EMBARGO: 11 JULY 2012

Extracts from:

Energy Policies of IEA Countries

Ireland

2012 Review



1. EXECUTIVE SUMMARY AND KEY RECOMMENDATIONS

EXECUTIVE SUMMARY

Ireland has implemented some significant changes since the last IEA in-depth review of its energy policies in 2007, and commendably, reforms have continued at a regular pace despite the disruptive effects of the financial crisis on its economy. Reform of the electricity and natural gas markets has continued – the Single Electricity Market (SEM) has been implemented, retail markets are open to competition, investment in infrastructure has continued and a significant smart-metering study has been completed. Nevertheless, the progressive market liberalisation of the gas and electricity markets has not displaced the market power of the traditional state-owned incumbents, and concerns linger with regard to the level of state involvement in these two sectors. Renewable energy capacity has continued to expand, a new procedure to integrate wind power has been introduced, and there has been a large increase in investment in energy-related research and development. Ireland has a very proactive energy efficiency policy, which is helping to reduce its carbon footprint in line with the European Union binding target to reduce greenhouse gas (GHG) emissions by 20% (relative to 1990) by 2020. So far, GHG emissions have fallen in line with Ireland's present obligations.

DECARBONISING THE ECONOMY

A focal point of Ireland's energy policy framework is the push to a low-carbon economy. This reduction in emissions calls for a fundamental shift in energy production and consumption habits, and the vectors for this shift have been a strong emphasis on the development of renewable energy and the promotion of energy efficiency and smart grid technologies.

Ireland has set the ambitious target of producing 40% of its electricity from renewable sources by 2020, one of the most demanding in the world. Ireland's location at the edge of the Atlantic Ocean ensures one of the best wind and ocean resources in Europe, and the government is encouraging the development of electricity generated from renewable sources by means of a renewable energy feed-in tariff (REFIT) programme. Feed-in tariffs have until now tended to favour the development of technologically mature wind power. There has also been a growing interest in biomass, notably for co-firing with, and ultimately replacing, Ireland's indigenous peat. The European Commission's approval in 2012 of the expansion of Ireland's REFIT programme into other renewable sectors, including biomass technologies, should favour this development. The government's diversification of renewable sources is commendable, notably in terms of energy security and economic efficiency and development.

The second pillar of Ireland's decarbonisation strategy is demand-driven, and relies on the development and optimisation of energy efficiency and research and development into "demand-side management" technologies. Ireland has a very proactive energy efficiency policy and a national target of 20% energy savings in 2020 (relative to the 2001-05 average), complemented by an ambition to reduce energy consumption in the public sector by 33% in 2020. In its highly detailed National Energy Efficiency Action Plan, Ireland has outlined 90 measures and actions, across all sectors of the economy, that are to be implemented in order to achieve its ambitious targets.

Public funding on energy-focused research and development has roughly quintupled between 2005 and 2008, and pre-crisis 2008 levels of spending have since been maintained throughout the financial crisis. Thanks to its proven record of engaging with information and communications technology companies and to its strong research infrastructure, Ireland has become a world leader for smart grid deployment. Smart grid technology is key to supporting the ambitious targets in the deployment of clean generation and end-use technologies, such as variable renewable energies and electric vehicles.

CONSOLIDATING ENERGY SECURITY

Ireland has limited indigenous fossil fuel resources – the country remains dependent on imported oil and gas and will remain so in the long term. While the push to develop renewable energies is commendable, this will also result in an increased reliance on natural gas, as gas-fired power plants will be required to provide flexibility in electricity supply when wind power is unavailable. With some two-thirds of Ireland's electricity already coming from gas-fired generation, the push for renewable energies poses certain concerns with regard to gas security.

Ireland's gas market is characterised by its very high dependence on imports, and 93% of its gas supplies comes through a single transit point in Scotland, Moffat. Ireland is thus vulnerable to a gas supply disruption, and would benefit significantly if there were a greater diversification and flexibility of supply in terms of entry points and sources. In this regard, the development of upstream gas fields, such as Corrib, and the proposal to build a liquefied natural gas (LNG) terminal in the Shannon Estuary, would be highly beneficial to Ireland's security of supply.

Imported oil remains the single largest source of energy, and is a major source of GHG emissions. The sector is undergoing a major restructuring at present and its future configuration is uncertain. There is uncertainty regarding the future of Ireland's only oil refinery in Whitegate after 2016. It could be argued, however, that the high level of liquidity in the north-west European oil product market means that the potential absence of a refinery should not pose a significant risk to Ireland in terms of security of oil supply and competition. Efforts to increase levels of oil stocks in Ireland, such as the 2009 regulatory decision to oblige baseload gas-fired generators to hold five days of secondary fuel stocks (generally gasoil) on site and the push by the national stockholding agency (NORA) to increase the amount of wholly owned stocks located on the island of Ireland, are laudable steps for improving Ireland's energy resilience.

IMPROVING INFRASTRUCTURE PLANNING

In order to meet Ireland's ambitious renewable targets and improve the island's level of energy security, the country will need to successfully develop a range of large infrastructure projects. In the electricity market, key projects are the development of new wind farms (close to 4 000 megawatt [MW] of additional wind generation capacity is required to meet renewable energy targets), their integration in the network by

means of the improved connection procedure, the construction of transmission and distribution lines to bring wind-generated electricity from the Atlantic seaboard to key demand centres, and the completion of additional transmission capacity between the Republic of Ireland and Northern Ireland. In the gas market, steps must be taken to ensure the development of the Corrib gas field and explore prospective shale gas reserves, and encourage the development of the proposed LNG terminal in the Shannon estuary. Commendably, the government and the regulator are taking steps to address regulatory hurdles and uncertainties that are affecting investment decisions.

Yet as is the case in numerous OECD countries, there are also recurrent challenges associated with gaining local community acceptance for large-scale energy infrastructure projects such as the delivery of indigenous gas (e.g. the Corrib gas field) and the construction of renewable energy capacity and transmission infrastructure. Social acceptance and understanding of the need for new infrastructure is critical. It is important for the government to enhance public awareness in relation to the fundamental benefits in terms of security of energy supply, environmental sustainability and economic and regional development, as well as improving energy cost competitiveness. A more integrated approach by project developers to early engagement and consultation with all stakeholders will ensure a more balanced public debate and a more timely delivery of projects. The planning and consenting process needs to ensure timely, sustainable and reliable decisions for all stakeholders, and the government should review the effectiveness of the consultation processes at local level as well as the Strategic Infrastructure Act in delivering the desired outcomes. At an international level, the government should continue to work with the European Union and IEA on the shared challenge of ensuring the delivery of large-scale infrastructure projects.

DEEPENING REGIONAL INTEGRATION

Ireland has successfully implemented the all-island Single Electricity Market (SEM) with Northern Ireland, which has made a positive impact on market entry, and alongside changes to the manner in which the retail markets are regulated, has allowed genuine competition between suppliers to emerge. Nevertheless, the electricity incumbent, state-owned Electricity Supply Board (ESB), continues to maintain almost half of total dispatchable generating capacity and most of the price-setting generation assets in the SEM, obliging the regulatory authority to implement specific bidding rules and a market monitor to regulate market behaviour. A further divestment of some of ESB's non-core generation assets, currently under consideration by the Irish government, could allow for a relaxation of the rules on bidding, thus allowing for greater flexibility and competition among market participants. In the context of ongoing electricity market reform, it is important that the energy regulator is sufficiently empowered to ensure that market and competition rules are strictly adhered to, and that the interests of consumers are protected.

The SEM will be further strengthened when key infrastructure projects currently under way are implemented, notably allowing for generators in Ireland to export their wind resources to the island of Great Britain and further afield in the future. Yet concerns remain with regard to the future of the SEM within a regional electricity market. The United Kingdom is at present reforming its electricity market and introducing a carbon price floor, which poses a number of opportunities but also risks for the Irish consumers. The two islands will be further integrated when the East-West Interconnector is commissioned by late 2012, giving generators in Ireland better access to the United Kingdom

market and vice versa. The changes being planned to the existing gross mandatory pool model in Ireland should take account of the need to ensure that the Irish consumers pay appropriate prices for electricity in the future. The two governments should continue and enhance their structured and formal engagement, so as to ensure a strong and mutually beneficial level of co-ordination between the two countries, in working towards their integration into the European Union target model in the medium term.

In the gas market, the governments of Ireland and Northern Ireland are working to develop a Common Arrangements for Gas (CAG) framework, replicating the success of the all-island Single Electricity Market. CAG has the potential to bring benefits to all consumers, both in terms of security of supply and cost reductions, through increased competition. Furthermore, the project has the capability of providing for further regional integration beyond the island of Ireland and contributing to achieving the 2014 single market goal set by the European Council. Specific attention must be given however to ensuring that this significant regulatory development delivers optimal results in terms of competition, economic efficiency and end-user prices, and the design of CAG should also be aligned with emerging EU Framework Guidelines and Network Codes. More generally, Ireland should continue to co-operate with the United Kingdom and the European Commission, in order to ensure that regulatory decisions beyond Ireland's border do not negatively impact its gas market.

KEY RECOMMENDATIONS

The government of Ireland should:

interests of consumers are protected.

Continue to encourage greater diversification and flexibility of gas supply, in light of the country's high level of reliance on the fuel.
 Maintain funding support to develop and deploy new low-carbon technologies in which Ireland possesses a comparative advantage, including wind, biomass, ocean and smart grids.
 Further enhance the consultation, planning and consenting process for critical energy infrastructure projects, with an emphasis on balancing the concerns of local communities with the economic, social and energy security benefits of the proposed projects.
 Ensure that participation in regional energy markets brings benefits to Irish consumers and certainty for investors in the energy market, by working closely with regional partners and the European Union.

☐ Ensure that the powers of the energy regulator are enhanced as necessary in order to ensure that market and competition rules are strictly adhered to and that the

2. GENERAL ENERGY POLICY

Key data (2010)

TPES: 14.4 Mtoe (oil 48%, natural gas 33%, coal 9%, peat 6%, renewables 4.6%) +4.9% since 2000

TPES per capita: 3.2 toe (IEA average: 4.7 toe)

TPES per GDP: 0.09 toe per 1 000 USD GDP (IEA average: 0.15 toe per 1 000 USD GDP)

Electricity generation: 28.4 TWh (natural gas 62%, coal 15%, wind 10%, peat 8%, budge 3% all 3%)

hydro 2%, oil 2%)

Inland energy production: 2 Mtoe, representing 14% of total energy supply

OVERVIEW

Ireland has a population of 4.6 million of which slightly more than 1.8 million reside in the greater Dublin area. Outside Dublin and the central eastern region of Leinster, the country is sparsely populated, with the major centres being Cork on the southern coast, Limerick and Galway on the western coast. The island is shared between (the Republic of) Ireland and Northern Ireland which is part of the United Kingdom. Ireland is bounded on the west and south by the Atlantic Ocean, on the east by the Irish Sea and on the north by Northern Ireland.

Total land area is slightly below 70 000 km². The climate is temperate maritime, strongly influenced by the North Atlantic Current. It consists of mild winters and cool summers with a relatively high degree of humidity throughout the year. Snowfall is rare, and temperatures rarely drop below freezing point.

The Irish economy was severely affected by the financial crisis in 2008 — and notably affected by a property market crash — after more than a decade of sustained growth that had propelled Ireland to among the highest level of GDP per capita in the OECD. In November 2010, Ireland received a EUR 85 billion rescue package from the European Union and the International Monetary Fund, but it has not required further financial aid.

The government is a coalition of Fine Gael (centre-right) and the Labour Party (centre-left), and has been in office since the March 2011 general election.

SUPPLY AND DEMAND

SUPPLY

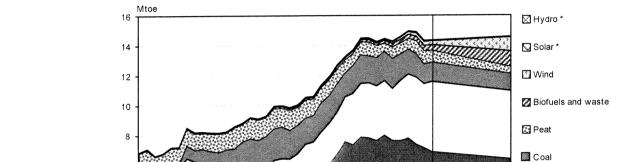
Total primary energy supply (TPES) in Ireland was 14.4 Mtoe in 2010, 5% lower than in 2007 as a result of the financial crisis. Over a longer time-frame, however, the average annual growth of TPES since 2000 stands at around 0.5%, while the

economy has grown on average by 2.4% per year over the same period. According to government forecasts, TPES is expected to remain stable over the next decade.

☐ Natural gas

Oil

2013 2017



1993

1997

2001

2005

2009

Figure 2. Total primary energy supply, 1973 to 2020

6

4

2

1973

Sources: IEA (2011a), and data submitted by the government of Ireland to the IEA.

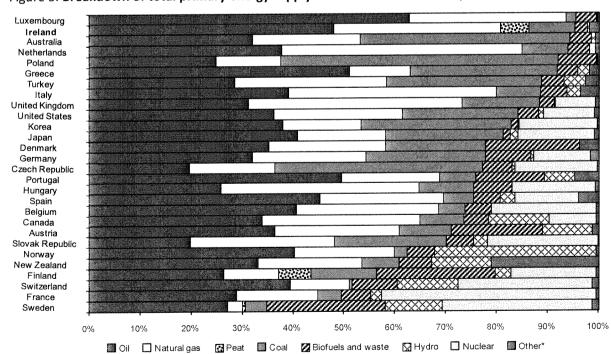


Figure 3. Breakdown of total primary energy supply in IEA member countries, 2010

16

^{*} Negligible.

^{*} Other includes geothermal, solar, wind, and ambient heat production. Source: IEA (2011a).

In terms of fuels, oil is the largest energy source in TPES, representing almost half of TPES. Ireland has the third-highest share of oil in the energy mix among IEA member countries, with only Luxembourg and Greece having an even higher share in their fuel mix. Natural gas is the second-largest energy source. Gas supply has increased rapidly, by 3% per year over the last decade, and amounted to 4.7 Mtoe or 33% of TPES in 2010. Ireland has the fifth-largest share of gas in its TPES among IEA member countries, behind the Netherlands, the United Kingdom, Italy and Hungary.

Coal is the third-largest energy source in Ireland, accounting for 9% of TPES in 2010, and peat the fourth-largest with around 6%. Therefore, the total share of fossil fuels sums up to 95% in TPES in 2010, the second-highest share among all IEA member countries. Renewable energy sources represent 4.6% of TPES, constituted mainly of wind with biofuels and waste.

Ireland imports nearly all of its energy needs, as indigenous energy production only amounts to 2 Mtoe, covering 14% of TPES. The largest indigenous energy source is peat, representing half of total inland production in 2010, while natural gas, biofuels and wind each roughly represented 0.3 Mtoe, or 16% of production.

Compared to other IEA countries, wind plays an important role in Ireland's energy mix. Ireland has the fourth-highest share of wind in TPES and in electricity generation, after Denmark, Spain and Portugal. Wind represents 16% of indigenous energy production, the highest share among all IEA member countries.

Other renewable energy sources like solar and hydro do not play a large role in Ireland, mainly because of its geographic and topographic situation.

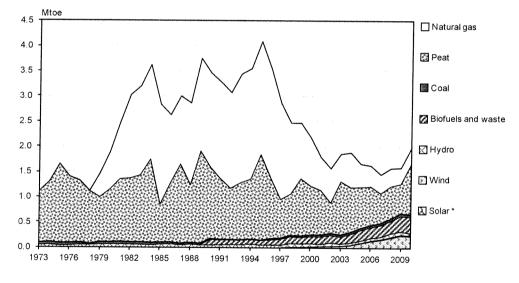


Figure 4. Energy production by source, 1973 to 2010

* Negligible.
Source: IEA (2011a).

DEMAND

Total final energy consumption (TFC) amounted to 11.2 Mtoe in 2010, comparable to 2009 levels, but 11% lower than the all-time high reached in 2006. The government expects final consumption to remain at around current levels over the coming decade.

Transport is the largest final energy-consuming sector, representing 35% of TFC in 2010, and demand in the sector is expected to increase by more than 40% by 2020. Industry accounted for 19% of final energy consumption in 2010, significantly lower than the IEA average of 32%. Ireland's industry has the second-lowest share of energy consumption in TFC among IEA member countries, after Denmark, where industry's share accounts for just 18% of TFC. On the other hand, energy consumption in the residential sector accounted for 28% of TFC in 2010, well above the IEA average of 20%. The commercial, public service and agriculture sectors together accounted for 17% of TFC in 2010.

Overall, the share of primary energy converted into heat in Ireland was 44% in 2010. This share has decreased, but remains higher than the IEA average (37% in 2010). The energy used for transport, which is growing, is also higher than the IEA average. In contrast, energy use in form of electricity was 19% of TFC, lower than IEA average of 22% but at similar levels to countries like the United Kingdom, Germany and Austria.

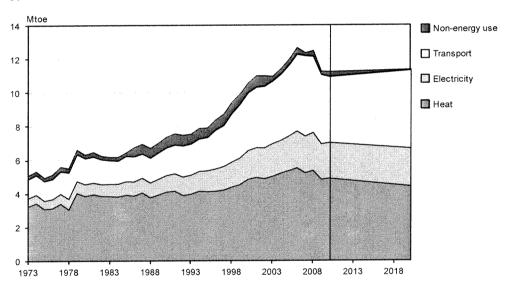


Figure 5. Final energy use in Ireland, 1973 to 2020

Sources: IEA (2011a), and data submitted by the government of Ireland to the IEA.

INSTITUTIONS

Three main bodies are responsible for the formulation and delivery of the government's energy policy – the Department of Communications, Energy and Natural Resources (DCENR) at central government level, the independent Commission for Energy Regulation (CER) and the Sustainable Energy Authority of Ireland (SEAI), which advises the government on a range of energy and sustainability issues and delivers a number of relevant Energy Efficiency, Renewable Energy and R&D programmes.

The **Department of Communications, Energy and Natural Resources (DCENR)** is the lead government department with responsibility for setting overall energy policy. The department determines overall policy to safeguard security of energy supply, develop a sustainable energy future and competitive, efficient and properly regulated energy markets. The Energy Policy section of the department is divided into six divisions:

- Energy Planning and Electricity Corporate Division;
- Electricity and Gas Regulation Division:
- Oil Security and Energy Corporate Governance Division;
- Renewable and Sustainable Energy Division;
- Energy Efficiency and Affordability Division; and
- Office of Chief Technical Advisor.

The Commission for Energy Regulation (CER) was established under the Electricity Regulation Act in 1999 to oversee an open, transparent and accountable regulatory process for Ireland's electricity industry. The 2002 Gas (Interim) Regulation Act expanded the CER's jurisdiction to include both gas and electricity. The CER facilitates competition in the energy sector by authorising the construction of certain energy infrastructure and licensing energy undertakings. The CER has a regulatory role in relation to the operation, maintenance and licensing of the transmission and distribution networks. It approves terms and conditions (including tariffs) for third-party access to electricity and gas networks and facilities. It is legally independent in the performance of its functions. It is funded by means of a levy on energy undertakings and income from licensing fees.

The stated functions of the CER are the following:

- ensuring sufficient capacity in the electricity and gas systems to meet reasonable demands for supply of natural gas and electricity;
- protecting the interests of final customers, including the disadvantaged, the elderly and those residing in rural areas;
- promoting competition in supply of electricity and natural gas and electricity generation;
- ensuring no unfair discrimination between applicants for or holders of licences, consents and authorisations or between them and state-owned operators;
- promoting the continuity, security and quality of supplies and encouraging safety and efficiency in undertakings and by end-users;
- monitoring security of electricity and gas supplies and taking appropriate action to ensure satisfactory margins between supply and demand;
- ensuring that licence and authorisation holders are capable of financing their activities;
- setting standards, enforcing compliance, settling disputes, controlling and monitoring performance and reporting regularly on these activities;
- promoting research and the use of sustainable forms of energy that reduce or are free of greenhouse gas emissions as well as adopting measures to protect the natural environment in all the sectors' activities;
- advising government on the development and regulation of the gas and electricity sectors;
- regulating the activities of electrical contractors with respect to safety;
- regulating the activities of natural gas undertakings and natural gas installers with respect to safety;
- promoting the safety of natural gas customers and the public generally as respects the supply storage, transmission, distribution and use of natural gas;

- establishing and implementing a natural gas safety framework; and
- establishing and implementing a risk-based petroleum safety framework.

The Sustainable Energy Authority of Ireland (SEAI) was established under the 2002 Sustainable Energy Act in 2002, and is responsible for advising government on policies and measures on sustainable and renewable energy (including energy efficiency), implementing programmes agreed by government and stimulating sustainable energy policies and actions by public bodies, the business sector, local communities and individual consumers. Its stated principal functions are:

- supporting government decision making through advocacy, analysis and evidence;
- driving demand reduction and providing advice to all users of energy;
- driving the decarbonisation of energy supply;
- raising standards in sustainable energy products and services;
- building markets based on quality, confidence and proven performance;
- fostering innovation and entrepreneurship; and
- improving the coherence of Irish energy research and development.

The **Competition Authority** is an independent, statutory body, which was established in 1991. Its functions, as set out in the 2002 Competition Act, include the enforcement of competition law, the review of mergers and competition advocacy. The 2002 Competition Act also clarifies the relationship between the Competition Authority and the sectoral regulatory authorities. It provides for a co-operation agreement between the Competition Authority and the sectoral regulator on the sharing of information and consultation to avoid duplication of efforts.

The **Environmental Protection Agency (EPA)** is responsible for licensing all activities with a significant pollution potential, through the Integrated Pollution Control licensing system. The Agency is also responsible for implementing the Emissions Trading Directive in Ireland. It is overseen by the Department of the Environment.

KEY POLICIES

Ireland's very limited indigenous energy resources shape government policy to exploit its existing peat and renewable energy resources, particularly wind, to as great an extent as possible. Irish energy policy acknowledges the high level of import dependence and supports measures to strengthen the competitiveness and integration of international energy markets. Recent increases in oil and gas prices and volatility in the geographical regions of supplier countries are seen as a threat to maintaining secure energy supplies at competitive prices. Ireland's relative geographical isolation within the European Union has led the government to support measures to increase the integration of European energy markets, including stronger UK-Ireland interconnections and stronger north and south interconnections within the island of Ireland.

2007 ENERGY POLICY FRAMEWORK

Ireland last formally outlined its energy policy in a 2007 White Paper entitled "Delivering a Sustainable Energy Future for Ireland", which set out the then government's Energy Policy Framework over the 2007-20 period. It set targets and actions out to 2020 for

meeting the government's goals of ensuring safe and secure energy supplies, promoting a sustainable energy future, and supporting competitiveness, and takes account of the evolving European Union framework, IEA developments and the push for regional integration, both on the island of Ireland and with its neighbouring European countries.

Actions to ensure security of energy supply

So as to meet the policy objective to ensure that energy is consistently available at competitive prices with minimal risk of supply disruption, the Energy Policy Framework outlined the following strategic goals:

- ensuring that electricity supply consistently meets demand:
- ensuring the physical security and reliability of gas supplies to Ireland;
- enhancing the diversity of fuels used for power generation:
- delivering electricity and gas to homes and businesses by means of efficient, reliable and secure networks;
- creating a stable attractive environment for hydrocarbon exploration and production; and
- being prepared for energy supply disruptions.

Actions to promote the sustainability of energy supply and use

So as to ensure that a sustainable energy future is being met, the following strategic goals were set:

- addressing climate change by reducing energy-related greenhouse gas emissions;
- accelerating the growth of renewable energy sources;
- promoting the sustainable use of energy in transport;
- delivering an integrated approach to the sustainable development and use of bioenergy resources;
- maximising energy efficiency and energy savings across the economy; and
- accelerating energy research development and innovation programmes in support of sustainable energy goals.

Actions to enhance the competitiveness of energy supply

A key policy objective is to ensure a reliable and competitively priced energy supply and competition in energy markets in support of economic growth and national competitiveness. The following underpinning strategic goals were set:

- delivering competition and consumer choice in the energy market;
- delivering the all-island energy market Framework;
- ensuring that the regulatory framework meets the evolving energy policy challenges;
- ensuring a sustainable future for semi-state energy enterprises;
- ensuring affordable energy for everyone; and
- creating jobs, growth and innovation in the energy sector.

POLICY DEVELOPMENTS SINCE 2007

Ireland has experienced huge changes to its economic outlook since 2007, as it was particularly affected by the world financial crisis. While Ireland has remained committed to the objectives laid out in the 2007 Energy Strategy, the worsened financial and economic climate has affected some aspects of its energy policy, notably in terms of demand, investments and priorities. Ireland received a EUR 85 billion package of financial support from member states of the European Union through the European Financial Stability Fund (EFSF) in November 2010. As a condition for the financial assistance, Ireland will undertake fiscal policy and structural reforms, some of which pertain to the energy sector. Ireland was notably requested to undertake "an independent assessment of the electricity and gas sectors, taking due account of the European Union regulatory context for these sectors", which was conducted by the International Energy Agency in late 2011.

The government intends to publish a new *Energy Policy Framework 2012-2030* in 2012, taking account of developments over the past few years since the publication of the 2007 White Paper, as well as European Union and international developments. The government indicates that the overriding objectives of Irish energy policy will remain consistent – security of supply, competitiveness and environmental sustainability will continue to be the pillars of energy policy.

With regard to its European Union commitments, Ireland has also published a National Energy Efficiency Action Plan (NEEAP) in May 2009, and a National Renewable Energy Action Plan (NREAP) in July 2010. These actions plans are described in further detail in Chapters 4 and 6.

Ireland published a Renewable Energy Strategy in May 2012. The government is also launching a second updated National Energy Efficiency Action Plan in July 2012.

NEWERA SHAREHOLDER EXECUTIVE

In September 2011, the government announced the establishment of the New Economic and Recovery Authority (NewERA), under the National Treasury Management Agency. NewERA is to carry out the corporate governance functions from a shareholder perspective and to assess and reform the state's management and shareholding arrangements in the companies in which the state has a majority stake, initially including ESB, Bord Gáis, EirGrid, Bord na Móna, and Coillte. NewERA will carry out the corporate governance function for these companies, and will have responsibility for reviewing capital investment plans, and potential synergies between companies, taking a portfolio approach to managing the government's shareholdings.

The financial crisis has had an important impact on Ireland's finances, and the government has agreed to an asset divestment programme as part of the EU/ECB/IMF programme. In this regard, the NewERA shareholder executive is tasked with advising on, and if appropriate oversee, any restructuring of state companies, in co-ordination with the Minister for Public Expenditure and Reform, on the disposal of state assets.

The NewERA shareholder executive reports to the Minister for Energy for matters concerning capital investment and other financial decisions taken by the energy semi-state companies. The Minister for Energy retains oversight for the government's overall energy policy objectives and related framework for the energy state companies.

TAXATION

All taxation matters, including indirect taxes such as VAT and excise duty, are the responsibility of the Department of Finance. This includes energy taxation.

Taxation or excise duty on the main energy fuels have been increased since 2006 and a carbon tax was introduced in the 2010 budget. Excise on petrol and automotive diesel was increased in the 2009 emergency budget and the supplementary budgets and in the 2011 budget.

A carbon tax, at a rate of EUR 15 per tonne of carbon dioxide (CO_2) emitted, was applied to petrol and auto-diesel with effect from 10 December 2009, and was extended to other mineral oils with effect from 1 May 2010. A natural gas carbon tax was also introduced on 1 May 2010 (see Chapter 3 for further details). A solid fuel carbon tax is provided for in the Finance Act 2010, subject to a ministerial commencement order. The current mineral oil tax on coal will be abolished simultaneously with the commencement of the new provisions on solid fuels.

Fuel used for electricity generation is exempt from excise duty, including the carbon tax. Relief from carbon charge also applies to mineral oil and natural gas used in installations covered by the Emissions Trading Scheme (ETS) subject to the fuels being liable to, at least, the relevant European Union minimum rate.

Substitute fuels that are intended or suitable for use as a propellant in a motor vehicle for which petrol can also be used are liable to mineral oil tax at the petrol rate. Other substitute fuels intended or suitable for use as a propellant in a motor vehicle are liable at the automotive diesel rate.

Substitute fuels that are biofuels qualify for relief from the carbon charge component of the mineral oil tax. In the case of blends of biofuels and other fuels, the relief only applies to the biofuel portion of the blend.

CRITIQUE

The government's Energy White Paper, published in 2007, articulated the then government's vision for a national energy-policy framework up to 2020. The document established a roadmap towards meeting the government's goals of ensuring safe and secure energy supplies, promoting a sustainable energy future, and supporting competitiveness. However, Ireland's economic circumstances have changed dramatically since 2007 - as have the world economy and particularly the energy sector - and a reconfiguration of energy policy is needed if Ireland is to adapt to its present position. The government indicates that it is currently developing a new energy strategy that will take these new circumstances into full account. This revised strategy framework must outline concrete milestones and roadmaps for achieving its ambitious renewable energy and climate change targets, and critically assess the feasibility of current policies in meeting these targets. Costs and competitiveness should remain a key focus of the new energy policy strategy, notably with regard to subsidies (e.g. REFIT tariffs for renewables, and the public service obligation), bearing in mind the potential for tension at times between the two objectives of promoting the transition to a low-carbon economy and ensuring that Irish consumers are provided with reliable and cost-efficient energy sources.

The recent economic crisis and the resulting structural changes in the underlying economy had a positive impact on Ireland's emission profile. Notwithstanding this, Ireland has

adopted a range of policies that have also facilitated this reduction. The Irish government introduced a carbon tax on oil products in 2008 and it is expected that behavioural changes will emerge if the price moves toward EUR 30 per tonne in 2014. The carbon tax has yielded substantial revenues to the government, and the stated objectives of the use of this tax revenue are noted. Yet despite the visible progress, the future of emissions reduction schemes post-Kyoto remains uncertain. Ireland's unique emission profile in Europe means that the range of options available is limited, and the government must provide a clear signal to stakeholders as to the shape of the post-2012 regime.

Energy is a cornerstone of the modern economy and delivering an efficiently functioning and organised energy system should be a priority for the government if it is to meet its commitments to sustainable economic growth. The government's announcement of the NewERA shareholder executive in September 2011 to oversee and reform the state's stake in energy companies is a welcome development in terms of promoting competitiveness, efficiency and transparency in the gas and electricity markets. Enhanced governance in the energy sector is an objective that was highlighted under the EU/IMF Programme of Financial Support for Ireland.

As part of the established NewERA shareholder executive, it is timely for the government to reassess the state's role in the energy sector, and notably with regard to the level of state ownership of energy companies operating in Ireland, and particularly in the gas and electricity markets, which remain dominated by state-owned companies such as ESB, BGÉ, Bord na Móna and Coillte. The expansion of the gas and electricity incumbents, BGÉ and ESB respectively, into other energy sectors admittedly adds a significant element of competition, but it also ultimately only further consolidates the dominance of state-owned companies in the retail market. It is not clear that having multiple wholly state-owned participants in the energy sector leads to the optimal outcome for the consumer. The government's stated intentions to retain the gas and electricity networks as key strategic infrastructure in majority state ownership is noted. In February 2012, the government announced that it would proceed with the sale of BG Energy, BGÉ's retail division, and some of ESB non-strategic generation assets. Reducing government participation in these sectors is a welcome move. In undergoing its restructuring, Ireland must ensure that its energy sector is compliant with EU Energy Third Package legislation.

RECOMMENDATIONS

The government of Ireland should:

Publish a new Energy Policy Framework this year that articulates the government's vision for post-2012 national energy policy framework up to 2020 and beyond, taking account of European Union and IEA developments.
 Outline a clear plan for emissions reduction targets and the future of the carbon tax in Ireland, so as to allow industry and market players to adapt accordingly.
 Continue to review the competitive landscape of the non-regulated gas and electricity sectors, with a focus on the appropriateness and depth of state activity in these sectors and in line with European Union legislation.
 Ensure that NewERA, in its new Shareholder Executive capacity, has a strong focus on driving cost efficiencies in the companies and within the network businesses, with a view to meeting or exceeding the CER's efficiency measures and targets.