



IBEC Energy Policy Committee

**Submission on Energy Policy Green Paper:
Toward a Sustainable Energy Future for Ireland**

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1. Overview

- 1.1 IBEC welcomes the opportunity to comment on the Department of Communication, Marine and Natural Resources' Energy Green Paper *Towards a Sustainable Energy Future for Ireland*. IBEC believe sustainable energy is central to the economic, environmental and social objectives of Ireland and requires an energy policy that is appropriate, integrated and deliverable. Clean, reliable and competitive energy is critical to the Irish economy.
- 1.2 The importance of an energy policy has recently been evidenced by rapidly rising fuel prices, increasing concerns over security of supply and ever more stringent environmental obligations.
- 1.3 Given the importance and urgency of a policy, IBEC is disappointed at the belated publication and limited direction of the document. While it effectively summarises the current status quo, IBEC believes it lacks the long-term vision, targets, delivery mechanisms and sense of urgency required to meet the formidable challenge of delivering sustainable energy.
- 1.4 To address these concerns it is imperative that the White Paper contains firm policy actions and targets covering all sectors which are both evidence-based and economically efficient, and that structures are established to deliver them in an integrated and timely fashion.
- 1.5 The White Paper must address all sources of energy demand. While the Green Paper places much focus on electricity, the White Paper must identify measures for other significant sectors of energy consumption particularly transport and the heating and lighting of buildings. The cross-sectoral nature of energy requires integrated policy making in relevant areas, including the National Climate Change Strategy, Transport 21, the National Spatial Strategy and Building Regulations.
- 1.6 Ireland, like its EU and global partners, is facing a significant and mounting challenge over the coming decade to take meaningful action to address climate change. With further more stringent climate change targets likely, Ireland's energy policy must be framed to address this challenge.
- 1.7 Decisions today will decide the shape of Ireland's energy future. An appropriate policy requires:
 - 1.7.1 **Policy Mechanisms and Integration**

The document correctly identifies the need for an integrated and cohesive cross-sectoral framework as the complexity and interdependencies of the issues requires coordinated actions from many stakeholders. Integration will be essential and the Paper lacks details on how cross-sectoral policy actions are to be integrated, co-ordinated and delivered.

Furthermore, energy policy must deliver the most efficient and effective options based on thorough economic analysis and balance the compromises needed to achieve a secure, sustainable and competitive energy future.
 - 1.7.2 **Innovation**

The global energy landscape has evolved considerably in the past decade, driven by changes in fossil fuel price and supplies; market liberalisation; and the impact of carbon emissions on global warming. Ireland must address each of these challenges in the context of its unique characteristics. We, therefore, need to be innovative in our approach and

investigate, select and implement economically sound actions that will deliver overall energy sustainability in Ireland. IBEC believes it is fundamental that Ireland's energy policy be formally reviewed at least every five years in order to take account of changing conditions (e.g. technological innovation).

1.7.3 **Timely Delivery**

Ireland currently needs significant investment in infrastructure, particularly in electricity generation, gas and electricity networks and interconnection. This investment must take place in a timely manner to meet the country's growing demand. With many decisions now a function of the market it is essential that the Government, through policy, and the Regulator, through regulation, provide adequate and appropriate market signals to deliver this investment in a manner which matches demand.

1.7.4 **Leadership**

Given the complexities of energy demand and consumption it is essential that stakeholders act cohesively to achieve the optimal results. This requires joined up short, medium and long-term thinking across Government departments and stakeholders. It also requires decisive leadership to work toward and deliver the preferred path. With this in mind, IBEC recommends the establishment by Government of a high level advisory group on energy. This group, comprised of industry leaders and experts, will provide integration, cohesion and carry out an ongoing assessment of policy delivery.

1.7.5 **Rigorous Analysis**

As a key component of sustained economic growth it is essential that decisions made on energy are well informed, evidence-based and underpinned by economic feasibility. IBEC acknowledges the level of analysis currently commissioned by the Department and believes that it will be beneficial to the proper implementation of a comprehensive energy strategy for Ireland. It is imperative, however, that these reports be completed in a timely manner and their recommendations appropriately considered and actioned in the White Paper.

2. Actions for Delivering Sustainable Energy

2.1 Environmental Challenge

2.1.1 Climate change policies at international, EU and national level will influence energy policy in an ever increasing manner. While post-Kyoto reduction targets, currently under discussion, will significantly shape future Irish energy policy, the document fails to adequately address this issue.

2.1.2 As a key policy driver, Government must not only set an indicative 2020 national emissions reduction target, but identify the measures by which the goal can be achieved, particularly those pertinent to the energy sector. This must be done in the context of maintaining security of supply and competitiveness. The White Paper must integrate fully with the National Climate Change Strategy (NCCS).

2.1.3 Focus on emissions abatement has to date concentrated on electricity generation but, as electricity represents less than one-third of Ireland's

total primary energy requirement, abatement strategies must incorporate all sectors, particularly transport and buildings heating and lighting. The Green Paper or the NCCS consultation document give little confidence that additional policies and measures for abatement will be extended proportionately to all sectors of society.

- 2.1.4 IBEC is generally supportive of targets outlined in the Green Paper, including the 20 percent energy efficiency, 15 percent and 30 percent renewables and the 30 percent co-firing of peat-fired power stations targets. However, before being finalised in the White Paper, the rationale behind these targets and the cost/benefit analysis of delivering them needs to be explained.
- 2.1.5 IBEC supports the Government's and Ireland's commitment to environmental protection but this must be achieved while maintaining international competitiveness.

2.2 Maximising Indigenous Resources

As highlighted in the Green Paper, a fundamental challenge for Ireland is our 90 percent dependence on imported fossil fuels, particularly oil, gas and coal, representing 56, 25 and 13 percent of total primary energy requirement respectively. This exposes Ireland to the volatility of fuel prices but also security of supply risks. Ways to address this include: developing potential reserves, improving security of oil and gas supply, diversifying fossil fuel sources, and developing alternate energy sources.

2.2.1 **Developing Potential Reserves**

Fossil fuels will remain part of the fuel mix for the foreseeable future so it is prudent to harness available Irish resources. With strong reserve potential off Ireland's west coast, the Government must promote a climate conducive to off-shore exploration. The primary method of doing this is through fiscal measures and the declining levels of exploration activity in recent years show improved measures must be brought forward. IBEC propose that the DCMNR review of the current fiscal scheme, in conjunction with the Department of Finance, be expedited for delivery in early 2007.

Of equal importance are the issues arising from the Corrib gas field. At maximum production Corrib will meet over 50 percent of national demand during initial years of operation, have a field life of some 16 years and provide a gas supply line from the west. The difficulties currently being experienced send incorrect signals to potential exploration companies. Companies will be unwilling to invest in exploration off Ireland if they believe that, having gone through the statutory licensing and consent processes, they may still be unable to recover their find due to local disputes. This issue must be resolved as a matter of priority.

2.2.2 **Improve Security of Oil and Gas Supply**

IBEC welcomes the Government's commissioning of reports on oil and gas security. Comprising 71 percent of total primary energy requirement in Ireland, adequate contingency infrastructure must be in place, including oil (particularly for transport) and gas storage in Ireland, reinforcement of the Moffat gas connection and investigation into the potential for LNG on the island. The reports must be delivered in time to be fed into final policy decisions in the White Paper.

2.2.3 **Diversify Fossil Fuel Sources**

Given the relative abundance of coal, Ireland must look to this fuel as a means of diversifying fuels in electricity production. While coal is high in

carbon, new technologies coming on-stream, including clean coal, gasification and carbon sequestration, must be tracked carefully. While it is unlikely that a new coal-fired power station will be built in the short-term, it will be prudent to track this technology as a possible solution for diversity in Ireland in the medium to long-term.

Peat is an indigenous fuel source with a further 20 years of supply estimated. To extend its life span and to significantly reduce carbon emissions, IBEC supports the Government's 30 percent biomass co-fuelling target. However IBEC is concerned by the lack of economic analysis and delivery mechanisms for achieving the target. Until this is addressed it will be difficult to meet the target.

2.2.4 **Developing Alternative Indigenous Resources**

As discussed above, Ireland's reliance on imported fossil fuels brings price, security and environmental risks. Ireland must, therefore, seek to harness cost effectively, indigenous sources including wind and bioenergy.

IBEC supports the Government's target of 15 percent renewables penetration by 2010 and the 30 percent target to 2020. However, there are a number of barriers which must be overcome to make this target achievable including:

- economic analysis for achieving 30 percent renewables
- transmission system capability to manage intermittent supply
- market signals to deliver flexible conventional generation plant
- system planning supporting non-dispatchable renewables and distributed generation
- market-based support mechanisms in support of additional renewable capacity.

A vital study in informing the debate on renewable energy is the All-Island Grid Study assessing the potential of partially dispatchable, non-dispatchable and embedded generation. Again this data must be concluded in time for it to inform policy in the White Paper.

Bioenergy is an area that has recently seen significant growth and is a unique area of energy policy that draws together the agriculture, waste, manufacturing industry (particularly food) and petroleum sectors. Bioenergy offers significant potential in its ability to provide indigenous sources of fuel for heating, electricity and transport and in contributing to reducing greenhouse gas emissions.

Ireland has potential to develop a strong bioenergy industry in both biomass and biofuel, however it lacks a clear plan detailing how a supply chain will be developed, how it may be supported¹ and similarly information on the feasibility of developing processing facilities such as bio-refinery or wood pellet manufacture.

A further source of bioenergy that is as yet unused is thermal treatment of waste. Government must ensure that the introduction of thermal treatment facilities maximises energy recovery and uses the heat element in the most efficient manner.

An imminent report from the interdepartmental taskforce on bio-energy has the opportunity to deliver integrated policies, with targets and mechanisms by which the potential of bioenergy can be maximised.

¹ Bioenergy solutions remain marginally uncompetitive against traditional fuels in most instances. In order to support the uptake of bioenergy solutions the Government must provide fiscal supports, particularly excise duty relief on fuels, the expansion of feed in tariffs for bioenergy fuelled electricity generation, supporting the development of energy crops and capital grant aid for equipment.

Similarly the White Paper must set out the vision, measures and structures to optimise the potential of renewable energy.

2.3 Evaluating Nuclear Power

- 2.3.1 Given Ireland's fuel import dependence, the limited long-term global reserves of fossil fuels, the economic impact of dependence on fossil fuels and the challenge posed by global warming, IBEC believes it is essential to thoroughly evaluate all possible options for providing sustainable energy in Ireland. Through interconnection and further integration in EU energy policy, nuclear power will already be part of the solution.
- 2.3.2 As a proven technology IBEC does not believe it appropriate, in the absence of a meaningful debate, to dismiss nuclear as a possible option. As stated by the Joint Oireachtas Committee on Communication, Marine and Natural Resources², the potential role of nuclear must be transparently evaluated (technical and economic) and debated, particularly in light of technological advances that have occurred in recent years. IBEC, therefore, calls on the Government to commission a study into the potential of nuclear power in Ireland and re-evaluate its position based on this evidence.

2.4 Competitive Markets – Electricity and Gas

- 2.4.1 Over recent years Ireland has experienced significant increases in energy prices. This increase has caused much disquiet among consumers, particularly the manufacturing industry who are unable to pass these costs on. If Ireland is to remain internationally competitive, energy costs must be brought in line with our international competitors.
- 2.4.2 Driven by EU legislation, Ireland has now moved from a centrally planned energy system to a liberalised model with market forces driving investment decisions. In a liberalised system it is critical that the policies and regulatory framework provide the correct signals for market investment³.
- 2.4.3 For the Government and the Commission for Energy Regulation, Ireland poses significant difficulties for effective liberalisation. Certainly the geographic location and small size of the country's market makes it less attractive to potential investors. In addition, the small scale means Ireland will be controlled by a limited number of players, reducing market liquidity and hence increasing the risk to investors. The small size also makes it more difficult for competitors to develop critical mass, allowing them to gain economies of scale in operation and mitigate risk through diversification⁴.
- 2.4.4 In addressing the issues the market is expanding via the establishment of the All-Island market, initially focused on electricity. It is within the transition to an all-island market that many issues, including scale and dominance, may be addressed, however, structural change is also required.
- 2.4.5 Increased competition is fundamental to Ireland's energy sector. In electricity IBEC notes that the Paper, while rejecting the Deloitte report

² Joint Oireachtas Committee 7th report – Review of Energy 2006

³ ESRI, *Aspects of Energy Policy*

⁴ IEA, *Energy Policy in IEA Countries - 2005 Review*

recommendations, fails to adequately address how effective competition will be achieved. The divestment of ESB assets and the creation of land banks is a welcome announcement and should, with additional measures, bring about a change in the competitive landscape.

- 2.4.6 Replacing 25 percent of Ireland's electricity generating capacity in the next five years presents a significant challenge. It also presents an opportunity to increase competition into the sector, particularly for price setting plant. IBEC agrees with EirGrid's assertion that these new plants be flexible to facilitate the Government's targets for further renewables.
- 2.4.7 The White Paper must clearly articulate a realistic perspective on how it expects competitive gas and electricity markets to evolve given the natural disadvantages that Ireland has.
- 2.4.8 Furthermore, it is Government's responsibility to monitor investment needs and investment performance. If the market fails to generate the necessary investment on its own, the Government must act to provide additional market incentives while avoiding market distortions⁵. With a quarter of generation plant needing replacing and additional plant required to meet growing demand, the Government must address the short-term difficulties the market currently has in attracting investment.
- 2.4.9 The gas market in Ireland has not yet been fully liberalised and is experiencing similar barriers to electricity in terms of new competitors coming to the market. Delivery of effective competition must also be a key action for Government and the Regulator. As in electricity, the Government must articulate a clear path to delivering effective competition in the gas market, including its inclusion as part of an all-island gas market.
- 2.4.10 IBEC welcomes the Green Paper's proposed review of the Regulatory Framework post-SEM implementation. Regulation in energy must be necessary, effective, proportional, transparent, accountable and consistent. A regulatory review is critical in aligning the appropriateness of the regulatory framework with policy objectives to 2020 and beyond.
- 2.4.11 With energy costs significantly out of line with our international competitors it is essential that Ireland delivers competitive energy prices as expeditiously as possible.

2.5 Network Infrastructure

- 2.5.1 Decisions by consecutive governments through the late 1980s and 90s not to allow sufficient returns to invest in the electricity network have resulted in a system in need of significant upgrade and expansion to cater for the growth in our economy. In making this investment in Irish networks it is essential to take a holistic view and to ensure that the investment currently being made is capable of addressing Ireland's changing energy needs, particularly the inclusion of intermittent sources.
- 2.5.2 Similarly, as Ireland diversifies its energy sources and invests in energy efficiency it will also be necessary to have a grid capable of managing distributed generation. The White Paper must confirm its commitment to developing a system that has the capacity to manage these characteristics and that those with responsibility for planning and delivering grid

⁵ IEA, Energy Policies in IEA Countries – 2005 Review

development (EirGrid, CER, ESB Networks) are cognisant of these evolving needs.

- 2.5.3 With €10bn currently being spent upgrading and expanding gas and electricity networks, a cost recovered through end-user tariffs, consumers have seen significant tariff increases in recent years. As infrastructure of strategic national importance IBEC believes that new build infrastructure should be funded by Government via the National Development Plan, thus reducing the cost burden on consumers already affected by a step change in fuel prices.

2.6 Interconnection

- 2.6.1 While welcoming the commitment on both north-south and east-west interconnection, IBEC is extremely disappointed at the slow rate of implementation. Delivery of the north-south infrastructure is crucial to the effective operation of the SEM, while east-west will bring advantages in market expansion, pricing and providing back-up to expanded renewables penetration. Given that the critical role interconnection can play has been known for some time — the 2003 IEA review of Ireland's Energy Policy highlighted the issue — the lack of progress is worrying.
- 2.6.2 To address these concerns the target dates for this infrastructure must be accelerated with a delivery date no later than 2010. Furthermore, with EU plans to integrate Ireland in a wider regionalised UK, Ireland and France electricity market, decisions and planning with regard to additional interconnection capacity must begin immediately.
- 2.6.3 As infrastructure of strategic national importance, interconnectors must be funded through the NDP and not recovered via end-user tariffs.

2.7 Energy Efficiency

- 2.7.1 Energy efficiency must be a core pillar to Ireland's strategy in meeting its energy needs going forward. Significant scope exists in all sectors but particularly in transport, and the heating and lighting of buildings
- 2.7.2 Key related documents to Ireland's achievement in energy efficiency are the National Spatial Strategy, Building Regulations and Transport 21. Together with the proposed energy efficiency action plan these documents must be integrated with the Energy White Paper and realistic and economically sound policy targets set to achieve energy efficiency gains.
- 2.7.3 In addressing energy efficiency in industry and in buildings and heating, the proposed Energy Efficiency Action Plan is critical as it will set the framework for activities. The plan when finalised must also be adequately funded to assist stakeholders in meeting objectives. One of the biggest barriers to improvements in efficiency can be upfront capital costs and return on investment timeframes. Initiatives such as the Greener Homes schemes show a willingness to convert to more sustainable solutions where resources are available.
- 2.7.4 IBEC calls on the Government to put in place the necessary resources to support industry in improving energy efficiency. Useful examples in this regard are the initiatives implemented by the UK Carbon Trust.

- 2.7.5 Additional exchequer revenue from existing excise duty on fuels should be made available through supports and initiatives to assist industry in becoming more energy efficient. The Government has received an additional €1bn in excise and VAT since 2003 due to high fossil fuel prices. An allocation of only €60m was made in the 2006 budget for the uptake of sustainable energy technologies so there is plenty of scope for developing this fund.
- 2.7.6 Building standards in line with the new EU Buildings Directive must be implemented and exceeded where economically feasible.
- 2.7.7 The efficiency gains of Combined Heat and Power (CHP) is poorly utilised in Ireland. The recommendations of the CHP Strategy Group Report must be implemented to further promote this technology at both large and small scale.
- 2.7.8 Where cost effective, IBEC supports the expanded use of distributed generation given the increased efficiency, reduction in network burden and increased security of supply that can result from well designed schemes.

2.8 Research and Development

- 2.8.1 From now on the nature of energy supply and consumption must evolve to deliver more competitive, secure and environmentally sustainable means of supply. This will involve new ways of thinking, new technologies and market innovation. Significant investment in research and development is necessary to bring forward and realise the next generation of low carbon technologies, focused where Ireland has resource potential.
- 2.8.2 Given the natural barriers and advantages that Ireland has it is imperative that appropriate research is directed into developing energy efficiency and innovative new ways to meeting energy needs sustainably. This may include new energy sources (e.g. ocean and wave), refining existing technologies for greater efficiency or economic principals to deliver competitive markets.
- 2.8.3 In this regard IBEC welcomes the establishment of the Energy Research Council. This council must be practical and pragmatic and seek solutions for the Irish market. Possible solutions should be investigated on a short, medium and long-term basis. The ERC must be adequately funded and operated in partnership with industry, merging academic prowess with industry experience.
- 2.8.4 The importance of research and development can not be understated and a clearly defined work programme must be identified which will deliver valuable knowledge and innovative solutions to meet Ireland's energy needs.

2.9 EU/International

- 2.9.1 In the past year energy has risen to the top of the global political agenda, leading to a number of global initiatives such as the G8 policy statement and the establishment of an EU High-Level Group on energy affairs.
- 2.9.2 With 90 percent of fuel imported, coupled with rapidly rising prices, Ireland is physically and economically vulnerable to international circumstances.

This reality is mirrored across Europe with increasing prices and fuel import dependency expected to rise from 50 to 70 percent over the next decade.

- 2.9.3 The impact of a step change in fuel supply security and price led to EU negotiations with the main supplier (Russia), diversification of supply sources in the Middle-East and the development of gas storage and LNG facilities. Disruption to oil supplies presents a further significant challenge in Ireland, particularly in transport.
- 2.9.4 As a price taker at the end of a very long supply route it is imperative Ireland is linked into EU negotiations on fuel supply, particularly in oil and gas.
- 2.9.5 A more coordinated EU energy policy is being established and Ireland must ensure it plays its full part as the outputs will clearly influence energy policy in Ireland. Significant EU policies and legislation will be forthcoming in the areas of climate change, market liberalisation, establishment of regionalised energy markets, renewables targets, energy efficiency targets and research and development. The Government must ensure that EU decisions do not negatively impact the growth and competitiveness of the Irish economy.

3. Conclusion

- 3.1 IBEC welcomes the Department of Communication, Marine and Natural Resources' Green Paper on Energy Policy. The subsequent White Paper will be a pivotal document in directing the future path for meeting Ireland's energy needs.
- 3.2 Given its importance and urgency, the Government must publish an integrated and informed policy White Paper with targets underpinned by rigorous analysis and delivery mechanisms. Given that decisions today will influence the shape of Ireland's energy framework for some time, it will also be prudent to take a longer term perspective beyond 2020 to 2050.
- 3.3 In the development of the Paper from green to white the Government must consider the challenge posed by ever increasing environmental commitments and how these may be achieved while delivering security of supply and maintaining international competitiveness.
- 3.4 IBEC welcomes the various reports and plans currently being prepared by the Department. However, the preparation of these reports must be expedited to ensure their recommendations inform decisions in the final White Paper. IBEC is always available to contribute to these discussions and to participate where possible with considered input.
- 3.5 Solving Ireland's energy difficulties requires innovative solutions. Every effort must be employed in harnessing, where economically justified, indigenous resources and in stimulating energy efficiency gains for the economy. It is also IBEC's belief that an informed and rational debate should take place on the role nuclear energy could play in Ireland. We must assess all options, evaluate their merits and make informed decisions after considered scrutiny.
- 3.6 Ireland has now moved from a centrally planned system to a market-based structure. In a period of transition and uncertainty it is imperative that the Government and Regulator in the short term evaluate the needs of the country. Security of supply and competitive pricing are fundamental

enablers to economic growth and must be maintained. It is essential that adequate market signals are provided by the Government and the Regulator and that needed investment takes place.

- 3.7 Finally, the importance of research and development can not be undervalued in this time of change. The Government must invest adequate resources to develop answers to our pressing problems and to deliver new technologies to the Irish market and help deliver more sustainable energy.
- 3.8 Ireland needs a secure, low carbon energy system at internationally competitive prices if long-term economic growth is to be sustained.

4. Energy Actions

- 4.1 A comprehensive Energy Policy White Paper, setting out a vision to 2050, must be published as a matter of priority.
- 4.2 The White Paper must include clear policies, targets and delivery mechanisms for all sectors
- 4.3 Energy policy must be formally reviewed at least every five years.
- 4.4 The Government must establish a high level energy advisory group responsible for coordinating the development of energy policy in Ireland and bring together the work of the various energy subsets. The group should comprise industry leaders, professionals in the energy sector, academia, government and other appropriate stakeholders.
- 4.5 The Department of Finance, in conjunction with the Department of Communication, Marine and Natural Resources, must implement financial measures to attract exploration of resources off Ireland's west coast. The outcome of the proposed review of fiscal measures in conjunction with the Department of Finance must be completed by mid-2007.
- 4.6 The Corrib gas project must be delivered as a matter of priority.
- 4.7 The report on security of oil supply must be published in 2007 and an action plan established including targets and delivery mechanisms.
- 4.8 The report on the security of gas supply must be published in 2007 and an action plan established including targets and delivery mechanisms.
- 4.9 The All-Island Grid Study assessing the potential of partially dispatchable, non-dispatchable and embedded generation must be published as a matter of priority. On foot of the report's publication, an action plan must be implemented on the delivery of increasing levels of penetration in the market.
- 4.10 Further to the Grid Study, the Single Electricity Market must provide adequate signals to encourage investment in back-up generation for non-dispatchable power sources.
- 4.11 The Government must outline the structure of future support measures for renewable generation along the lines of REFIT to engender market confidence.
- 4.12 The Inter-Departmental Taskforce on bioenergy must publish its bioenergy strategy as a matter of priority.
- 4.13 The Government must outline the structure of supports to stimulate the growth of bioenergy in Ireland.

- 4.14 In particular the bioenergy strategy must outline the cost/benefit of delivering sufficient biomass feedstock for 30 percent peat replacement by 2020.
- 4.15 The Government must commission a report critically evaluating the potential for nuclear energy in Ireland.
- 4.16 The SEM must be delivered by 1 November 2007.
- 4.17 In 2007 the Government, in conjunction with the Regulator, must outline a realistic path for enhanced competition in Ireland's electricity and gas sectors.
- 4.18 The Government and the Regulator must detail how appropriate investment in Ireland's energy market will be attracted in the short to medium-term. Appropriate investment includes a diverse portfolio of plant and fuel mix and back-up generation for renewables.
- 4.19 Given the significant level of investment required in network infrastructure and its strategic national importance, new build networks should be funded via the National Development Plan.
- 4.20 Interconnection N/S and E/W is fundamental to the physical and competitive operation of the SEM. Interconnection must be delivered no later than 2010.
- 4.21 The cost of interconnection as infrastructure of strategic national importance should be funded via the NDP.
- 4.22 Investigation and cost/benefit analysis of additional interconnection capacity between Ireland, UK and mainland Europe must begin immediately.
- 4.23 Energy efficiency must be a central pillar of Irish energy policy. The Government must publish an Energy Efficiency Action Plan. The scope of the plan must include energy efficiency in buildings, heating, electricity, manufacture and transport.
- 4.24 Significant resources must be made available to fund cost-effective energy efficiency initiatives in the form of tax breaks, capital grant aid, etc. Funding this initiative may be done by ring-fencing the €1bn additional revenue earned by Government due to returns from excise and VAT on high fuel prices since 2003.
- 4.25 The range and quality of services provided to business in support of energy efficiency must be broadened, developed and adequately resourced.
- 4.26 The Government must promote and stimulate the cost-effective uptake of high efficiency energy systems particularly large and small scale CHP.
- 4.27 Research, development and demonstration (RD&D) will be critical to the appropriate planning and development of sustainable energy systems in Ireland. RD&D must be industry-led in partnership with academia and focused on solutions that compliment Ireland's resource potential.
- 4.28 The EU significantly influences Ireland's energy future in terms of legislation, liberalisation of markets and also international negotiation on security of fuel supply. The Government must harness strong links with the EU ensuring Ireland is appropriately considered in the decision-making process.
- 4.29 Given the current and future linkages between Ireland and the UK (e.g. interconnection, regionalised markets) the Government must appropriately align Ireland's energy policy with that of the UK.

- 4.30 Implementation of the Kyoto protocol must not take place at the expense of international competitiveness. The Government must deliver the equitable sharing of emission reduction targets across all sectors of society.
- 4.31 Following completion of the SEM in November 2007 a thorough evaluation of the regulatory process must be undertaken.