policy framework constitutes the initial direction from the Minister for the Environment, Heritage and Local Government to the National Treasury Management Agency.

April 2007

Glossary of Terms

| The second second | |
|---|--|
| AAUs | see Assigned Amount Units. |
| Additionality | An important concept under the Kyoto Protocol. Certified units will only be issued from JI and CDM projects where emission reductions are "additional to those that otherwise would occur". |
| Annex B Countries | Countries listed in Annex B of the Kyoto Protocol. Annex B countries have quantified emission limitation or reduction commitments (see Appendix 1). |
| Assigned Amount Units (AAUs) | These are the units allocated to each Annex B country representing the total allowed level of emissions for a country under the Kyoto Protocol. |
| Burden Sharing Agreement | The agreement by the EU-15 to collectively meet their obligations under the Kyoto Protocol using the "bubble" allowed in Article 4 of the Protocol. Under the terms of the burden sharing agreement, each of the Member States has a specific target for carbon emissions. |
| Bubble | Collective scheme for countries allowed under the Kyoto Protocol. See Burden Sharing Agreement. |
| CDM | See Clean Development Mechanism. |
| CDM Executive Board (CDM EB) | The CDM EB registers validated project activities as CDM projects, issues Certified Emission Reductions to relevant project participants and manages a series of technical panels and working group meetings. It reports to the Conference of Parties to the Kyoto Protocol. |
| CERs | See Certified Emission Reductions. |
| Certified Emission Reductions (CERs) | Carbon credits produced through the Clean Development Mechanism. |
| Clean Development Mechanism (CDM) | One of the Flexible Mechanisms allowed under the Kyoto Protocol. The Clean Development Mechanism generates carbon credits by sponsoring greenhouse gas reducing projects in developing countries. |
| CO ₂ equivalents | Where gases other than ${\rm CO_2}$ are referred to, for comparison purposes these are converted to their equivalence in Global Warming Potential (GWP) to ${\rm CO_2}$. |
| Conference of the Parties (COP) | The COP is the supreme body of the United Nations Framework Convention on Climate Change (UNFCCC) and meets annually. The Marrakesh Accords were the result of COP7. The most recent conference, i.e.COP16 took place in Cancun, Mexico, December 2010. |
| COP | See Conference of the Parties. |
| Emission Reduction Units (ERUs) | Carbon credits produced though the Joint Implementation Mechanism. |
| Emissions Units | All emissions units under the Kyoto Protocol are equivalent to one tonne of Carbon Dioxide emitted. |
| Emissions trading | In the context of the EU Emissions Trading Scheme or the Flexible Mechanisms of the Kyoto Protocol, this refers to the buying and selling of allowances to emit a defined quantity of greenhouse gases or credits that represent a quantity of greenhouse gas already reduced. |
| ERU | See Emission Reduction Units. |
| | |

| EU Emissions Trading Scheme | "Cap and Trade" scheme within the EU-15 for the major polluters. | | |
|--|--|--|--|
| EU ETS | See EU Emissions Trading Scheme. | | |
| EUAs | See European Union Allowances. | | |
| European Union Allowances (EUAs) | Carbon credits allocated to companies in the EU ETS. These credits come from a country's AAUs. | | |
| Flexible Mechanisms | The Flexible Mechanisms provided under the Kyoto Protocol, i.e. International Emissions Trading, Joint Implementation and the Clean Development Mechanism. | | |
| Global Warming Potential (GWP) | To compare the different greenhouse gases, emissions are calculated over a normalised time horizon in order to give a measure of their relative heating effect in the atmosphere. A 100 year time horizon is generally used. CO ₂ is the basic unit. See Footnote 1, page 4. | | |
| Intergovernmental Panel on Climate Change (IPCC) | The IPCC is a scientific intergovernmental body set up by the World Meteorological Organization (WMO) and by the United Nations Environment Programme (UNEP). It is the authoritative scientific source on human interference with the global climate system. Website: www.ipcc.ch | | |
| International Transaction Log (ITL) | The ITL is the centralised database of all tradable credits under the Kyoto Protocol and verifies all international transactions and their compliance with Kyoto rules and policies. | | |
| IPCC | See Intergovernmental Panel on Climate Change. | | |
| II | See Joint Implementation. | | |
| JISC | See Joint Implementation Supervisory Committee. | | |
| Joint Implementation (JI) | A flexible mechanism for the transfer of emissions permits from one Annex B country to another. JI generates credits on the basis of emission reduction projects leading to quantifiable emission reductions. | | |
| Joint Implementation Supervisory Committee (JISC) | This body supervises the verification of ERUs generated by JI projects. | | |
| Kyoto Protocol | The Protocol to the Framework Convention on Climate Change which was agreed in Kyoto, Japan in December 1997 and came into force on 16 February 2005. It specifies emission obligations for Annex B countries and defines the three Kyoto Flexible Mechanisms: JI, CDM, and International Emissions Trading. | | |
| Kyoto Units | A unit of emissions equivalent to one tonne of CO ₂ emitted. | | |
| Marrakesh Accords | These Accords include the detailed modalities and procedures of the international climate change policy regime and cover significant principles of technology transfer, accounting, Flexible Mechanisms implementation etc. | | |
| UN Framework Convention on Climate Change (UNFCCC) | The UNFCCC was established in 1992 at the Rio de Janeiro Earth Summit. It is the overall framework guiding the international climate negotiations. Its main objective is the "stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic (man made) interference with the climate system". | | |
| | | | |



Financial Statements of the Carbon Fund

for the year ended 31 December 2010

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Statement of Agency's Responsibilities

The National Treasury Management Agency (NTMA) is required by the Carbon Fund Act, 2007 to prepare financial statements in respect of the operations of the Carbon Fund for each financial year.

In preparing those statements, the Agency:

- selects suitable accounting policies and then applies them consistently;
- makes judgements and estimates that are reasonable and prudent;
- prepares the financial statements on the going concern basis unless it is inappropriate to do so;
- discloses and explains any material departure from applicable accounting standards.

The Agency is responsible for keeping in such form as may be approved by the Minister for the Environment, Community and Local Government with the consent of the Minister for Finance, all proper and usual accounts in relation to the performance by it of the functions delegated or granted to it under the Carbon Fund Act, 2007. The Agency shall whenever requested to do so by the Minister for the Environment, Community and Local Government, give to him such accounts and such information in relation to such accounts as he may specify.

The Agency is also responsible for safeguarding assets under its control and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

John C. Corrigan Chief Executive

John b. Carigon

30 June 2011

Comptroller and Auditor General Report for presentation to the Houses of the Oireachtas



Carbon Fund

I have audited the financial statements of the Carbon Fund for the year ended 31 December 2010 under the Carbon Fund Act 2007. The financial statements, which have been prepared under the accounting policies set out therein, comprise the Accounting Policies, the Fund Account, the Net Assets Statement and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and Generally Accepted Accounting Practice in Ireland.

Responsibilities of National Treasury Management Agency (the Agency)

The Agency is responsible for the preparation of the financial statements, for ensuring that they give a true and fair view of the state of the Fund's affairs and of its income and expenditure, and for ensuring the regularity of transactions.

Responsibilities of the Comptroller and Auditor General

My responsibility is to audit the financial statements and report on them in accordance with applicable law.

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation.

My audit is carried out in accordance with the International Standards on Auditing (UK and Ireland) and in compliance with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of Audit of the Financial Statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements, sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of

- whether the accounting policies are appropriate to the Fund's circumstances, and have been consistently applied and adequately disclosed
- the reasonableness of significant accounting estimates made in the preparation of the financial statements,
 and
- the overall presentation of the financial statements.

I also seek to obtain evidence about the regularity of financial transactions in the course of audit.

In addition, I read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my report.

Opinion on the Financial Statements

In my opinion, the financial statements, which have been properly prepared in accordance with Generally Accepted Accounting Practice in Ireland, give a true and fair view of the state of the Fund's affairs at 31 December 2010 and of its income and expenditure for the year then ended.

In my opinion, proper books of account have been kept by the Agency. The financial statements are in agreement with the books of account.

Matters on Which I am Required to Report by Exception

I report by exception if

- I have not received all the information and explanations
 I required for my audit, or
- my audit noted any material instance where moneys have not been applied for the purposes intended or where the transactions did not conform to the authorities governing them, or
- the information given in the Fund's Annual Report for the year for which the financial statements are prepared is not consistent with the financial statements, or
- I find there are other material matters relating to the manner in which public business has been conducted.

I have nothing to report in regard to those matters upon which reporting is by exception.



John Buckley Comptroller and Auditor General 30 June 2011

Accounting Policies

The Carbon Fund was established under the Carbon Fund Act 2007 for the acquisition of Kyoto Units¹ and any other such instruments or assets on behalf of the State to meet international climate change obligations under the 1992 United Nations Framework Convention on Climate Change and the 1997 Kyoto Protocol to that Convention. The National Treasury Management Agency (NTMA) has been designated as the Purchasing Agent on behalf of the State and administers and manages purchases of Kyoto Units.

The NTMA may use the following mechanisms to purchase Kyoto Units:

- direct purchase of Kyoto Units from other Kyoto Protocol parties
- direct investment in Joint Implementation and Clean Development Mechanism projects
- investment in managed funds
- direct market purchases of Kyoto Units

The significant accounting policies adopted in respect of the Carbon Fund are as follows:

Basis of Preparation

The financial statements have been prepared in accordance with the Carbon Fund Act 2007 in a format approved by the Minister for the Environment, Community and Local Government.

The financial statements summarise the transactions and net assets of the Carbon Fund.

Reporting Period

The reporting period is from 1 January to 31 December 2010. The comparative reporting period for 2009 is from 1 January 2009 to 31 December 2009.

Reporting Currency

The reporting currency is the euro, which is denoted by the symbol \in .

Carbon Fund Assets

Carbon Fund assets represent investments in the following:

Direct Holdings

Kyoto Units purchased are recorded on delivery at cost of acquisition. The cost of acquisition includes Value Added Tax paid and payable in respect of the purchase of the Kyoto Units.

Indirect Kyoto Units

Investments in indirect units are made in managed funds. Investments in these funds are recorded at investment cost. Such investments relate to carbon reducing projects that may or may not produce Kyoto Units. The total number of units, if any, will not be known until a future date when the projects complete.

The Minister for the Environment, Community and Local Government has invested €20 million in a Multilateral Carbon Credit Fund established by the European Bank for Reconstruction and Development. That investment does not form part of the fund but the units produced by projects undertaken are included herein as explained in Note 3(d).

A Kyoto Unit is defined in the Carbon Fund Act 2007 as "a unit, equivalent to one metric tonne of carbon dioxide, issued pursuant to the Kyoto Protocol and the decisions adopted pursuant to the Convention and the Kyoto Protocol". Kyoto Units are generally referred to as carbon credits. The legislation allows for the disposal of Kyoto Units only under very specific conditions i.e. "with the consent of the Minister (for the Environment, Community and Local Government) and the Minister for Finance and on such terms as they may specify".

Accounting Policies [continued]



Gains and Losses on Carbon Fund Assets

As the Kyoto Units are acquired with the intention to meet Ireland's obligation under the Kyoto Protocol at the end of 2012, at which time they will be surrendered, no realised gains or losses will arise on these assets.

Fund Account

The Fund Account records the accumulated income received or receivable from the Department of the Environment, Community and Local Government. Ongoing investments are funded on a bridging basis from the Central Fund pending receipt of this income.

Foreign Currencies

All transactions in foreign currencies are translated into euro at the rates of exchange prevailing at the date of such transactions.

Taxation

The income and profits of the Carbon Fund are exempt from Irish corporation tax. The purchases of Kyoto Units by the Carbon Fund are liable to Value Added Tax as such transactions are regarded as a supply of a service, as defined by Section 5(1) Value Added Tax Act 1972. VAT incurred is included in the cost of acquisition of the Carbon Fund assets.

Fund Account

| | | Year Ended 31 December 2010 € | Year Ended 31 December 2009 € |
|---------------------------------------|-------|-------------------------------------|-------------------------------------|
| | Notes | | |
| Income | 1 | 1,405,838 | 28,560,318 |
| Increase in Fund during the period | | 1,405,838 | 28,560,318 |
| Net Assets of Fund at start of period | | 95,603,677 | 67,043,359 |
| Net Assets of Fund at end of period | | 97,009,515 | 95,603,677 |

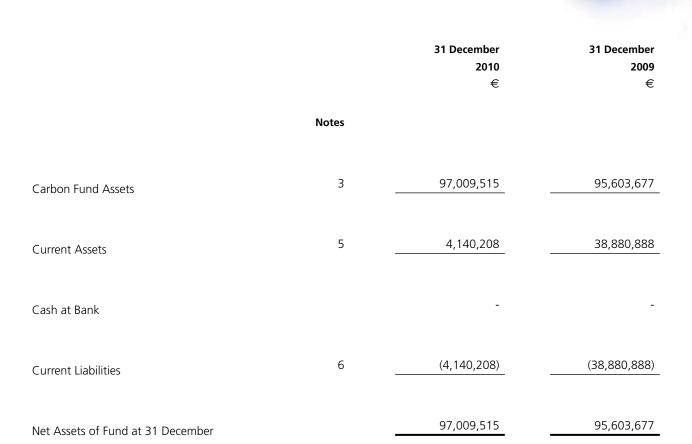
The accounting policies and notes 1 to 7 form part of these financial statements.

John C. Corrigan Chief Executive

John b. Carigon

30 June 2011

Net Assets Statement



The accounting policies and notes 1 to 7 form part of these financial statements.

John C. Corrigan Chief Executive

John b. Carigon

30 June 2011

Notes to the accounts

1. Income

| | Year Ended 31 December 2010 € | Year Ended 31 December 2009 € |
|---|-------------------------------------|-------------------------------------|
| Income from the Department of the Environment, Community and Local Government | 1,405,838 | 28,560,318 |

Income comprises the funding to be reimbursed to the Carbon Fund from the Department of the Environment, Community and Local Government to meet expenditure incurred during the year.

2. Administration Costs

The administration expenses of the Carbon Fund are all charged to the National Treasury Management Agency Administration Account and are paid out of the Central Fund.

3. Carbon Fund Assets

| (a) | Summary of Assets | 2010 | 2009 |
|-----|-------------------------------------|------------|------------|
| | | € | € |
| | Direct Holdings | 89,573,025 | 89,573,025 |
| | Indirect Holdings | 7,436,490 | 6,030,652 |
| | | 97,009,515 | 95,603,677 |
| | | | |
| (b) | Analysis by Currency of Acquisition | 2010 | 2009 |
| | | € | € |
| | Euro | 93,673,025 | 93,673,025 |
| | US Dollar | 3,336,490 | 1,930,652 |
| | | 97,009,515 | 95,603,677 |
| | | | |
| (c) | Indirect Holdings: | 2010 | 2009 |
| | | € | € |
| | World Bank – Carbon Fund for Europe | 4,100,000 | 4,100,000 |
| | World Bank – BioCarbon Fund | 3,336,490 | 1,930,652 |
| | | 7,436,490 | 6,030,652 |

Notes to the Accounts [continued]



3. Carbon Fund Assets (continued)

(d) Credits Delivered and Held:

The number of carbon credits delivered and held with the Emissions Trading Registry – Ireland at the Environmental Protection Agency at 31 December 2010 is 7,089,983 – 5,255,000 purchased directly and 1,834,983 via indirect holdings, (2009: 5,255,000 – all purchased directly). 1,634,983 units of the 7,089,983 held at 31 December 2010 relate to credits acquired through investments made by the Department of the Environment, Community and Local Government prior to the establishment of the Carbon Fund.

4. Commitments

Carbon Fund Investments

The NTMA administers payments on behalf of the Minister for the Environment, Community and Local Government in respect of two World Bank funds. Investments in these funds relate to projects which may yield Kyoto Units but the total number of units will not be known until a future date when the projects complete. At 31 December 2010, the uncalled commitments in respect of these investments amounted to:

Total Commitment of the State

| World Bank Fund | Local Currency | Euro equivalent | Paid to date | Unfunded Commitment |
|-----------------|----------------|-----------------|--------------|------------------------|
| | | € | € | € |
| Carbon Fund for | | | | |
| Europe | €10.00m | 10,000,000 | 4,100,000 | 5,900,000 |
| | | | | |
| BioCarbon Fund | US\$12.88m _ | 9,544,167 | 3,336,490 | 6,207,677 |
| | _ | 19,544,167 | 7,436,490 | 12,107,677 |
| | _ | | | |

5. Current Assets

| | 2010 | 2009 |
|--------------------------------|-----------|------------|
| | € | € |
| Department of the Environment, | | |
| Community and Local Government | 4,140,208 | 38,880,888 |

The amount owed to the Carbon Fund by the Department of the Environment, Community and Local Government is due under Section 3 (4) of the Carbon Fund Act 2007.

Notes to the accounts [continued]

6. Current Liabilities

| | 2010 | 2009 |
|-------------------------|-----------|------------|
| | € | € |
| Central Fund | 1,405,838 | 36,146,518 |
| Value Added Tax payable | - | 2,734,370 |
| NTMA | 2,734,370 | |
| | 4,140,208 | 38,880,888 |

The liability to the Central Fund is in respect of advances made by the Central Fund to the Carbon Fund, and will be repaid to the Central Fund when the Carbon Fund receives funds from the Department of the Environment, Community and Local Government.

7. Related Parties

- (a) Minister for Finance
 - Under Section 3 of the Carbon Fund Act 2007, the Minister for Finance may advance moneys to the Carbon Fund from the Central Fund, which are reimbursed by the Carbon Fund out of moneys made available by the Minister for the Environment, Community and Local Government.
- (b) Minister for the Environment, Community and Local Government
 Under Section 2(3) of the Carbon Fund Act 2007, the Minister for the Environment, Community and
 Local Government manages and controls the Carbon Fund.
- (c) National Treasury Management Agency
 Under Section 2(4) of the Carbon Fund Act 2007, the Minister for the Environment, Community and Local
 Government delegates the management of the Carbon Fund to the National Treasury Management Agency.

Under Section 8 of the Carbon Fund Act 2007, the Minister for the Environment, Community and Local Government may give directions or guidelines to the National Treasury Management Agency in relation to the performance by it of the functions delegated or granted to it under the Act.



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