

These reports have been prepared by an external contractor and do not necessarily represent the Commission's view. They are based on the contractor's own research on information publicly available as of February 2013.

Assessment of climate change policies in the context of the European Semester

Country Report: Ireland



Ecologic Institute

Authors team: Eike Dreblow, Matthias Duwe, Tim Wawer, Lena Donat, Elizabeth Zelljadt, Andrew Ayres

eclareon

Author: Ilze Upatniece

Client: DG Climate Action

Service Contract: 071201/2012/635684/SER/CLIMA.A.3

Ecologic Institute

eclareon

Ecologic Institute, Berlin:

Pfalzburger Strasse 43/44
10717 Berlin
Germany
www.ecologic.eu

eclareon GmbH

Giesebrechtstraße 20
10629 Berlin
Germany
www.eclareon.eu

Contact:

Eike Dreblow,
Fellow Climate and Energy
Tel. +49 (30) 86880-165
Fax +49 (30) 86880-100
[eike.dreblow\(at\)ecologic.eu](mailto:eike.dreblow(at)ecologic.eu)

Contact:

Ilze Upatniece
Researcher, Policy Department
Tel. +49 (30) 88 66 74 000
Fax +49 (30) 88 66 74 010
[policy\(at\)eclareon.com](mailto:policy(at)eclareon.com)

This country report has been produced as a joint output by Ecologic Institute and eclareon to support the Directorate General for Climate Action (DG CLIMA) at the European Commission in its work on the European Semester (Service Contract: 071201/2012/635684/SER/CLIMA.A.3).

The report provides an overview of current emission trends and progress towards targets as well as policy developments that took place over the period May 2012 to January 2013.

The content of the report represents the state of knowledge in February 2013, specific updates were made adding the latest official greenhouse gas emission data by the European Environment Agency (EEA).

Please feel free to provide any comments or suggestions to the authors through the contacts listed above.

Short summary

- **Background:** Climate change policy has been receiving increasing attention in Ireland and in the national media; legislation related to environmental issues is in place.
- **GHG target:** Ireland's 2011 non-ETS emissions were below of the 2013 emission allocation but according to the latest national projections the country is expected to miss its 2020 target with existing and additional measures.
- **Policy development:** In 2012, the *National Climate Change Adaptation Framework* and the *Renewable Energy Strategy* were launched, and primary legislation on climate change should be elaborated by December 2013.

I Background on climate and energy policies

In Ireland, climate change policy has been receiving increasing attention recently. Environmental and natural resource policies and measures are in place, and diverse climate change-related topics are being discussed in the national media. On 28 December 2012, two important documents were launched by the Department of the Environment, Community and Local Government: the *National Climate Change Adaptation Framework* (Department of the Environment, Community and Local Government 2012a), providing a policy approach to combat the climate change risks confronting Ireland, as well as the *Statement of Progress* on the programme for the development of national climate policy and legislation (Department of the Environment, Community and Local Government 2012b). The new *Renewable Energy Strategy* was published in May 2012. In addition, Ireland has a strong focus on energy efficiency. There are a number of instruments addressing energy efficiency both the building and transport sectors.

In 2011, Ireland's energy import dependency amounted to 88%, and the cost of all energy imports to Ireland reached approximately € 6 billion. The transport sector makes up 42% of final energy consumption in Ireland, amounting to twice as much as industry. According to the Sustainable Energy Authority of Ireland, the key objectives of the energy sector include energy efficiency and the deployment of low-carbon energy sources (including RES technologies). In addition, innovation for and enterprises dealing with the "low-carbon future" shall be supported (SEAI 2012a).

The 2020 targets for Ireland, according to the EU climate and energy package, are to increase the share of electricity generated from renewable energy sources in gross electricity consumption by 16%, to reduce carbon emission by 20% compared to 2005, as well as, to increase the energy efficiency by 20% (NRP 2012). Minister for Communications, Energy and Natural Resources, Pat Rabbitte confirmed Ireland's determination to meet the 2020 targets (Department of Communications, Energy and Natural Resources 2012c).

The roadmap for the development of national climate policy was published in January 2012, and consultation on climate policy and legislation open to all stakeholders, including the general public took place from February to April 2012. It was the key

element of the programme for the development of national climate policy and legislation (Department of the Environment, Community and Local Government 2012c). The primary legislation on climate change is scheduled to be elaborated by December 2013 and will give an assurance that national climate policy is in line with EU 2020 targets. The policy analysis found in "Towards a New National Climate Policy", which was released in December 2012, gives recommendations for the new strategy, including alternative financing options, such as PAYS (pay-as-you-save), for increasing energy efficiency in the non-ETS area, increasing the biofuel obligation, the development of an agriculture action programme, long-term greening of the tax system, etc (National Economic and Social Council 2012).

The perception of green growth in Ireland is considerable, especially with respect to green jobs. At least 6,500 people were directly employed in the sector in Ireland in 2009, in such industries as renewable energy, waste management, and water treatment (High-Level Group on Green Enterprise 2009). According to the Sustainable Energy Authority of Ireland, the "Better Energy: the National Upgrade" programme allocated grants for home insulation upgrades and supported up to 5,800 jobs in 2011 (SEAI 2011). In addition, it should be added that 4,000 green jobs were maintained in the construction and energy service industries in Ireland in 2012 (SEAI, 2013b).

2 GHG projections

Background information

In 2011, Ireland emitted 57.5 Mt CO₂eq (UNFCCC inventory 2011) with an increase between 1990 and 2010 by around 11%, mainly driven by the rapid expansion of the economy between 1990 and 2006. From 2010 to 2011 emission declined by about 6%. Agriculture accounts for the biggest share of emissions with 31% of total GHG emissions, which is three times above the EU average; even though emissions from that sector decreased by 10% between 1990 and 2011 due to improved production efficiency and reduced use of nitrogen fertilizer. Other important emission sources are energy supply where emissions increased by around 6% over the same period, with a peak in the mid-2000s linked to the above-mentioned economic growth. The most significant increase in emissions between 1990 and 2011 was observed in the transport sector, where emissions more than doubled. This is the result of the increased number of passenger cars and light-duty vehicles, as well as "fuel tourism" from the United Kingdom. The industrial sector accounts for 3% of total emissions, and emissions decreased from 1990 to 2011 by 44% (UNFCCC inventory 2011, EEA 2012c, UNFCCC 2012).

Progress on GHG target

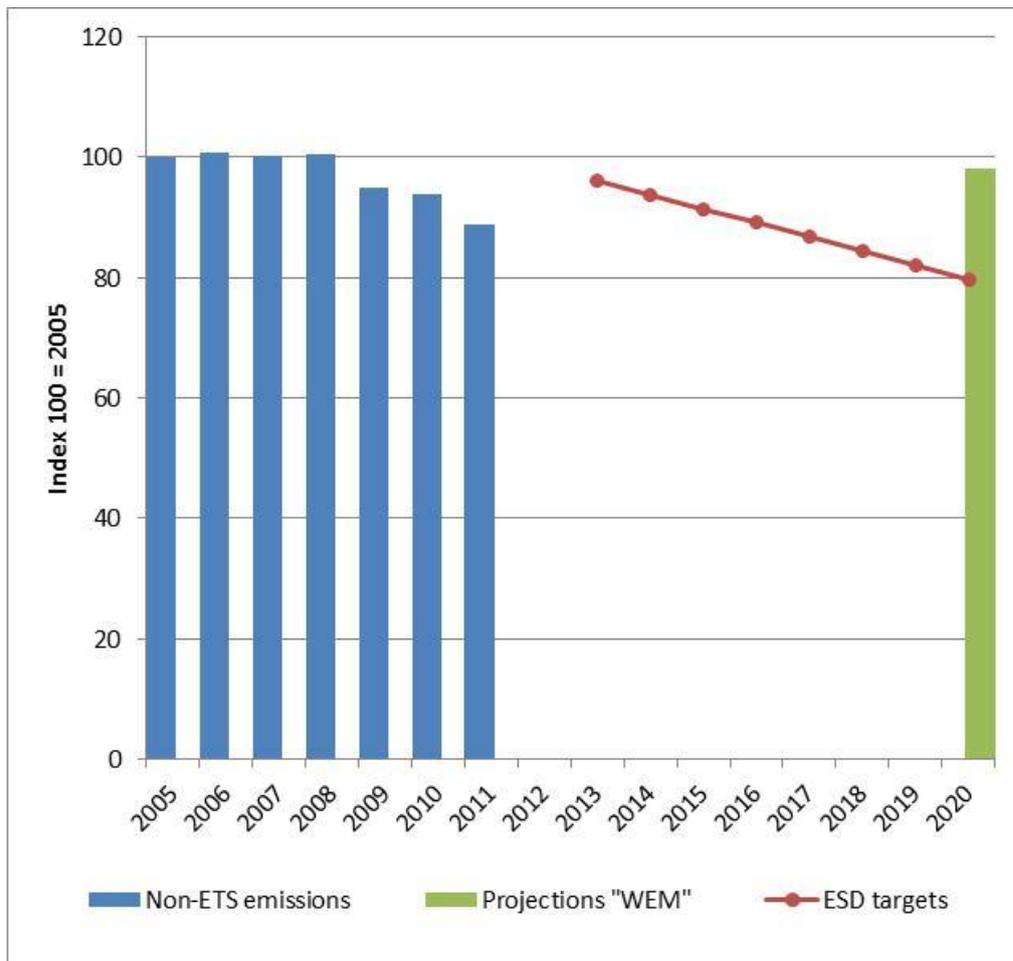
There are two sets of targets to evaluate: 1) the Kyoto Protocol targets for the period 2008-12 (which has just ended) and 2) the 2020 targets for emissions not covered by the EU ETS.

Under the Kyoto-Protocol the emission reduction target for the period 2008-2012 has been set to increase 13 % based on 1990 for CO₂, CH₄ and N₂O and on 1995 for F-gases. An evaluation of the latest complete set of greenhouse gas data (for the year 2011) shows that emissions have increased by 3.4% from the Kyoto base year to 2011 (EEA 2013a). Therefore, Ireland is on track to meeting its Kyoto target.

By 2020, Ireland needs to reduce its emissions not covered by the EU ETS by 20% compared to 2005, according to the Effort Sharing Decision (ESD) ⁽¹⁾. The latest data suggest that Ireland is currently not on track to meeting this target. According to the 2011 inventory data, emissions in 2011 were 8% below the Annual Emissions Allocation (COM 2013) for the year 2013. National projects show that Ireland is expected to miss its 2020 non-ETS emissions target by 23% in scenarios with existing measures. In a scenario with additional measures, Ireland is expected to miss its non-ETS emissions target by 20% ⁽²⁾ (EEA 2013b).

Figure 1 shows Ireland’s non-ETS emissions until 2011, targets under the ESD for the period 2013-2020 and the projections with existing measures for 2020.

Figure 1: Non-ETS emission trends and projections compared to the ESD targets



Source: EEA. Projections are based on 15/04/2013 draft GHG inventory submissions under the UNFCCC and MS projections submitted

¹ Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020.

² Calculations are based on domestic emissions only, without accounting for possible use of flexibility options. The 2020 targets and 2005 non-ETS emissions are all consistent with 2013-2020 ETS scope, i.e. they take into account the extension of the ETS scope in 2013 and the unilateral inclusion of installation in 2008-2012.

Table I: GHG emission developments, ESD-targets and projections (in Mt CO₂eq)

	1990	2005	2010	2011	ESD target*		2020 Projections**	
					2013	2020	WEM	WAM
Total	55.2	69.5	61.5	57.5				
Non-ETS emissions (% from 2005)		47.0	44.1	41.7 -11%	45.2 -4%	37.2 -20%	45.8 -2%	42.5 -9%
Energy supply (% share of total)	11.2 20%	15.8 23%	13.3 22%	11.9 21%				
Energy use (w/o transport) (% share of total)	14.5 26%	16.8 24%	15.6 25%	13.7 24%				
Transport (% share of total)	5.1 9%	13.1 19%	11.6 19%	11.3 20%				
Industrial processes (% share of total)	3.2 6%	3.3 5%	1.9 3%	1.8 3%				
Agriculture (% share of total)	19.6 36%	18.9 27%	18.0 29%	17.7 31%				

Source: UNFCCC inventories; EEA (2013b); COM (2013), Calculations provided by the EEA and own calculations.

* The ESD target for 2013 and for 2020 refer to different scopes of the ETS: The 2013 target is compared with 2011 data and is therefore consistent with the scope of the ETS from 2008-2012; the 2020 target is compared to 2020 projections and is therefore consistent with the scope of the ETS from 2013-2020. Non-ETS emissions in 2005 for the scope of the ETS from 2013-2020 amounted to 46.5 Mt CO₂eq.

** 2013 projections with existing measures (WEM) or with additional measures (WAM).

Legend for colour coding: green = target is being (over)achieved; orange = not on track to meet the target

Total greenhouse gas emissions (GHG) and shares of GHG do not include emissions and removals from LULUCF (carbon sinks) and emissions from international aviation and international maritime transport.

National projections of GHG emissions up to 2020, summarised by the EEA, need to be prepared by the Member States in accordance with the EU Monitoring Mechanism ⁽³⁾ every two years, and the latest submission for Ireland was in 2013. The projections need to be prepared reflecting a scenario that estimates emissions reductions in line with policies and measures that have already been implemented (with existing measures, WEM), and an additional scenario that reflects developments with measures and policies that are in the planning phase (with additional measures, WAM) may also be submitted.

In the following two tables, these measures - as outlined by the Member States as basis for their projections as of April 2011 ⁽⁴⁾ - have been summarised with a focus on national measures and those EU instruments expected to reduce emissions the most ⁽⁵⁾. An update on the status of the policies and measures is included in order to assess the validity of the scenarios.

³ Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol.

⁴ The respective policies and measures were not available at the time of the preparation of this country report. Thus, policies and measures as outlined in April 2011 are given here.

⁵ The implementation of the EU-ETS has not been included. Other EU Directives have only been considered if they have been outlined in the projections as one of the main instruments to reduce GHG emissions.

Table 2: Existing and additional measures as stated in the 2011 GHG projections

Existing Measures (only important national measures; w/o EU legislation)	Status of policy in January 2013
Renewable Energy Feed-in Tariff scheme (REFIT)	Implemented. In 2012, two new schemes (REFIT 2 and REFIT 3) received state aid clearance and were open for new applications. REFIT 2 covers onshore wind, hydro, and biomass landfill gas, whereas REFIT 3 covers the biomass categories of anaerobic digestion, biomass CHP, biomass combustion, and biomass co-firing.
The Greener Homes Scheme aims to increase the use of renewable energy and sustainable energy technologies in Irish homes.	Closed since May 2011, when the national upgrade programme "Better Energy" was launched. The solar heating part of the Greener Homes Scheme was transferred to the Better Energy Homes Scheme.
Energy	To be implemented. A north-south electricity interconnector is being planned. The project re-evaluation process is expected to be completed in the coming months. This will coincide with the publication of the preferred project solution.
Transmission and distribution efficiencies improvement	Implemented
Winter Peak Demand Reduction Scheme: Reward large customers for reducing energy demand during peak period below an agreed baseline	On hold due to a lack of budget resources.
ReHeat: Provides financial assistance for boilers fuelled by wood chips and wood pellets, solar thermal collectors, and heat pumps	On hold due to a lack of budget resources.
Rollout of Grid 25 strategy: Framework to build a more cost effective and efficient system to cater for the integration of increasing amounts of renewable generation	Being implemented. Grid25 represents a total investment of €4 billion between 2012 and 2025.
CHP deployment grant scheme (30% on equipment purchase and 40% for feasibility studies)	On hold due to a lack of budget resources.

	Building Regulations 2005 to improve the energy efficiency of new buildings	Implemented. In 2011, amendments of regulations were to promote the conservation of fuel and energy in dwellings.
	Supports for Exemplar Energy Efficiency Projects (SEEEP) and Energy Efficiency Retrofit Fund (EERF): Grant aid provided energy efficiency projects that will achieve significant energy savings and will create demand for labour-intensive services during implementation.	Closed
Energy Efficiency	Warmer Homes Scheme to improve the energy efficiency and comfort conditions of homes occupied by low-income household	Implemented. For elderly and vulnerable persons, the following measures are available at no cost to the household: attic insulation, draught proofing, lagging jackets, low energy light bulbs, cavity wall insulation and energy advising.
	The Home Energy Saving (HES) scheme provides assistance to homeowners who are interested in improving the energy efficiency of their home in order to reduce energy use and costs as well as greenhouse gas emissions	Implemented.
	Efficient Boiler standard: Oil and gas fired boilers installed as replacements in existing dwellings must meet a minimum seasonal efficiency of 86%, where practicable (part of the revision of the Building Regulations Part L "Conservation of Fuel and Energy" adopted in December 2007).	Implemented
Transport	VRT/Motor Tax changes: Motor tax (annual circulation tax) and VRT linked to CO ₂ emissions for new passenger cars	Implemented. Structures for both VRT and motor tax for vehicles taxed on the basis of CO ₂ emissions are revised. The two lowest tax bands are broken into six. There are now 11 tax bands instead of seven. The lowest band now applies only to cars with emissions between zero and 80g/km, carrying a VRT rate of 14%. For the rest of the cars that fall into tax bands A and B, the tax is increased between €10 and €55 a year from 1 January 2013, depending on the emissions level.
	Biofuels Mineral Oil Tax Relief (MOTR) Schemes	Implemented. The National Oil Reserves Agency Act 2007 (Biofuel Obligation Rate) Order 2012 was signed in December 2012 with the aim of increasing the rate of biofuel mixing from 4% to 6% from 1 January 2013 onwards.
	Biofuel Obligation	Implemented. The Biofuels Obligation Scheme came into effect in 2010 and compelled fuel suppliers to include a certain percentage of biofuels in their annual fuel sales. The current percentage is 4% by volume per annum and will be gradually increased up to 6%.

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, April 2011.

Additional Measures: Still to be implemented (only important national measures; w/o EU legislation)		Status of policy in January 2013
Energy	Draft Geothermal legislation to facilitate geothermal development	Not implemented. Publication was expected in late 2012.
	Building Regulations 2010: 30% improvement on energy performance of non-residential buildings relevant to current building regulations	Implemented
	Retrofit - commercial and public sector component: Support to increase in the scale and depth of energy efficiency investments in upgrading existing buildings and facilities.	To be implemented
Energy Efficiency	Retrofit - residential component: Support to increase in the scale and depth of energy efficiency investments in upgrading existing residential buildings. It aims to include 1 million homes by 2020	Implemented
	Implementation of the public sector contribution to national energy efficiency target	Implemented
	ACA: tax incentive for companies paying corporation tax. The ACA allows companies to write off 100% of the purchase value of qualifying energy efficient equipment against their profit in the year of purchase	Implemented
	SEI Large Industry Programme: Develop and maintain robust energy management in industry	Implemented
	Low Carbon Homes 2013: Improve energy performance of residential buildings by 70% relative to current building regulations	Closed
	Electric Vehicle Deployment: to ensure electric vehicles make up 10% of the transport fleet by 2020.	To be implemented. The scheme has not yet achieved the goal, as there are still just about 200 electric vehicles on the roads in Ireland.
Transport	More sustainable public transport fleet: The objective of this measure is to radically improve the level, accessibility, and quality of rail and bus services throughout the country. Urban transport services involving bus, light rail, suburban rail, and metro will be improved.	To be implemented. Priority for the Minister for Transport, Tourism & Sport in 2013 is to determine the structure of the public service bus market, to secure funding of the CIE companies post-2014, and to reorganise Irish Rail until by of 2013.
Other non-ETS sectors	F-gas regulation: Contain, prevent, and thereby reduce emissions of F-gases	Implemented

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, April 2011.

3 Evaluation of National Reform Programme 2012 (NRP)

In April of each year, Member States are required to prepare their National Reform Programmes (NRPs), which outline the country's progress regarding the targets of the EU 2020 Strategy. The NRPs describe the country's national targets under the Strategy and contain a description of how the country intends to meet these targets. For climate change and energy, three headline targets exist: 1) the reduction of GHG emissions, 2) the increase of renewable energy generation, and 3) an increase in energy efficiency ⁽⁶⁾.

In the following table, the main policies and measures as outlined in the NRP of April 2012 ⁽⁷⁾ have been summarised, and their current status (implemented, amended, abolished, or expired) is given, with specifics on latest developments.

Table 3: Main policies and measures as outlined in the NRP, April 2012

New national climate policy and legislation	
Status as stated in the NRP	Consultation starting in 2012
Status as per Jan 2013	Should be implemented by mid-2014
Description of policy or measure	From February to April 2012 consultation on climate policy and legislation took place. It was open to all stakeholders, including the general public. The consultation was the key element of the programme for the development of national climate policy and legislation. The programme was introduced in January 2013, while the primary legislation on climate change is expected to be elaborated until December 2013. The document will give an assurance in relation to national policy and framework for emission reduction in line with EU 2020 targets.
Better Energy – the National Retrofit Programme (continuation of “Better Energy – the National Retrofit Programme”)	
Status as stated in the NRP	Implemented. Target to be achieved by 2013 is 2,000GWh by a combination of energy supplier-led initiatives and SEAI programme activity.
Status as per Jan 2013	Under implementation
Description of policy or measure	This is a multi-annual programme to increase energy efficiency standards of the buildings by reducing fossil fuel use, running costs and greenhouse gas emissions. The key objectives of the Programme are to improve energy efficiency in 1 million buildings by 2020; to implement 8,000GWh energy savings until 2020, to develop a sustainable market for energy efficient goods and services; and to reduce the GHG emissions. The main support scheme is a subsidy.

⁶ There are specific targets for all MS by 2020 for non-ETS GHG emission reductions (see section 2) as well as for the renewable energy share in the energy mix by 2020 (see section 4, renewable energies). Specific energy efficiency targets will be defined (or revised) by the MS until the end of April 2013 in line with the methodology laid out in Article 3 (3) of the Energy Efficiency Directive (Directive 2012/27/EU).

⁷ All NRPs are available at: http://ec.europa.eu/europe2020/documents/related-document-type/index_en.htm

Voluntary agreements under which energy suppliers commit to deliver an agreed energy savings target each year

Status as stated in the NRP	Implemented. Nine energy suppliers, who supply over 75GWh annually, gave a commitment to deliver on an agreed energy savings target each year.
-----------------------------	--

Status as per Jan 2013	Implemented in 2012.
------------------------	----------------------

Description of policy or measure	Voluntary agreements are agreements between Sustainable Energy Authority of Ireland (SEAI), the Irish national energy authority, and energy suppliers, which commit themselves to deliver voluntary agreed energy saving targets each year. The agreements shall play a key role in reaching Ireland's energy efficiency savings of 20% by 2020.
----------------------------------	--

Energy efficient procurement

Status as stated in the NRP	Implemented. A three-part framework for energy efficient procurement has been developed.
-----------------------------	--

Status as per Jan 2013	Implemented in 2012.
------------------------	----------------------

Description of policy or measure	A framework for incorporating energy efficient practices into procurement has been laid out by the Government of Ireland. Ireland's first Green Public Procurement Action Plan was launched in August 2012 to assist public authorities in planning and implementing green public procurement.
----------------------------------	--

Building Regulations

Status as stated in the NRP	Implemented.
-----------------------------	--------------

Status as per Jan 2013	Implemented in 2011.
------------------------	----------------------

Description of policy or measure	The regulations state exploitable minimum building performance requirements. The amendments of 2011 relate to the conservation of fuel and energy in dwellings.
----------------------------------	---

National Energy Efficiency Action Plan (NEEAP)

Status as stated in the NRP	Under implementation.
-----------------------------	-----------------------

Status as per Jan 2013	The NEEAP2 is currently being prepared.
------------------------	---

Description of policy or measure	National Energy Efficiency Action Plan 2 (NEEAP2) Consultation Paper was published in 2011. According to the schedule, National Energy Efficiency Action Plan 2 still needs to be launched.
----------------------------------	---

4 Policy development

This section covers significant developments made in key policy areas between May 2012 and January 2013. It does not attempt to describe every instrument in the given thematic area. The time-frame was chosen based upon the release of the National Reform Programmes (in the section above) in April 2012, which contain the status quo for policy on most topics.

Environmental Taxation

Energy use in Ireland was subject in 2009 to an implicit tax rate of approximately 160 € per tonne oil equivalent, the tenth-highest in the EU, which increased almost 19% between 2008 and 2009 (Eurostat 2013). However, Ireland was the least energy intensive economy in the EU in 2010, so revenues generated by these taxes are low as a proportion of GDP. Energy taxation was equivalent to just 1.5% of GDP in 2010, which is the third-lowest percentage in the EU; environmental taxes netted 2.4% of GDP in revenues (24th place in the EU). However, transportation taxation revenues as a proportion of GDP in Ireland ranked 6th in the EU in 2010 (Eurostat 2012).

In 2010 a Natural Gas Carbon Tax came into force in Ireland. The tax applies to imported kerosene, marked gas oil, liquid petroleum gas, fuel oil, and natural gas (Revenue Commissioners 2012). In 2012, the carbon tax was increased by €5 and amounts to €20 per tonne of CO₂ emitted from fossil fuels. As announced by the government, in 2013 the Natural Gas Carbon Tax shall also cover solid fuels (on a phased basis) such as peat and coal. As a result of the amendments to the Carbon Tax, the rate of €10 per tonne for solid fuels will be applied from 1 May 2013 and the rate of €20 per tonne will be applied to other fuels from 1 May 2014 onwards (Citizens Information 2012).

Energy Efficiency

Ireland's economy was the least energy intensive in the EU in 2010, and the intensity remained steady between 2005 and 2010, declining merely .4%. Final energy consumption increased after 2005 and peaked in 2007 before declining again as a result of the global economic crisis; the 2010 total is nonetheless 1.2% above the 2001-2005 average. Industrial and transport energy use both declined precipitously after 2007, although transport energy use had been increasing beforehand (Eurostat 2013).

The purpose of the National Energy Efficiency Action Plan 2 Consultation Paper (NEEAP2) consultation paper is to provide the basis for the development of national climate policy and legislation. The key element of the document is to find out how industry representatives as well as other stakeholders perceive the progress made thus far and the measures to be included into the second Action Plan. As stated in the NEEAP2 Consultation Paper, progress has been made across all sectors. A few examples of the measures introduced in the Consultation Paper are given here:

- *Home Energy Savings Scheme*. This is a grant assistance scheme available to homeowners implementing energy efficiency retro-fitting measures. The measures include attic and wall insulation, high-efficiency boilers, heating controls and Building Energy Rating (BER) assessments;
- *Warmer Homes Scheme*. Grants cover such measures like attic insulation, cavity wall insulation, draught proofing, lagging jackets, energy efficient lighting, and energy advising;
- *Tax Relief*. In 2011 a new tax incentive scheme aiming at encouraging energy efficiency measures in homes was proposed;
- *Accelerated Capital Allowances Scheme*. Under this scheme, the companies are allowed to write off the full capital cost of registered energy efficient equipment in the year of purchase;
- *SME Programme*. This programme is designed to provide support to businesses willing to becoming more energy efficient. The support includes free energy management, mentoring, training, advice and other services;

- *Public Sector Programme and Procurement Regulations*. This programme is aimed at providing support to the public sector while adopting and maintaining exemplary standards of energy management;
- *National Retrofit Programme*. This is a multi-annual programme for upgrading Ireland's building stock and facilitating high standards of energy efficiency;
- *VRT and Motor Tax*. This is an annual motor tax targeting new cars based on their CO₂ emissions (DCENR 2012a).

Better Energy: the National Upgrade Programme (update of “Better Energy – the National Retrofit Programme”). This is a multi-annual programme to increase energy efficiency standards of buildings by reducing fossil fuel use, running costs, and greenhouse gas emissions. According to the Sustainable Energy Authority of Ireland, the key objectives of the programme are to improve energy efficiency in 1 million buildings by 2020, to implement 8,000GWh energy savings by 2020, to develop a sustainable market for energy efficient goods and services, and to reduce GHG emissions (SEAI 2012a). The Better Energy Homes Programme establishes the following level of financial support: for attic insulation - € 200, for cavity wall insulation - € 250, for internal dry lining wall insulation – € 900 up to € 1,800, for external wall insulation - € 1,800 up to € 3,600, for heating system upgrade - € 400 up to € 800; and Building Energy Rating - € 50 (SEAI 2013a). The overall budget of the programme was € 90,000,000 in 2011 (Better Energy 2011).

Better Energy Obligations: Energy Saving Targets for Energy Suppliers. According to the agreements, energy suppliers will help to reach the energy efficiency savings of 20% by 2020. The programme will set energy saving targets to be achieved by both network connected and non-network connected energy suppliers; these are voluntary targets. Also an energy efficiency fund available to the energy suppliers and providers of energy services will be created (SEAI 2012a).

A framework for incorporating energy efficient practices into public procurement has been laid out for procuring energy supply, energy equipment and vehicles, energy services, and capital projects (Department of Taoiseach 2006). The foreseen budget for public sector procurements is approximately €15 billion per year (SEAI 2012c). The subsidy programme “Better Energy Workplaces” funded more than 100 energy efficiency projects in businesses and the public sector. One hundred and fifty homes per day, or 26,000 homeowners in 2012 in total, received energy upgrades. Additionally, 14,000 vulnerable low-income households received energy efficiency upgrades (SEAI 2013b).

Efficient energy use is promoted in public authorities by the Green Procurement Action Plan which is to assist public authorities to plan and implement green public procurement. Existing best-practices and further actions to boost green public procurement are presented. In addition to the procurement guidelines for energy services discussed above, this action plan is focused on eight priority areas: Construction, Energy, Transport, Food and Catering Services, Cleaning Products and Services, Paper, Uniforms and Textiles, and ICT (SEAI 2012b).

Renewable Energy

The consumption of renewable energy both overall and in the electricity sector in Ireland approximately doubled between 2005 and 2010. However, the 2010 value of 5.5% still leaves Ireland a long way off from reach its target of 16% by 2020 (Eurostat 2013).

The Renewable Energy Strategy was launched by the Ministry for Communications, Energy & Natural Resources in May 2012. Renewable Energy strategy sets the strategic goals and stipulates 36 specific actions to be implemented in order to inflate the economic potential of renewable energy, including, for instance, increasing wind power (both onshore and offshore), building a sustainable bio energy sector, fostering R&D in renewable (wave & tidal), increasing sustainability in transport sector, and constructing robust and efficient smart energy networks (DCENR 2012b). Currently electricity from renewable sources is mainly promoted through a feed-in tariff scheme (REFIT). In 2012, two new schemes (REFIT 2 and REFIT 3) received state aid clearance and were open for new applications. REFIT 2 covers onshore wind, hydro, and biomass landfill gas, whereas REFIT 3 covers the biomass categories of anaerobic digestion, biomass CHP, biomass combustion, and biomass co-firing. There is also a tax relief scheme for corporate investments in projects generating electricity from renewable sources (solar, wind, biomass, and hydro).

A bioenergy grant scheme also pays farmers to produce biomass (miscanthus and willow) for use as an energy source. Aid is available for one-half of the planting costs, but no more than € 1,300. Landholders must provide evidence of a connection to a purchaser before planting, but the biomass can be sold off-farm and is thus not only for on-site use.

Transport

Transport emissions in Ireland decreased between 2005 and 2011 more or less in line with the trend of overall emissions, and they represent about 19%-20% of total Irish greenhouse gas emissions (see Table 1). Revenues generated by transport taxation in Ireland as a percentage of GDP are relatively high and account for 9% of GDP ranking 6th among EU MS in 2010 (Eurostat 2012). Newly registered cars in Ireland were almost 8% more efficient than the EU average in 2011, emitting on average 128.3 gCO₂/km driven (EEA 2012e).

Electric Vehicle Grant scheme: The Sustainable Energy Authority of Ireland allocates grants for electric cars and chargers for electric cars. A maximum grant of €5,000 is available for qualifying electric vehicles when purchased privately. The grant level applies equally to Battery Electric Vehicles (BEV) and Plugin Hybrid Electric Vehicles (PHEV). For a commercial purchase, the maximum grant is capped at €3,800. The target was to achieve 6,000 electric passenger vehicles in operation in Ireland by 2012. Sustainable Energy Ireland has paid €573,600 in grants to buyers of electric vehicles, and Ireland's largest electricity service provider, Electric Ireland, has spent €3.9 million installing charging points for public, domestic, and business use. Nonetheless, there are still just 200 electric cars on the road (SEAI 2012d).

Adaptation

National Climate Change Adaptation Framework: The Framework, published on 28 December 2012 provides a policy approach for combating the climate change impacts confronting Ireland. The Framework requires the relevant national and local authorities to

develop sectoral and local adaptation plans and publish the drafts of these plans by mid-year 2014.

5 Policy progress on past CSRs

As part of the European Semester, Country Specific Recommendations (CSRs) for each MS are provided by the EU Commission in June of each year for consideration and endorsement by the European Council. The recommendations are designed to address the major challenges facing each country in relation to the targets outlined in the EU 2020 Strategy.

No country specific recommendations for 2012 were relevant for climate change.

6 References

- Better Energy: The National Upgrade Programme (2011): the Factsheet. Online available. http://www.dcenr.gov.ie/NR/rdonlyres/3F8D2585-F2E1-46EA-BA30-50370A4F1D0F/0/2011_0511BetterEnergyLaunchFactsheet.pdf
- Citizens Information (2012): Carbon Tax. Online available: http://www.citizensinformation.ie/en/money_and_tax/tax/motor_carbon_other_taxes/carbon_tax.html
- Department of Communications, Energy and Natural Resources (2012a): NEEAP2 Consultation Paper. Online available: <http://www.dcenr.gov.ie/Energy/Energy+Efficiency+and+Affordability+Division/NEEAP2+Consultation+Paper.htm>
- Department of Communications, Energy and Natural Resources (2012b): Strategy for Renewable Energy: 2012 – 2020. Online available: http://www.dcenr.gov.ie/NR/rdonlyres/C0498ADB-362B-449C-B381-0099B552EBD1/0/RenewableEnergyStrategy2012_2020.pdf
- Department of Communications, Energy and Natural Resources (2012c): Launch of Renewable Energy Strategy. Online available: <http://www.dcenr.gov.ie/Press+Releases/2012/Launch+of+Renewable+Energy+Strategy.htm>
- Department of the Environment, Community and Local Government (2012a): National Climate Change Adaptation Framework. Online available: <http://www.environ.ie/en/Publications/Environment/ClimateChange/FileDownload,32076,en.pdf>
- Department of the Environment, Community and Local Government (2012b): Programme for the development of national climate policy and legislation. Statement on progress at 28 December 2012. Online available: <http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/ProgrammeforDevelopmentofClimateChangePolicyLegislation/>
- Department of the Environment, Community and Local Government (2012c): Climate Policy Development Consultation. Background. Online available: <http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/ClimatePolicyDevelopmentConsultation/>
- Department of Taoiseach (2006): Towards 2016. Online available: http://www.taoiseach.gov.ie/attached_files/Pdf%20files/Towards2016PartnershipAgreement.pdf
- COM (2013): Commission decision of 26 March 2013 on determining Member States' annual emission allocations for the period from 2013 to 2020 pursuant to Decision No 406/2009/EC of the European Parliament and of the Council. Online available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:090:0106:0110:EN:PDF>
- EEA (2012a): "Approximated EU GHG inventory: Early estimates for 2011" Technical report No 13/2012, available online at <http://www.eea.europa.eu/pressroom/publications/approximated-eu-ghg-inventory-2011/>
- EEA (2012b): Gap between average non-ETS 2008–2011 emissions and Kyoto targets without the use of carbon sinks and flexible mechanisms. Online available: <http://www.eea.europa.eu/data-and-maps/figures/gap-between-average-nonets-200820132011>
- EEA (2012c): Greenhouse gas emission trends and projections in Europe 2012 - Tracking progress towards Kyoto and 2020 targets. EEA Report No 6/2012. Online available: <http://www.eea.europa.eu/publications/ghg-trends-and-projections-2012>

- EEA (2012d): Projected gaps between 2020 GHG emissions and national targets in sectors not covered by the EU ETS. Online available: <http://www.eea.europa.eu/data-and-maps/figures/projected-gaps-between-2020-ghg-1>
- EEA (2012e): Monitoring CO₂ emissions from new passenger cars in the EU: summary of data for 2011. Online available: www.eea.europa.eu/publications/monitoring-co2-emissions-from-new/at_download/file
- EEA (2013a): EEA greenhouse gas - data viewer: Change in emissions by country (%), Kyoto base year - 2011. Online available at: <http://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer>
- EEA (2013b): Summary of new Member State projections under the Reporting of Member States in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, April 2013.
- EPA (2012): Environmental Protection Agency. Ireland is on track to meet its Kyoto agreement commitments. Online available: <http://www.epa.ie/news/pr/2012/name,33923,en.html>
- Eurostat (2012): Source of data is Eurostat "Taxation trends in the European Union 2012". Collection: Statistical books. 2012. Brussels.
- Eurostat (2013): Source of data is Eurostat using the following tables: Implicit tax rate on energy (tsdcc360). Energy intensity of the economy (tsdec360). Final energy consumption (ten00095). Share of renewable energy in gross final energy consumption (t2020_31). Electricity generated from renewable sources (tsdcc330). Average carbon dioxide emissions per km from new passenger cars (tsdtr450). Final energy consumption, by sector (tsdpc320). Greenhouse gas emissions by sector (tsdcc210)
- High-Level Group on Green Enterprise (2009): Developing the Green Economy in Ireland. Online available: http://www.forfas.ie/media/dete091202_green_economy.pdf
- Revenue Commissioners (2012): Guide to Natural Gas Carbon Tax. See appendix no.2
- National Economic and Social Council (2012): Towards a New National Climate Policy. Online available: <http://www.environ.ie/en/Publications/Environment/ClimateChange/FileDownload,31202,en.pdf>
- NRP (2012): National Reform Programm for Ireland 2012 Update under the Europe 2020 Strategy. Online available: http://ec.europa.eu/europe2020/pdf/nd/nrp2012_ireland_en.pdf
- SEAI (2011): Sustainable Energy Authority of Ireland. Better Energy: The National Upgrade Program Factsheet. Online available: http://www.dcenr.gov.ie/NR/rdonlyres/3F8D2585-F2E1-46EA-BA30-50370A4F1D0F/0/2011_0511BetterEnergyLaunchFactsheet.pdf
- SEAI (2012a): Sustainable Energy Authority of Ireland. Energy in Ireland 1990 – 2011. Online available: http://www.seai.ie/Publications/Statistics_Publications/Energy_in_Ireland/Energy_in_Ireland_1990_-_2011.pdf
- SEAI (2012b): Sustainable Energy of Ireland. Participating Energy Suppliers. Online available: http://www.seai.ie/Grants/Better_energy_homes/Participating_Energy_Suppliers/
- SEAI (2012c): Sustainable Energy of Ireland. Green Public Procurement. Online available: <http://www.environ.ie/en/Environment/SustainableDevelopment/GreenPublicProcurement/PublicationsDocuments/FileDownload,29208,en.pdf>
- SEAI (2012d): Sustainable Energy of Ireland. Electric Vehicle Grant. Online available: http://www.seai.ie/Grants/Electric_Vehicle_Grant_Scheme/

SEAI (2013a): Sustainable Energy Authority of Ireland. What grants are available? Online available:

http://www.seai.ie/Grants/Better_energy_homes/homeowner/What_Grants_Are_Available/

SEAI (2013b): 4000 jobs maintained and 35 million EUR annual energy savings achieved. Online available:

<http://www.em.gov.lv/em/2nd/?lng=en&cat=30173>
http://www.seai.ie/News_Events/Press_Releases/2013/4_000_jobs_maintained_and_%E2%82%AC35_million_annual_energy_savings_achieved_.html

Reporting of Member States in accordance with Decision No 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community GHG emissions and for implementing the Kyoto Protocol. Last submission: April 2011.

Revenue Commissioners (2012): Guide to Natural Gas Carbon Tax. See appendix no.2

UNFCCC inventory (1990-2011): National greenhouse gas inventories (IPCC Common Reporting Format sector classification). Online available for the EU: <http://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer> (Last modified : May 29, 2013 09:30 AM)

UNFCCC (2012) Reports on in-depth reviews of the fifth national communications of Annex I Parties. Online available:

http://unfccc.int/national_reports/annex_i_natcom/idr_reports/items/4056.php