



**national consumer agency**  
gníomhaireacht náisiúnta tomhaltóirí

# **Response to the Department of Communications, Marine & Natural Resources Green Paper**

## **“Towards a Sustainable Energy Future for Ireland”**

## **About the National Consumer Agency**

The National Consumer Agency (NCA) is in the process of being established on a statutory basis under the auspices of the Minister for Enterprise, Trade & Employment. This new Agency will strengthen the voice of consumers in national decision making and tackle anti-consumer practices in Ireland by articulating and defending the priorities of the consumer in relevant policy and practice discussions.

Enactment of the Agency's underpinning legislation is expected in the first part of 2007, pending which the Agency is operating under the direction of an interim Board appointed by the Minister for Enterprise, Trade & Employment. The new legislation will bring the existing enforcement role of the Office of the Director of Consumer Affairs (ODCA) within the new Agency, and will further provide for extensive new powers and responsibilities in the areas of research, advocacy, enforcement, information, education and awareness. Put simply, the overarching purpose and supporting powers of the National Consumer Agency will focus on Putting Consumers First in Ireland.

Consumer power can play an integral role in the development and implementation of robust policy and good legislation. The Joint Committee on Communications, Marine and Natural Resources, in its Report on Energy (2006) notes that the implementation of energy policy would have increased impact if Government bodies and NGOs consulted with consumers and demonstrated how they can be involved. Government has also stated its desire to ensure that the rights of the consumer are protected, as the protection of consumer confidence is essential in the successful development of competitive, open and functioning markets. The NCA welcomes the opportunity to articulate consumer priorities for Ireland's energy future as a part of this process, which will have long- term implications for all consumers in Ireland.

In making this submission, the NCA wishes to underscore that it has limited its comments to aspects of the Energy market most relevant to the Consumer in general, in line with its remit. Submissions by other entities and bodies will doubtless address the energy priorities of the business community and the specific energy priorities of individual groupings within both the commercial sector and civil society more generally.

In preparing this submission, the NCA benefited from the analysis and recommendations comprised in a report commissioned from RPS Consulting Engineers. This paper draws largely from that report, which is available on request.

## EXECUTIVE SUMMARY

### The Context for Ireland's Energy Future

The current process of planning and policy development for Ireland's energy future comes at a critical juncture for developed economies globally. Globalisation is fuelling an unprecedented pace of economic expansion; socio-political instabilities in oil and gas producing countries have seen successive energy security crises, while expert estimates suggest that Peak Oil may be reached as early as 20 years hence, with some forecasters fearing it will be reached far faster, perhaps within a decade.

Ireland's flourishing economic development and rising living standards over the past two decades, in particular, have driven unprecedented levels of energy consumption. Forecast data points to no abeyance in Irish energy demand growth in the period to 2020. Total Primary Energy Requirement (TPER) of just over 15Mtoe in 2005 is expected to reach 20Mtoe by that time, driven by sustained GDP growth.

Ireland does not benefit from significant natural fossil fuel deposits and despite more recent positive policy initiatives, no large-scale capability to harness and exploit indigenous renewable resources is yet on stream. Ireland relies to an enormous extent on imported fuel to meet its energy requirements. According to Sustainable Energy Ireland<sup>1</sup> import dependency, that is the proportion of our energy requirement satisfied by the importation of fuel sources, reached 90% in 2005, and forecasts suggest that this figure will fall only marginally in coming decades, estimated at 86% by 2025. Within this, our dependence on imported oil is particularly marked, representing 65% of Ireland's net fuel import requirement in 2005. Gas and coal made up 21% and 13% of net fuel imports in the same year, respectively.<sup>2</sup>

Within the internal energy supply structures of the country, too, difficulties prevail. Despite commitment to the opening of the energy market to competition, the Electricity Supply Board (ESB) remains, certainly for the retail/consumer market, the dominant supplier of electricity, while liberalisation in the business market has developed only slowly. Similar problems have been experienced at EU level in relation to both Electricity and Gas markets. A major review of the Electricity Sector in Ireland published in October 2006 pointed to significant efficiency problems within this former monopoly supplier and underscored the vulnerabilities associated with such a high dependence on a single entity for electricity supply.

In the face of these major challenges, time is running out in the race to secure and satisfy Ireland's future energy requirements. Businesses and Consumers have experienced successive energy price rises, lack of supplier choice remains a critical issue and dissatisfaction is growing with the way the Irish energy market is being managed. The European Commission has promised a crackdown on countries that are dragging their heels in relation to market liberalisation in the energy sector. Environmental pressures, too, mean that difficult decisions in relation to how countries will meet their future energy needs need to be taken. There is an urgent need for future Irish energy policy to be robustly debated, agreed and implemented with the support of all actors, in the interests of the country and of each individual within it.

Unlike some aspects of national policy, Energy policy affects each of us at an individual level. Whether as private consumers, as employers or as employees, we are all affected by decisions taken influencing the management of our current energy requirements and forward planning for future energy resources. Energy policy can affect us financially, resulting in rising or falling bills; it can increase or constrain our consumer choice, through promoting or

---

<sup>1</sup> Security of Supply in Ireland, 2006 from the SEI Energy Policy Statistical Support Unit

<sup>2</sup> IBID

limiting competition; it can influence the environment in which we live, resulting from fuel mix choices; it can even dictate our lifestyle choices, arising from the actions we elect to adopt in response to the prevailing energy environment. We are, therefore, all directly impacted by the energy choices now under consideration.

### **The Proposed Policy Framework**

The Green Paper “Towards a Sustainable Energy Future for Ireland” sets out a policy framework for the future of Irish energy supply shaped by three key priorities:

- ensuring the **security of energy supply**,
- promoting the **sustainability of energy supply**, and
- enhancing the **competitiveness of energy supply**.

In providing a response to the Green Paper, the National Consumer Agency wishes to add a further two priority areas of focus to these three headings:

- securing **comprehensive stakeholder involvement** in national energy policy development and implementation
- **Eliminating Fuel Poverty** as a public policy priority in Ireland

### **Security & Sustainability of Energy Supply**

The NCA broadly welcomes the proposals made in the Green Paper with regard to security and sustainability of energy supply. An increase in indigenous and diversified energy generation will ensure that the threat of brown and blackouts is minimised. It will also protect the consumer from the vagaries of the international energy market and political climate and should help to increase competition in the generation market if properly implemented and controlled.

The proposals and targets put forward in the Green Paper are ambitious and should result in the amelioration of security of supply issues if thoroughly and swiftly implemented. However, increasing discussion in media, industry and policy circles around the challenges posed by Peak Oil & Gas also bear consideration in the context of future energy strategies for Ireland. 2006 price spikes in global oil and gas markets provided an insight into a world facing a dramatic squeeze on availability of traditional fossil fuels. The NCA urges Irish energy policy makers to consider alternative scenarios to the “business as usual” approach to fuel supply upon which many of the Green Paper recommendations are based. In this light, the NCA suggests that the scale of concrete proposals for *Renewable and Indigenous Energy Promotion* is currently insufficient. Further, the NCA wishes to underscore the importance of *promoting and substantially supporting energy conservation and efficiency measures* as a further means of contributing to energy sustainability. The body of this paper suggests a number of areas in which additional concrete proposals could contribute to consumer led enhancements in security and sustainability of energy supply.

### **Competitiveness of Energy Supply**

The Green Paper recognises that the current structure of the Irish energy market has not been conducive to competitiveness of energy supply, contributing to higher energy costs, and the Government has already committed to steps to effect changes that will facilitate the emergence of a competitive energy market on the island of Ireland. The NCA would welcome increased competition in the energy sector working to the benefit of consumers through improved choice of energy supplier, enhanced transparency of tariff structures and, where possible, lower energy prices.

At present, competition in the existing Electricity market is virtually non-existent for the majority of consumers. This is due to the dominance of the ESB and the continuing link between its constituent Generation, Transmission and Supply businesses, which militates against new players’ ability to profitably enter the market for either Generation or Supply

services. The lack of consumer choice at the supply end of the market means that the ESB can seek price increases from the Regulator without fear of a competitor underbidding and gaining market share. Yet price inflation represents just one possible solution to cost increases which may arise, at least in part, from inefficient working practices within a quasi-monopoly energy supply structure. The introduction of the All-island Single Electricity Market is a most welcome development for consumers and it should promote greater competition in the Supply section of the market but it is unlikely that it will truly have a major impact until changes occur in the current scale and structure of the ESB.

The recent Deloitte Review of the Electricity Sector in Ireland, which was published alongside the Green Paper, points to the reduction of dominance of ESB in its current structure as one of the major changes required to deliver a competitive energy market. The same report outlines a number of possible scenarios by which to introduce competition into the Irish electricity market. The NCA would have wished to see a thorough and public evaluation of the various Deloitte proposals in the Green Paper. The NCA recognises that the size, history and legacy structures of the Irish energy market make definition of an optimal structure complex. Moreover, international examples suggest that no straightforward “One Size Fits All” structure exists. However, a thorough evaluation of the options for market structure reform as presented in the Deloitte Review document, concluding with a detailed, timeline-defined proposal of the preferred option is highly desirable in the White Paper. As a general point of principle, the NCA would support the Deloitte proposal that their Alternative 4, styled “Portfolios and Separation”, be implemented.

### **Comprehensive Stakeholder Involvement**

The National Consumer Agency (NCA) commends the work being conducted by the Commission for Energy Regulation, Sustainable Energy Ireland and the Department of Communications Marine and natural Resources (DCMNR) in raising public awareness of energy matters and in promoting overall energy efficiency and sustainability in the country. However, although the NCA recognises the value of improving public awareness of energy issues at a national and strategic level, this must be accompanied by meaningful Stakeholder Involvement at local level to provide all the information necessary to consumers to ensure that real and affirmative action is taken on the ground. The Power of One initiative marks an important step in that direction and the NCA eagerly anticipates the development of the campaign.

It is vital that consumers take ownership of their own energy consumption and assume control of their energy demand. In an EU commissioned survey conducted in late 2005, 51% of Irish people surveyed indicated that more information should be provided to help people reduce their energy consumption. The expertise and knowledge held within organisations such as Sustainable Energy Ireland, Local Energy Agencies and the DCMNR needs to be channelled in a format accessible to the consumer. One of the best methods for delivery of this is localised Stakeholder Involvement, whether achieved through SEI, Local Authority Environmental Awareness Officers or the progressive and effective network of Local Energy Agencies being developed throughout the country.

The power of consumer choice should not be underestimated. International evidence points to the strong influence of consumer choice in the delivery of economic prices. Ireland now ranks as one of the most expensive countries in the EU for consumer goods & services and Government policy decisions in this area should provide scope for consumers to exert pressure in the interest of improving competitiveness in the energy market.

### **Fuel Poverty**

Notwithstanding the Celtic Tiger, fuel poverty remains an issue in Ireland, with approximately 17% of Irish dwellers still suffering from an inability to adequately pay for their fuel requirements. With simple home improvements (insulation, double glazing, lagging jacket), up to 30% savings can be made on the average heating bill with up to 60% savings achievable where these improvements are made alongside the replacement of electric space heating by an efficient central heating system.

This issue has been a focus point for Local Authorities, with the result that vast improvements in fuel poverty have been made in much of the social housing stock. However, the rental markets and low-income private sector markets remain fuel poverty black spots. There is currently no incentive for landlords in the rental sector to increase the energy efficiency of their building stock. Even with the introduction of the Energy Performance of Buildings Directive (ultimately encompassing all new and rented accommodation in 2009) it is unlikely that there will be a major improvement in a rental market buoyed by an increasing population looking for temporary accommodation.

Another major and increasing problem is in the low-income residential sector where money may not be available for home improvement.

An immediate issue relates to the level of specification of Social and Affordable Housing. At the moment much of the Social and Affordable building stock is being constructed with low levels of specification relating to energy efficiency. Minimum acceptable levels of insulation and glazing specification are being installed, alongside electric storage heating, which has by far the cheapest capital cost to install but the highest running cost. Unfortunately, such inefficient housing stock is frequently the recourse of those consumers least able to choose in the property market and least able to afford high running costs, through lack of a real alternative. The Government and Local Authorities should address this problem immediately by enforcing an increase in the level of energy efficiency specification for Social and Affordable Housing.

In presenting its submission, the NCA wishes to propose the following areas of focus from a consumer perspective, which might be considered in the drafting of the White Paper on a Sustainable Energy Future for Ireland:

## Consolidated Recommendations

- 1 The White Paper should include a full and detailed evaluation of the various options presented in the Deloitte Review of the Electricity Sector in Ireland for restructuring of the ESB. The Government's preferred option should be clearly set out alongside a timeline and specific measures to facilitate its implementation. The NCA supports implementation of the "Portfolios & Separation" alternative.
- 2 The E-W interconnector and the additional N-S interconnector project are strategic investment priorities for Ireland. The new NDP should make provisions for funding of essential energy infrastructure projects, to ensure their timely delivery.
- 3 Current schemes through which growth in indigenous and renewable energy sources are promoted should be expanded as rapidly as is practicable, to reduce reliance on imported energy sources. New schemes should be implemented where possible.
- 4 To incentivise rationalised energy usage, consideration should be given to variable tariff structures, to the introduction of time of day meters or to changing the "standing charge" to place more emphasis on the cost of energy consumed.
- 5 As a means of reducing fuel poverty, targeted measures should be enforced to incentivise or to compel the application of higher energy efficiency standards in the construction, refurbishment and maintenance of rental and Affordable & Social Housing properties.
- 6 Investment in research and development in the energy sector should be increased to ensure that solutions are developed in Ireland utilising Irish resources. The application of indigenous expertise to indigenous energy resources could create a sustainable energy economy with a real minimisation of security of supply risk.
- 7 A comprehensive evaluation and consultation procedure on the topic of Nuclear Energy should be held, to support definition of a rational and evidence based national policy position on the matter.
- 8 Improved competitiveness and consumer value for money are key in both established and emerging energy markets. To this end, a near term review of the structure of the networks and the supply businesses of Bord Gais Eireann would be appropriate.
- 9 The use of alternative fuel sources should continue to be promoted through fiscal incentives.
- 10 Public Relations and Stakeholder Involvement activities should be increased to raise awareness of the existence, availability and savings achievable through alternative energy sources.
- 11 A system should be introduced for 'auditing' the cost of renewable energy systems to ensure that no artificial price-fixing to a 'grant' level is conducted by private system suppliers and installers.
- 12 To inspire consumer confidence in the installation of renewable energy systems, some form of official accreditation or professional membership programme similar to the Register of Electrical Contractors of Ireland should be established and administered by Sustainable Energy Ireland. This would require a minimum level of competence/qualification of supplier/installers.
- 13 The Single Electricity Market marks an important step in creating a structure conducive to competition in the energy market in Ireland. Current plans should be implemented as already outlined and further policy commitments should be set out to deliver upon the strategic goals of the All Island Energy Market.
- 14 Some form of Government incentive, such as tax relief, should be considered to encourage consumers to purchase specific energy efficient appliances.
- 15 The role of local authorities and their respective energy agencies should be given further consideration in the White Paper as a means of supporting energy efficiency measures "on the ground", reflecting the important information and guidance service they offer to consumers seeking energy efficiency tips and advice.

# Table of Contents

<b>1.</b>	<b>ENSURING THE SECURITY OF ENERGY SUPPLY .....</b>	<b>1</b>
1.1	HIGH IMPORT DEPENDENCE .....	1
1.2	INFRASTRUCTURE MEASURES .....	1
1.3	INVESTMENT IN RENEWABLE ENERGY SOURCES .....	1
1.4	OIL, GAS AND FUTURE LIQUID BIOFUEL MARKETS.....	2
<b>2.</b>	<b>PROMOTING THE SUSTAINABILITY OF ENERGY SUPPLY .....</b>	<b>4</b>
2.1	SUPPORT FOR AMBITIOUS GROWTH IN TARGETS FOR RENEWABLE ENERGY .....	4
2.2	LIQUID BIOFUELS AND VEHICLES .....	4
2.3	SEI GREENER HOMES SCHEME AND HOUSE OF TOMORROW .....	4
2.4	CONSUMPTION PATTERNS.....	5
2.5	THE NUCLEAR DEBATE .....	5
<b>3.</b>	<b>ENHANCING THE COMPETITIVENESS OF ENERGY SUPPLY .....</b>	<b>7</b>
3.1	THE CONTINUED OPENING OF GAS AND ELECTRICITY MARKETS TO COMPETITION .....	7
3.2	FOSSIL FUEL DEPENDENCY AND RENEWABLE ENERGY IN THE FUEL MIX .....	10
<b>4.</b>	<b>COMPREHENSIVE STAKEHOLDER INVOLVEMENT .....</b>	<b>11</b>
4.1	ENERGY EFFICIENT STRATEGIES .....	11
4.2	ENERGY TARIFFS & METERING.....	11
4.3	CONSUMER AWARENESS & THE ROLE OF THE LOCAL AUTHORITIES.....	12
<b>5.</b>	<b>“ELIMINATING FUEL POVERTY” AS A PUBLIC POLICY PRIORITY IN IRELAND .....</b>	<b>14</b>
<b>6.</b>	<b>THE 22 GREEN PAPER QUESTIONS.....</b>	<b>16</b>
6.1	ENSURING THE SECURITY OF ENERGY SUPPLY .....	16
6.2	PROMOTING THE SUSTAINABILITY OF ENERGY SUPPLY .....	18
6.3	ENHANCING THE COMPETITIVENESS OF ENERGY SUPPLY .....	20
6.4	ADDITIONAL QUESTIONS & COMMENTS.....	21

## **1. ENSURING THE SECURITY OF ENERGY SUPPLY**

### **1.1 HIGH IMPORT DEPENDENCE**

Ireland is among the most heavily energy-import dependent economies in Europe. Approximately 85% of our primary energy demand is met from imported oil, accounting for approximately 63% of final energy consumption here compared with a 44% average across Europe. The finite nature of oil as an energy source and the unstable political conditions in key oil producing countries leave Ireland exposed to supply shortages and fluctuating prices. The Irish economy is also highly dependent on imported gas, with almost 90% of gas used in 2005 sourced from outside the country. Ambitious targets have been set to increase the proportion of renewable energy sources contributing to our energy supply, but these are highly dependent on technological innovation, changing consumer behaviour and, perhaps most significantly, compelling commercial incentives for investors to fund their development.

At this point in its development, Ireland faces a high level of dependence on external energy supply, extensive use of fossil fuels to meet energy requirements and an energy marketplace long dominated by state owned monopolies and now struggling to identify appropriate structures to drive efficiency, increase consumer choice and provide for the long term energy needs of the economy and the population.

### **1.2 INFRASTRUCTURE MEASURES**

It is likely, even with increases in energy efficiency, that Ireland's rapidly growing economy and population will fuel further energy demand in the near term. Improvements to existing energy supply infrastructure will be required to protect the consumer from potential brown and blackout scenarios. Proposed steps to delivering such enhanced supply security via conventional energy supply mechanisms include:

- Completion of a Single Electricity Market (SEM) and the All-Island Energy Market (AIEM)
- A further N-S interconnector
- Construction of a 500 MW E-W interconnector between Ireland and the Britain
- New generating plant in the SW

In the context of an All-Island energy market it is important for both security of supply and competition that a further N-S Interconnector be constructed and the National Consumer Agency welcome the proposal to increase interconnection with Northern Ireland. Similarly, the proposed E-W interconnector will further increase security of supply and could ultimately facilitate the export of electricity to other markets, a possibility which may increase in relevance with the proposed increase in the deployment of wind energy generation on the Irish electricity grid.

It is hoped that the new National Development Plan (NDP) will provide for exchequer funding in support of these critical infrastructure initiatives, thereby relieving some of the pressure to recover such infrastructure costs exclusively through higher energy tariffs.

### **1.3 INVESTMENT IN RENEWABLE ENERGY SOURCES**

The National Consumer Agency acknowledges the vital role of Ireland's existing energy infrastructure in meeting the current and imminent energy needs of the country, and recognises the requirement to maintain and upgrade it. Moreover, in

light of the competitiveness issues currently high on the policy agenda, concentration on rationalisation of this conventional mode of generation, transmission, distribution and supply is a pressing requirement. Section 3 of this paper outlines the NCA's comments on the options for the modernisation of our electricity market structure to promote competitiveness and choice for end users.

An imbalance exists between investment in conventional infrastructure maintenance and support on the one hand and research, development, technology and innovation in new energy sources and efficiency mechanisms, on the other. Although substantial investment in gas and electricity networks is currently required, that focus will principally address short to medium term requirements. With fossil resources rapidly in decline it would seem appropriate to also target investment at emerging, cleaner and renewable technologies that will contribute to security of supply and sustainability in the long term.

The current support provided for deployment of existing renewable technologies is a positive step. However, greater focus on investment in Irish Research, Development and Innovation in the Energy area is required. Substantial resources are currently being targeted at investment in exportable research and technological innovation in the Biomedical and Pharmaceutical industries. A similar focus on Energy based research could deliver important progress in terms of new primary energy sources, improved understanding of efficient and self-sufficiency technologies and ultimately establish an important research niche for Ireland.

Although it may seem counter-intuitive to link renewable energy sources with more traditional fuel resources, increasing gas and oil prices in the past year may also throw a spotlight on Ireland's potential use of coal and peat in the fuel mix. Although the decline in coal and peat use of recent years has contributed significantly towards reducing Ireland's carbon emissions, it has had the parallel effect of weakening the Irish fuel mix and undermining primary fuel dependency. The availability and efficiency of clean coal technologies with a potential for carbon sequestration in gas fields, among others, should not be ignored as any increase in domestically fuelled energy generation would benefit and protect the Irish Energy consumer. Developments to facilitate the clean use of coal and peat should be considered as part of the broad approach to broadening the fuel mix.

#### **1.4 OIL, GAS AND FUTURE LIQUID BIOFUEL MARKETS**

The NCA welcomes current measures to explore and potentially increase indigenous resources and on-shore national storage capacity of oil. This will ultimately strengthen Ireland's position in terms of security of supply and market competitiveness and will assist Ireland in increasing its self-sufficiency, protecting it from external political and energy market instability.

Significant investment in Irish gas supply infrastructure means that based upon current estimates, adequate transmission capacity is now in place to meet the needs of gas customers. However the coming on line of the Corrib gas field and the completion of the gas pipeline to the West of the country now highlights the need for a structural review of the networks and supply businesses of Bord Gais Eireann (BGE). The CER should press Government to consider appropriate policy measures.

An element of the Irish self-sufficiency strategy involves rapidly increasing the current market share of biofuels. Sustained Government support to each sub-sector of the bio-fuels market will be important while a supply, distribution and demand

marketplace is being developed, to underpin development of a competitive marketplace.

**Current schemes through which growth in indigenous and renewable energy sources are promoted should be expanded as rapidly as is practicable, to reduce reliance on imported energy sources. New schemes should be implemented where possible.**

**The E-W interconnector and the additional N-S interconnector project are strategic investment priorities for Ireland. The new NDP should make provisions for funding of essential energy infrastructure projects, to ensure their timely delivery.**

**Investment in research and development in the energy field should be increased to ensure that solutions are developed in Ireland utilising Irish resources. The application of indigenous expertise to indigenous energy resources could create a sustainable energy economy with a real minimisation of security of supply risk.**

**Improved competitiveness and consumer value for money are key in both established and emerging energy markets. To this end, a near term review of the structure of the networks and the supply businesses of Bord Gais Eireann would be appropriate.**

## **2. PROMOTING THE SUSTAINABILITY OF ENERGY SUPPLY**

### **2.1 SUPPORT FOR AMBITIOUS GROWTH IN TARGETS FOR RENEWABLE ENERGY**

As of June 2005 there was 665MW (6.1% of demand) of installed renewable generation capacity in Ireland, with onshore wind farms making up the majority of this total. By 2010, the DCMNR is committed to achieving a target of 13.2% penetration from renewable energies or 1,433MW. The NCA commends the DCMNR in its efforts to date in this regard.

It is anticipated that this target will be achieved mainly by the further deployment of wind generation. There is potential however, for the development of other renewable technologies such as biomass and marine technology, which should further diversify the fuel mix. The NCA would welcome further developments in the renewables market, as these could contribute to enhanced security of supply, sustainability and diversity of fuel mix. Improved diversity in the fuel mix and any increase in the use of indigenous resources could help to avoid brown or blackout scenarios. It could also increase competition in the generation sector and encourage broader choice for the consumer between conventionally and renewably generated electricity.

### **2.2 LIQUID BIOFUELS AND VEHICLES**

The introduction and ongoing phasing in of Excise Relief on liquid biofuels is welcome. The development of production capacity in Ireland will offer choice to consumers at the fuel-pump and also protect the consumer from the vagaries of the global oil markets. However, while the production of liquid biofuels has been largely addressed, attention must now turn to stimulation of demand for these products. The current 50% VRT relief on flexifuel, bio-fuel and hybrid vehicles does not yet appear to have kick-started the large-scale purchase of these vehicles, creating the demand for fuel producers.

The NCA would welcome further incentives to encourage consumers to choose biofuel, flexi-fuel and hybrid vehicles, affording the consumer a further incentive for choosing green. This would create a further demand for biofuels with consequent positive benefits for the development of this market.

### **2.3 SEI GREENER HOMES SCHEME AND HOUSE OF TOMORROW**

The Greener Homes Scheme currently being run by Sustainable Energy Ireland (SEI) is of great benefit to the consumer, providing a grant towards the purchase of certain renewable energy systems that can be applied in a domestic/residential situation. The promotion of renewables at this level is commendable and the NCA recognise the benefit of this to the public. However, there are two issues of concern.

The first concerns the lack of publicised policing or audit of the cost of systems to the consumer. By tracking funding proposals from consumers and identifying renewable energy system suppliers and installers it should be possible to track industry costs for these systems and ensure that no artificial raising of system and installation prices occurs due to a grant being available. A publicised 'audit' of technology and application costs would deter price-fixing to 'grant' levels by private contractors and would also give the consumer more confidence when choosing a supplier/installer.

The second area of concern is more difficult to address in that the list of suppliers provided by SEI is not in any way an endorsement by SEI of those suppliers and

installers. At present, SEI do make clear that their register is an information source and not a validation or endorsement of any supplier/installer. It is also recognised that such accreditation would be difficult to achieve without significant input of resources and time. However, establishment of some form of registration system or accreditation would mark an important step in building consumer confidence in the installation of such systems. The Register of Electrical Contractors of Ireland could be used as a model, to be policed by the industry itself but where accreditation would ensure a defined level of technical competence on the part of the installer, again protecting the consumer.

## 2.4 CONSUMPTION PATTERNS

Sustainability of supply can be enhanced by more prudent consumption of energy. Consumers can be incentivised to desist from undesirable behaviours through the potential of a reward for doing so. The introduction of the Plastic Bag levy and the effect of waste charging on the use of recycling facilities points to the effect of such a “carrot & stick” approach to behaviour modification. In the case of energy, there is a clear difficulty with the peak energy requirements between 17:00 to 19:00, to which current generation capacity must cater. The introduction of revised tariff structures and rates and the possible introduction of time-of-day meters could all contribute to more prudent consumption patterns. However, such measures are likely to have genuine effect only where some form of tangible benefit (e.g. cost reductions) flows through to the end consumer.

The NCA would also like to highlight in this context the potential benefit to be gained from reducing standing charges and placing a greater proportional cost-weighting on actual energy consumption. The present system militates against rewarding consumers for positive consumption behaviours when a proportion of their bill cannot actually be influenced by the consumption choices they make. Whilst the NCA recognises the contribution to infrastructural development costs made by the standing charge, the Agency would welcome a debate as to the optimal structuring of charges, in the interests both of the consumer and of positive energy consumption behaviours.

## 2.5 THE NUCLEAR DEBATE

There appears to be a systemic resistance in Ireland to full and comprehensive evaluation of Nuclear Power as an energy supply option. The logic of this resistance is called into question when one considers that the electricity supplied through the N-S interconnector will have been generated at least in part by nuclear energy in its country of origin.

The NCA does not, at this point, have a policy position on this matter, nonetheless it would urge the Government to conduct a comprehensive evaluation and consultation procedure on the topic, enabling a rational and well argued policy position to be set in place.

**The use of alternative fuel sources should continue to be promoted through fiscal incentives.**

**Public Relations and Stakeholder Involvement activities should be increased to raise awareness of the existence, availability and savings achievable through alternative energy sources.**

**A system should be introduced for ‘auditing’ the cost of renewable energy systems to ensure that no artificial price-fixing to a ‘grant’ level is conducted by private system suppliers and installers.**

**To inspire consumer confidence in the installation of renewable energy systems, some form of official accreditation or professional membership programme similar to the Register of Electrical Contractors of Ireland should be established and administered by Sustainable Energy Ireland. This would require a minimum level of competence/qualification of supplier/installers.**

**A comprehensive evaluation and consultation procedure on the topic of Nuclear Energy should be held, to support definition of a rational and evidence based national policy position on the matter.**

### **3. ENHANCING THE COMPETITIVENESS OF ENERGY SUPPLY**

#### **3.1 THE CONTINUED OPENING OF GAS AND ELECTRICITY MARKETS TO COMPETITION**

The Irish electricity market is the second smallest of the original EU-15. Until 2000, the ESB was the primary generator and sole supplier of electricity and the Irish consumer had no meaningful choice in the marketplace. The commencement of market liberalisation in February of 2000 saw a 28% market opening for industrial users. The market was fully opened in 2005 to the domestic consumer, allowing customers to choose their supplier of electricity. This has only had a meaningful impact for the industrial and commercial users, however. The only other major energy supply company supplying the domestic market, Airtricity, recently pulled out of domestic supply citing ESB dominance (and by its nature price setting) as the main cause for their market exit. Generation capacity dominance and *de facto* control of top-up and spill price by the ESB make it unlikely that any new market entrant will come into the domestic market until the implementation of the planned new All-island market in November of 2007.

The clear all-island commitment to the development of a competitive energy market for Ireland sends a strong signal to potential market entrants. Full implementation of the proposed Single Electricity Market (SEM) will see generators sell electricity to a central 'pool' which will be controlled by an independent entity. This electricity will then be sold to electricity supply companies, who will in turn sell on to and invoice the consumer.

Within this, however, the continued dominance of the ESB remains problematic. The separation of ESB Networks from ESB Group marks a positive step and the decrease in the dominance of the ESB's generation portfolio arising from the CER-ESB Asset Strategy Agreement of November 2006 would suggest positive developments in the Irish energy market, yet the confidence of smaller independent generators, suppliers and the Irish consumer in this process is questionable.

The question of whether ESB's dominance will be adequately challenged remains a concern, in particular due to the extended period over which the enforced development of competition is to be achieved. The recent granting of permission to the ESB to develop further state-of-the-art generation capacity while satisfying their commitment to reducing their market share by divesting less efficient assets to other market entrants, raises further questions regarding Government follow-through on Energy Policy and Market commitments.

The competitiveness of energy supply in Ireland is of concern to the NCA, as this bears a direct relationship to the level of service to the customer and, most importantly, dictates energy tariffs and rates to the end consumer. The power of consumer choice, once available, plays a large part in guaranteeing that service levels and competitive pricing become the norm. At present Irish electricity prices are higher than the EU average. There are clearly some contributory factors that cannot be solved in the short term. Such factors include the size of the Irish electricity market, continually increasing demand, low levels of interconnection, poor infrastructure and dependency on imported and fossil fuels. The Green Paper does consider each of these aspects and makes welcome proposals to address them. However, without a short to medium term increase in competition and diversity in the generation and supply marketplace, it is unlikely that the resolution of any of these key issues or a combination of them will result in any real benefit being passed on to the consumer.

Currently ESB controls 77% of generating capacity and this dominance affords them a price setting capability, which has a direct impact on the consumer. This is a serious and growing concern for the Irish consumer. In addition, Ireland, as a small island “at the end of a pipeline” from the UK and further afield, is threatened by volatility in international energy markets, with the delivered end price of oil and gas being dictated by UK and EU market conditions. Fuel prices are also determined by the finite nature of oil and gas as an energy source and the unstable conditions in some oil and gas producing countries. Fuel prices are therefore likely to continue to rise in the foreseeable future. This places an even greater emphasis than ever on the role of competitive energy businesses in delivering efficient, market-oriented energy supplies for the island of Ireland. In this light, the NCA welcomes the Government’s commitments to increasing indigenous fuel and energy production, encouraging the entrance of new players to the market and enhanced interconnectivity.

New players and the development of the Single Electricity Market (SEM) could potentially have a positive impact on the economy. However the advantages may not be fully realised where there is continued dominance of a single player and by the limited physical connectivity we have with the Northern Irish energy market. The All-island electricity market is designed to level the playing field for generators and energy supply companies alike. It will see all generators above 10MW in size dispatch into a central pool as demand requires, energy supply companies will then purchase from this pool and sell on to consumers. Should separation of the ESB generation portfolio and ESB Customer Supply occur from within the ESB umbrella structure then it is likely that at least in the short term that greater competition would come into being for Energy Supply Companies with consumers being able to choose between different supply companies and their respective tariffs.

A gradual separation and decrease in the ESB’s generation portfolio (as is currently proposed) would ultimately result in an increase in the attractiveness of the market to new entrants. However this may be unlikely to occur in the short to medium term to any great degree should the ESB divest itself only of strategically unimportant and inefficient elements of its portfolio while concurrently building up state-of-the-art facilities that are strategically located to retain a potentially price-setting capability upon commencement of the new market arrangements.

Whilst the NCA supports, in principle, the structure termed Alternative 4, Portfolios & Separation in the Deloitte Review of the Electricity Sector in Ireland, it is recognised that such decisions are complex. The imperative, from a consumer perspective, is to agree a strategy to deliver optimal market structures to secure an efficient, competitive energy market for Ireland. The NCA recognises that it is incumbent upon the Regulator to consider the commercial function of the ESB and to avoid a situation where regulation or forced separation and divestment might force that business into an unfairly compromised position in the new market. These comments, therefore, are posited in the interest of underscoring the constraints imposed by the current market structure and of pressing for a fuller evaluation in the White Paper of the various structural proposals put forward in the Deloitte Review of the Electricity Sector in Ireland, culminating in a clear selection of the preferred option, and its presentation alongside a defined timeline for implementation.

#### ***An Evaluation of the role of the ESB in Ireland’s Energy Supply***

The continued link between the ESB’s generation portfolio and the physical infrastructure upon which the Irish Electricity Market is operated detracts from the attractiveness of the Irish energy market to any new generation entrants. The independence of the physical infrastructure from any market participant is

vital to ensure neutrality and fairness. Eirgrid was established with a view to separating these interests. However progress in this area has been very slow and new market entrants are likely to continue to see the ESB as one large and dominant entity until this has been progressed.

A clearer separation of ESB Generation portfolio, ESB Networks and ESB Customer Supply as separate business entities might be more likely to offer clear competitive opportunities to new entrants and to encourage strategic investments in this market. The break-up of the ESB generation portfolio into competing units of a scale that would allow new entrants to the market compete upon entry is therefore clearly an attractive option. However, the size of the market may militate against such an approach, or at least may suggest a more progressive approach, involving a reduction of the ESB generation portfolio in a controlled manner, which promotes overall competitiveness without threatening security of supply. In this regard, the NCA along with the Commission for Energy Regulation (CER) need to work together to guarantee the protection of consumer interests.

### ***An Evaluation of Bord Gáis Éireann in Ireland's Energy Supply***

Bord Gáis Éireann (BGE) is a fully owned state company that comprises two main sectors, namely Bord Gáis Networks and Bord Gáis Energy Supply. Competition in the gas market is strong with 85% of all customers having the ability to choose suppliers (100% of non-domestic users). By 2004, 63% of Irish gas demand was delivered by BGE competitors, indicating a strong market.

Demand for this resource is continually increasing based on economic growth and with over 80% of Ireland's natural gas demand imported from the UK, the position of BGE in the Irish energy market demands attention. BGE has already invested €1.53bn in the period 2001-2005, with a further €1.25bn planned for 2006-2010. The gas transmission system is sufficient to cope with reasonable current demand forecasts. This level of investment and the consequent linking of further towns and users to an expanding natural gas network needs to be given consideration in assessing the future market position of BGE.

As regards security of supply, high levels of import will continue to affect the end consumer as Irish prices are dictated by UK prices and, in future, EU prices, which leave the Irish consumer vulnerable to increasing tariffs. Irish Gas Prices are also higher than in the rest of Europe given there are additional transportation charges from the UK. As North Sea gas reserves decline it is unlikely that Ireland will be protected in any way by the UK, as has happened with previous gas market fluctuations.

Development of indigenous resources and the coming online of the Corrib Field are therefore critically important to the security of supply issue and international competitiveness challenges facing Ireland at present.

100% of Non-domestic gas customers may now choose supplier. That same facility should be afforded to domestic consumers. This is particularly relevant since the completion and commissioning of the new Gas Pipeline to the West, which has opened up major new potential demand centres. The development of a supply market in these new locations should be constantly monitored by the Commission for Energy Regulation and the ability to choose supply company for these new consumers should be factored into plans from the

earliest stage. By having choice in place from the start in these growing markets, no supply monopoly should be able to develop. This must, however, be achieved in such a manner as to recognise the investment in infrastructure put in place by Bord Gáis Distribution and Transmission business units.

### **3.2 FOSSIL FUEL DEPENDENCY AND RENEWABLE ENERGY IN THE FUEL MIX**

The Government wishes electricity end customers to take additional measures to switch away from fossil fuels to achieve security of supply and environmental objectives. However, without a significant improvement in the fuel mix or increased diversification, purchasers will not be free to choose their source of energy whether or not it is from a renewable source. An increase in renewable energy share in the marketplace will both increase consumer choice and increase competition.

Exercising consumer choice requires such choices to exist. The exit of Airtricity from the residential/domestic supply market citing a lack of competitiveness and regulation left domestic (and some small business) consumers with even less choice in an already small market. The proposed all-island market should go some way to redressing this and it would be hoped that energy supply companies would be able to enter the market competitively. However, until real competition is developed in the generation sector it is unlikely that any significant improvement in choice will be afforded to the consumer.

**The White Paper should include a full and detailed evaluation of the various options presented in the Deloitte Review of the Electricity Sector in Ireland for restructuring of the ESB. The Government's preferred option should be clearly set out alongside a timeline and specific measures to facilitate its implementation. The NCA supports implementation of the "Portfolios & Separation" alternative.**

**The Single Electricity Market marks an important step in creating a structure conducive to competition in the energy market in Ireland. Current plans should be implemented as already outlined and further policy commitments should be set out to deliver upon the strategic goals of the All Island Energy Market.**

## **4. COMPREHENSIVE STAKEHOLDER INVOLVEMENT**

### **4.1 ENERGY EFFICIENT STRATEGIES**

Energy efficiency is one of the key areas where both generators and consumers can increase their efforts to contribute towards lower energy loss levels and a lower overall demand for energy.

The Green Paper does recognise that energy efficiency is a key priority for Ireland but does not address the necessary actions required to further develop it across all sectors. The recently launched Energy Efficiency Awareness Campaign, The Power of One, marks a move in the right direction but needs to be strengthened. Further developments will need to be established in order for any effects to be felt by the consumer. It is vital that any such campaigns be followed by meaningful Stakeholder involvement providing on-hand and easily accessible information to the consumer. Without a reduction in the individual demand of each consumer, increased competition in the marketplace will only have a limited impact, as any reduction in price will be minimised by increased levels of usage.

It is also important that improvements in national energy efficiency be passed on to the consumer. For many measures, such as the purchase of lower energy appliances, there is a direct positive impact for both the consumer and the national Energy networks, yet for other energy saving measures, there is no tangible reward to the consumer and thence no compelling reason to adopt new behaviours.

### **4.2 ENERGY TARIFFS & METERING**

The basic structure of the current supply tariffs in Ireland for the majority of consumers is that of a bundled tariff that comprises energy, transmission, distribution and a retail margin charged by the Electricity Supply Company. With the new market arrangements commencing in November 2007 it is likely that further energy supply companies will enter the market. The cost of energy to these supply companies, transmission charges and distribution charges should be similar. As a consequence the main area where competitiveness will come into play is in the 'retail margin' being charged. Under current arrangements the ESB has largely been able to define its own tariff structure and propose tariff increases to the regulator without the fear of competitors undercutting these rates. The recent revision by the CER of the proposed ESB rate increase (largely to reflect a change in gas prices) would suggest that a margin in the retail cost exists that could be exploited by new energy supply companies.

A lack of choice in available tariffs and in more sophisticated tariff structures limits the actions of the average consumer. Further, it does not reflect some of the messages being sent out in ongoing and recent PR campaigns. The 'Peak Period' between 17:00 and 19:00 every day is the time where the demand for electricity is at its highest. As a result, this peak sets the bar for how much generation capacity is needed. It is also the period of time within which generators are, generally speaking, paid a premium for their energy. Through changing the current tariff structure and introducing a peak charge during these hours with a 'shoulder charge' before and after and then an 'off-peak' charge similar to the current 'night rate', consumers would be encouraged to avoid this 'peak'. Further, from a network management perspective, the benefit of lower use in this period would ultimately be passed on to the consumer directly, through enhanced competitiveness in the generation market.

Similar to the plastic bag levy, it often takes a tangible penalty to the consumer to enable change to happen. It is also vital that a behavioural change in the consumer that reduces peak demand (such as putting your washing machine on after seven) is rewarded. As it stands the immediate benefit would be passed on to the supply company and generators. The consumer will not benefit directly unless they move their demand to the current nighttime period after 23:00. A re-arrangement of the tariff into a more sophisticated penalty/reward structure would be far more likely to effect change in the peak, helping to increase efficiency and helping to prevent brown and blackout scenarios.

As previously mentioned, the NCA would also like to highlight in this context the potential benefit to be gained from reducing standing charges and placing a greater proportional cost-weighting on actual energy consumption. The present system militates against rewarding consumers for positive consumption behaviours when a proportion of their bill cannot actually be influenced by the consumption choices they make. Whilst the NCA recognises the contribution to infrastructural development costs made by the standing charge, the Agency would welcome a debate as to the optimal structuring of charges, in the interests both of the consumer and of positive energy consumption behaviours.

To increase the uptake of more energy efficient appliances, the Government should consider the introduction of tax relief on certain identified, and publicised, energy efficient appliances that would be considered to make the largest impact. The potential lost revenue to the government in introducing this measure should be easily quantifiable and should be compared against the benefit in energy efficiency and carbon emissions avoidance.

#### **4.3 CONSUMER AWARENESS & THE ROLE OF THE LOCAL AUTHORITIES**

There is a large interest among the general public in current energy matters including energy efficiency and the potential of renewable energy use. Through the recent Power of One campaign and through the work of Sustainable Energy Ireland and Local Energy Agencies consumers are increasingly becoming aware of their own important role in the Irish energy sector. This awareness needs to be followed by a meaningful transfer of knowledge that is both readily available and accessible to the consumer.

In a survey and report commissioned by the European Commission in the final quarter of 2005, it was found that in the EU25 countries, 43% of people stated that more information should be provided on efficient use of energy. Out of the Irish people surveyed, 51% of consumers stated that more information should be provided to help people reduce their energy consumption. It has been previously noted by the Consumers Association of Ireland that consumers are either ill-informed or uninformed in relation to energy efficiency matters and as a result 'are bewildered as to how to act effectively or support the introduction of true efficiencies'.

The role of the Local Authority (LA) and their respective Energy Agencies could play an important role in raising consumer awareness. However they are given little recognition and support in the Green Paper. Their function should not be overlooked as they are in a position locally to directly work with the consumer and increase their involvement in energy matters and encourage energy efficiency through localised information campaigns. Their existence 'at the coalface' for much of the public provides an existing interface that could be exploited to inform consumers of various methods of increasing energy efficiency and improving their position in terms of

energy economy. Funding should be provided for the LAs to implement such campaigns (with technical support from Sustainable Energy Ireland and others) to increase their involvement, as they possess an untapped potential of networks to address consumer concerns.

**To incentivise rationalised energy usage, consideration should be given to variable tariff structures, to the introduction of time of day meters or to changing the “standing charge” to place more emphasis on the cost of energy consumed.**

**Some form of Government incentive, such as tax relief, should be considered to encourage consumers to purchase specific energy efficient appliances.**

**The role of local authorities and their respective energy agencies should be given further consideration in the White Paper as a means of supporting energy efficiency measures “on the ground”, reflecting the important information and guidance service they offer to consumers seeking energy efficiency tips and advice.**

## **5. “ELIMINATING FUEL POVERTY” AS A PUBLIC POLICY PRIORITY IN IRELAND**

Fuel poverty is not a new problem in Ireland although it is more prevalent now than ever before in both the public and private sector housing stock, due to increased fuel prices of recent years. Fuel poverty has many definitions with the most recent and pertinent one for Ireland given as being ‘The inability to heat ones home to an adequate (safe and comfortable) temperature owing to low income and poor (energy inefficient) housing’<sup>3</sup>. Many Local Authorities (LAs) have successfully addressed this problem in social housing areas with positive regeneration schemes that have removed many tenants from fuel poverty. Much of the success has been achieved in more concentrated developments of social housing where over the past 10 years building energy efficiency has been improved significantly. This is now being followed up by campaigns to address energy inefficiencies in less concentrated social housing stock (often requiring more capital investment to make a real impact). This could be further achieved through expansion of the SEI Low Income Housing Programme and Warmer Homes schemes.

With the problem of fuel poverty in Social Housing now being ameliorated or in the process of being so, the more difficult to regulate rental and low-income private sectors now need to be addressed. Even with improvements in the Social Housing sector approximately 17% of Irish dwellers still suffer from fuel poverty (UCD household survey performed in 2001).

Two major areas exist where fuel poverty is prevalent, the first being in the rental sector. With a buoyant rental market where choice is often driven primarily by location, there is no market-driven incentive for landlords to provide more energy efficient accommodation. While the Energy Performance of Buildings Directive will ultimately see all rented properties rated for their energy performance (new dwellings from 2007 onwards and existing dwellings from 2009) this will still have little impact where location is of primary concern. Whether through enforcement or incentivisation, some mechanism needs to be put in place to ensure that rental accommodation is maintained to high enough standards that tenants are not caught in an energy poverty trap.

The second major area is that of Affordable Housing and low-income housing. This housing is building stock that is made available at artificially low prices so that prospective homeowners who otherwise could not enter the market are able to own a home. Inherent in this specific housing market there is little or no consumer choice as the opportunity and potential to own their own home is the driving force. Should these dwellings be constructed to high levels of energy efficiency then there would be no issue. However there is a trend in the marketplace (due to cost implications) to build these dwellings to the minimum standards. This almost invariably entails minimum acceptable levels of insulation and electric heating systems (which are by far the cheapest to install but most expensive to operate). This means that relatively vulnerable homebuyers are faced with an ongoing burden of relatively expensive and less sustainable heating systems. Again, an expansion of schemes such as the SEI Low Income Housing Programme and Warmer Homes schemes would help to ameliorate this.

The forthcoming Energy Performance of Buildings Directive (EPBD) will begin to address this issue in the private sector and is a positive step for the ordinary

---

<sup>3</sup> as provided by Clinch and Healy in their 2001 paper produced for UCD

consumer where they may be able to choose, for example, between an A or C rated house. The rating of homes on an energy scale will increase public knowledge on energy efficiency, the importance of insulation and should ultimately lead to increased levels of energy efficiency in the overall building stock. However, this will only have a real impact on those participants in the Housing Market who can afford to choose between a range of houses that may potentially be on offer.

The Government and Local Authorities should address this problem immediately by enforcing an increase in the level of specification of Social and Affordable Housing with regard to energy efficiency.

**As a means of reducing fuel poverty, targeted measures should be enforced to incentivise or to compel the application of higher energy efficiency standards in the construction, refurbishment and maintenance of rental and Social & Affordable Housing properties.**

## 6. THE 22 GREEN PAPER QUESTIONS

The DCMNR proposed the following 22 questions for the consultation process. What follows are the National Consumer Agency responses to the same. They represent shortened responses developed from the discussion in this paper.

### 6.1 ENSURING THE SECURITY OF ENERGY SUPPLY

1. *In addition to enhancing the contribution of renewable energy, what actions could be taken to further diversify the fuel mix for electricity generation and reduce dependence on oil and gas?*

The increased use of combined heat and power (CHP), including biomass CHP units should be further facilitated. One of the benefits of CHP is that once established, a variety of fuels can be used. Small-scale CHP can be a viable alternative option for many consumers where it is facilitated offering cheaper running costs to conventional separate heat and electricity supply. At the moment there are a number of barriers to small-scale CHP, which are not addressed adequately in the Green Paper.

The availability of grid connections for generators and the contestability of these connections needs to be addressed. This could ensure that once generators are deemed compliant with the Grid Code and suitable capacity is available for the generator, there would be no excessive delay in connection.

2. *How can generation and transmission adequacy in the electricity sector be improved?*

Generation in the electricity sector can be improved by increasing the penetration of small-scale embedded generation and renewables into the already established generation portfolio. As stated above, this should include CHP, biomass and other alternatives where feasible.

The recommendation to create a land bank of power generation facilities should be developed and managed by the CER, as suggested in the Deloitte report.

Improvements in transmission adequacy are already underway by ESB Networks with €7.6 billion spending on the transmission and distribution networks infrastructure over a 14-year period until 2010.

3. *What actions should be taken to create strategic storage capacity in the gas sector?*

The proposed study on Compressed Natural Gas and Liquid Natural Gas currently under procurement by the DCMNR needs to be followed up on with positive action. The existing scenario where Ireland has only 2 days of gas reserves leaves all energy consumers highly vulnerable to the vagaries of the international political climate and energy market.

4. *What are the challenges to greater participation by new players in the development and operation of power generation plant - and how should they be addressed?*

The dominance of ESB Group due to its size; its strategic (location) price-setting capability; and its continued link to ESB Networks and customer supply sections are the main challenges to increased participation by new entrants. The separation of ESB Networks from ESB Group and the

liberalization of the electricity sector would mark the first step in building confidence in the Irish market for prospective new generation companies.

There should also be concerted effort to accelerate the process of reducing ESB domination either through a policy of splitting up the current generation portfolio into smaller, competing bundles or through the enforced reduction in ESB dominance. This all must be completed in such a manner that it does not expose the consumer to security of supply issues and in such a way that it leaves the ESB competitive in the new market place without being uncompetitively dominant.

5. *How, and over what timeframe, should Ireland pursue greater electricity interconnection with Europe?*

An increase in North-South interconnection should be advanced as a top priority in the short-term to ensure that added competition in the new All-island market is not constrained by limited physical interconnection. East-West interconnection should also be pursued and developed to allow for both import and export, increasing security of supply and also allowing for greater penetration of wind energy into the Irish generation market.

6. *What measures could be taken to encourage the exploration and production of indigenous energy resources?*

The current measures in place to increase the deployment of renewable energy should promote the deployment and market participation of mature renewable energy technologies and the proposals and commitments put forward by the Green Paper are welcomed by the National Consumer Agency.

It is vital, however, that new and emerging technologies are developed in Ireland, with a consequent need for R&D funding. The long-term security of supply of energy for Ireland not only depends on the implementation of existing technologies developed elsewhere but also the development of expertise within the country for developing technologies within Ireland. Our vast Wave and Tidal resource is a primary example, followed perhaps by clean coal technologies, Agri-energy resources and hydrogen fuel cell technology.

Only through investment in R&D now can we ensure that in the long-term we have both independence in terms of energy supply but also in terms of energy technology expertise as both a resource for Ireland and an exportable commodity, as proven by countries such as Denmark. Funding for R&D should be increased significantly in Ireland by the government ensuring that technologies and patents developed are retained in the country.

7. *Given the existing level of dependence on imported fossil fuels, what needs to be done to enhance contingency measures?*

Storage capacity needs to be not only taken up to international standard but to surpass it. As a country almost entirely dependent on imported energy it is not enough to slowly come up to a standard imposed by external influences. We must continue to examine additional and innovative solutions for storage in Ireland.

8. *Does the Green Paper generally set out the right policy directions for security of energy supply?*

The Green Paper sets out policy for the short and medium term but fails to address issues in the longer term. One of these is the re-iterated decision to continue the prohibition of nuclear energy. In the very near future Ireland may be forced into a position where fossil fuel imports are constrained on a more permanent basis and our renewables industry has not developed sufficiently to cater for market demand. The refusal to examine this as a viable option at this stage strategically restricts our ability to choose in the future should excessively adverse conditions force us to consider all alternatives.

## 6.2 PROMOTING THE SUSTAINABILITY OF ENERGY SUPPLY

9. *What can be done to improve the pace and range of development of renewable energy resources for electricity generation on a sustainable basis?*

One of the largest inhibiting factors for generation from renewable energy sources is the long timeline for grid connection into the National Electricity Grid and high grid connection costs involved. The costs for renewable generators should be significantly reduced to entice smaller generators into the market. Another factor to be considered here is the planning permissions required and timeframe for acceptance that can extend beyond the final grid connection date. The ESB is not delivering this essential infrastructure fast enough and alternative means of putting it in place (e.g. use of private contractors by developers) should be explored.

The range of renewable resources can be increased by further developing technology and providing grants for further research and development.

10. *In addition to electricity generation, what actions should be taken to develop renewable energy usage in the transport and heat sectors?*

- Information and incentives to consumers with regard to Flexi-fuel and Biofuel vehicles needs to be increased (VAT on fuels and VRT on Vehicles)
- A combined strategy involving the Government and members of the Energy, Agricultural, Fuel and Motor Industry needs to be developed. This needs to include the involvement of the Department of Finance and the Revenue Commission at every stage.
- Biofuels strategies need to have a much wider reach to give consumers access and choice.

11. *What significant new initiatives could be taken to increase energy efficiency across the economy and in particular in households, businesses, the public sector, the transport sector and the built environment?*

- Meaningful Stakeholder Involvement is essential with easily accessible and on-hand information available to the full range of consumers to allow them to control and reduce their energy consumption. The utilisation of Local Authorities and Local Energy Agencies with SEI and others as technical back up would provide this on-hand support at a universally known and easily accessible interface.
- Tariffs, fuel prices and the cost of energy efficient technologies need to facilitate and encourage the increase in energy efficiency. Consumers should receive tangible incentives to improve energy

efficiency and the benefits of increased energy efficiency should be passed back down to the consumer.

- Control and an increase in building energy efficiency needs to be addressed. This is a particular problem in the Rental and Social and Affordable Housing Sectors.

*12. What additional policy measures should be introduced to significantly expand energy RTDI and what are the priority areas of research, which need to be targeted?*

Areas of priority research need to be those most relevant to the specific Irish scenario, namely:

- Wave and Tidal Energy
- Agri-Energy (both biomass and liquid biofuels)

It is vital that as RTDI is increased that the majority of funding comes from the Government ensuring that the technologies and patents developed remain in Ireland, so ensuring satisfactory payback for the investment made by taxpayers' money.

*13. In light of the Government's Science, Technology and Innovation Strategy, what needs to be done to radically expand the national energy research capacity?*

See question 12.

*14. What are the key supply and demand questions to be addressed to underpin a fully cohesive National BioEnergy Strategy?*

From the consumer point of view it is essential that each innovation in either technology or the market is publicised and that the consumer is aware of how they can practically take ownership of bioenergy in their everyday life.

It is vital for a healthy market that user and consumer confidence remains strong, the control of quality of bioenergy systems, their installation and the bioenergy fuel itself are paramount at this early stage of development of the industry in Ireland. If confidence in the industry is lost at this early embryonic stage of its development it may be difficult to ever regain it. The introduction of quality control into the installation and supply sectors (similar to RECI for electrical contractors) needs to be implemented whether by Government or Market/Industry driven.

*15. Do we need to choose between mandatory targets and better incentives for renewable energy and energy efficiency - or is a mix of both the best way forward?*

Better incentives for renewable energy include grants and support schemes that are properly regulated and controlled are proven to create higher awareness and greater deployment of renewable energy technologies. What is important to note here is that the funding schemes need to be properly and efficiently monitored to ensure they are being used effectively.

The use of mandatory targets is a good function to increase the sustainability factor. Leading from the example given by Fingal County Council, a percentage of all developments or power generation should originate from sustainable and renewable technologies.

The National Consumer Agency feels that the retention of both mechanisms is the best way forward once they are controlled and their impact on the market monitored.

*16. Does the Green Paper generally set the right policy directions for energy sustainability?*

The National Consumer Agency welcomes the majority of the proposals put forward regarding energy sustainability in the Green Paper.

### **6.3 ENHANCING THE COMPETITIVENESS OF ENERGY SUPPLY**

*17. In the context of liberalization of the Irish energy market, what further actions should be taken to develop more fully competitive electricity and gas markets and what specific barriers need to be overcome?*

- Removal of dominance of ESB Generation Portfolio, and the separation of this and the other constituent elements of the ESB i.e. ESB Networks and ESB Customer Supply.
- A land bank of power generation facilities independently controlled by the CER should be formed to prevent the retention or development of price-setting generation capacity by any existing or future major player in the energy market.
- The Transmission and Distribution Systems Operators should be retained in state ownership.
- Interconnection should be pursued as a short to medium-term target to address physical constraints to increased integration of the market.

*18. What policy measures and targets should be introduced to reform institutional arrangements and market structure, particularly in the electricity and gas sectors?*

- The new market arrangement for electricity is a viable mechanism for increasing competitiveness in Ireland in the Electricity market. However it will only succeed in this regard if the existence and dominance of the ESB as a vertically integrated utility (Generation, transmission, distribution and supply) is addressed by the CER and Government in the short-term as opposed to the long-term.

*19. While a significant proportion of our energy prices are determined by international oil and gas prices, what actions should be taken domestically to reduce the cost of electricity and gas to consumers?*

- Participation in the Single Electricity Market by new generators and suppliers needs to be promoted.
- Separation of ESB as per the Deloitte Report and the controlled sale of Generation Portfolios.
- Increased diversity in current fuel mix including renewables.
- Continuing energy efficiency awareness campaigns with meaningful Stakeholder Involvement

*20. State-owned enterprises (e.g. ESB, BGE, Bord na Mona) have played a central role in the development of the energy sector. How should the role of State-owned energy enterprises respond to the challenges of meeting our energy needs in the future?*

The State Enterprises have achieved their primary aim of ensuring that as much as is practicable the population have access to a dependable supply of energy. The success of these has caused an inequitable situation in the current marketplace where new participants who could assist and encourage in overall efficiency and cost effectiveness of the market are unable to participate at any meaningful and competitive level. The controlled but short-term removal of this dominant market position needs to be completed.

The National Consumer Agency recognises the efforts of the Government in this regard but feels that the solutions proposed will not have an impact in the short to medium-term and would encourage the adoption of the recommendations put forward in our answer to Question 17 as above.

*21. What further action should be taken to alleviate fuel poverty?*

- There needs to be an increased focus on the inefficiency of Building Stock, particularly in the Rental and Social and Affordable Sectors.
- Provision of support for fuel should be matched by investment in efficiency to ensure that the causes as well as the symptoms of fuel poverty are addressed.

*22. Does the Green Paper generally set the right policy directions for enhancing the competitiveness of the Irish energy sector?*

The National Consumer Agency feel that while some of the proposals put forward in the Green Paper will have impact on competitiveness in the Irish Energy Market that these impacts will not have any significant effect in the short to medium-term and that certain measures identified above and expressed in the Deloitte report would address this.

#### **6.4 ADDITIONAL QUESTIONS & COMMENTS**

*23. Should the Government maintain its statutory prohibition on Nuclear Energy?*

As indicated in the Electricity Regulation Act of 1999, the Irish Government has taken a firm stance on the use of nuclear energy in Ireland for the foreseeable future. While politically it may be an extremely sensitive issue to broach with the public it is vital for all energy consumers in the country that we at least examine all potential energy sources and their viability in Ireland. With a two-day natural gas supply and ninety-day oil supply currently being our only contingencies the examination of Nuclear as a viable alternative should at the very least be considered.

The restriction of future choices at this stage is inadvisable considering our dependence on external fuel imports and the lack of significant deployment to date of renewable energy resources.

*24. Utilisation of District Heating (DH) is not mentioned in connection with the use of large-scale CHP units, why?*

Throughout the Green Paper, the use of CHP plants was discussed, at large and micro scale. However, the use of DH in connection with large-scale CHP units was not discussed.

There are many advantages to the use of DH, especially in an urban setting where there is a high and constant heat demand. Such advantages include the diversification of the fuel mix available for use

once the pipe network is established. This can include, depending on location, geothermal, biomass & biofuels, CHP, fossil fuels, municipal waste incineration or surplus heat from industry. Other advantages of DH include the ability to shift demand to off-peak periods due to the potential for storage of energy and reliability and security of supply. One such project is currently being developed by Dublin City Council with a view to introducing and propagating this efficient heating system through the city.

District Heating addresses the three main strands of the Governments Green Paper i.e. competitive pricing and market, sustainability and security of supply. It should therefore feature explicitly in the Green Paper and support mechanisms that recognise the potential contribution in the overall energy market should be considered.

From a consumer point of view, the use of district heating has the potential to offer up to 10% savings on annual heating bills and offer a sophisticated level of control.