Utility Regulator
ELECTRICITY GAS WATER

# Energy Retail Report

# 2010

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# Energy Retail Report 2010

## Introduction

The 2010 Energy Retail Report is the second in our series of annual reports which details information and explains the regulated energy sectors in Northern Ireland. We have both updated and also increased the data captured in this report. We are extremely grateful to stakeholders, particularly in the regulated companies, who provided much helpful information and explanation for the contents.

As noted in 2009, we intend to keep improving content and coverage in future reports. To that end we welcome comments and views from readers and stakeholders in terms of how the report might be improved and new data sets or sources that would be useful to add to future editions. Whilst this is not a formal consultation, comments on this report are very welcome and should be sent to:

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## Purpose of the Document

The primary purpose of our second annual Energy Retail Report is to provide readers and stakeholders with readily accessible information in relation to the work of the Utility Regulator (UR) and the energy sectors we regulate. Specifically this report focuses on information relevant to the evolution and performance of Northern Ireland retail energy markets. With the arrival of energy supply competition at household level for the first time in Northern Ireland during 2010, transparency and information around the workings of our energy supply markets is more important than ever. This report is just one way in which we intend to deliver that transparency for stakeholders and customers.

Given the diverse interests of our stakeholders, this report covers much ground within both the regulated gas and electricity sectors, and is deliberately wide-ranging in content. The report is structured along the following lines:

PART ONE: Background. This covers general aspects of the Northern Ireland energy sector. We believe it is important to those interested to have a high level vision of how the energy sector functions, who the main companies are and the role of the UR.

PART TWO: Core retail information. In this section we present information and data that will give information to stakeholders interested in Northern Ireland retail markets, and also help us to monitor the behaviour of the main market participants and the functioning of the retail sectors as supply competition emerges. Our intention is that this section will be complemented in the future

with a new set of quarterly reports that will allow closer monitoring of competition development and its impact on customers.

PART THREE: Key future retail work areas. Will give a general overview of some key areas/projects we intend to progress through the Retail Directorate within the UR. This section is mainly based on our Forward Work Plan (FWP), and derived from our Corporate Strategy and national and European legislation.

## Policy Background to Energy Retail Competition Development

Achieve effective competition that can deliver real consumer benefits, has long been and remains at the heart of the EU and UK vision of energy retail markets. In recent times, we have actively pursued a policy of creating a fertile environment for greater electricity and gas supply[1] competition to emerge, particularly in market sectors where competition has been absent (households).

The statutory remit given to us places a high value on competition as a means to deliver consumer benefits. Competition is a key feature, particularly in electricity where it is the UR's primary statutory objective 'to protect the interests of consumers…wherever appropriate by promoting effective competition'.

EU law is equally explicit about the central role of competition to deliver consumer benefit. Recent 2009 EU Directives[2] continue the pursuit of effective competition as an EU-wide policy goal and focus also on consumer rights and roles within retail markets *'in order to allow consumers to take full advantage of the opportunities of a liberalised internal market'* in electricity and natural gas.

Revealed consumer preferences also drive our policy. The UR has abundant anecdotal evidence that Northern Ireland consumers would like to have more choice of their energy supplier.

Beyond these policy drivers, the current situation is that whilst there is a significant level of competition in both electricity and gas markets for business customers, household-level customers until recently have had no choice of electricity and gas suppliers. That changed in June this year when Airtricity entered the domestic electricity supply market. This has been a welcome and ground-breaking development, and we are hopeful of further entry into our energy retail markets by other suppliers in the short to medium term.

Since 2007, the gas market in the Greater Belfast and Larne area has been open to competition for all customers. In Belfast there are currently four active gas suppliers, Phoenix Supply Limited (PSL), firmus energy, Energia and VAYU. Whilst a relatively small number of industrial and commercial gas customers have changed supplier, competition in the gas sector in this area at household level is due to start on the 1 November 2010.

For the ten towns[3] connected to the gas network outside of the Greater Belfast and Larne area, firmus energy retains the exclusive rights to supply gas to all customers[4].

Our overall philosophy in developing retail competition is to develop, change and where appropriate reduce the regulatory framework in a way that seeks to maximise consumer benefit

[1] The UR currently regulates the electricity and natural gas supply markets; not the home heating oil market.
[2] Directive 2009/72/EC concerning common rules for the internal market in electricity; and Directive 2009/73/EC concerning common rules for the internal market in natural gas.
[3] Antrim, Armagh, Ballymena, Ballymoney, Banbridge, Coleraine, Craigavon, L'Derry, Limavady and Newry.
[4] The retention of exclusivity for firmus energy is consistent with EU Directive 2003/55/EC (the Directive that requires market opening), since the Directive only applies where a supplier has in excess of 100,000 customers.

from competition. We contend that this can be achieved through maximising the degree to which the energy retail market is truly contestable and competitive. Competitive entry (or the effective threat of it) and customer empowerment are the engines that can realise the benefits of competition.

The benefits from greater energy retail competition might include:

- **innovation** – new suppliers, with experience in other markets, are likely to bring to market different products that extend consumer choice. This will likely include 'dual fuel' options;
- **service standards** – Competitive pressures, combined with effective industry systems, should enable high service standards to be delivered flexibly and cost effectively. Regulation can only effectively set a single standard which might be the average of consumers' wishes, while competition can allow different supplier and product offerings to differentiate service levels, with prices varying accordingly; and
- **downward cost pressures** – in the short term, from creating competitive pressure to reducing costs in supply, and to be more efficient in the procurement of wholesale energy. In the long- term, from dynamic efficiencies and improvements driven by competition at both the firm and sectoral levels.

Delivering truly contestable and competitive supply markets will be the driver for ensuring consumers benefit. While we will focus on this goal, we will move forward pragmatically, recognising the complexity of issues involved with delivering competition in a relatively small market like Northern Ireland.

As a first guiding principle to future policy development, we believe that electricity retail competition can potentially deliver benefits for consumers, so long as it is: developed efficiently; delivers truly contestable retail conditions in all market sectors; delivers lower prices than regulation of the retail market would otherwise have achieved; and Northern Ireland consumers have the information they need to fully engage with these markets. Thus our future regulatory approach and actions to currently regulated supply markets will be driven by evidenced emergence of contestability and competitive potential in our supply markets. An enhanced framework for energy retail marketing monitoring will therefore be a key priority for the UR going forward.

As a second guiding principle, we believe that strong regulatory frameworks should remain in place until contestability/competition is firmly evidenced and until we believe that customers in Northern Ireland can realistically expect to benefit from competition. As we go forward we need to try to ensure that all customer groups benefit from competition and switching opportunities, or at least are made no worse off. Where they do not, we need to ensure the regulatory structure continues to offer customer protection – competition where it is effective, regulation remaining where not.

In practical terms going forward, our work in this area will centre on (see Part 3 of this report for more background and discussion of this area):

I. delivering the necessary systems and processes to allow effective retail competition to emerge and full customer switching capabilities;

II. facilitating new supplier entry;

III. enhanced monitoring of energy retail markets to better understand contestability issues and customer experiences; and

IV. where necessary, optimising customer protection frameworks e.g. in terms of Codes of Practice for suppliers, transparency of information and billing, protection of vulnerable customers.

# PART ONE: BACKGROUND

## 1. Overview of the electricity and gas sectors

### 1.1. The Utility Regulator

The UR is an independent non-ministerial government department. Our role is to ensure that the utility industries in Northern Ireland are regulated and developed within the strategic policy parameters set out by the Northern Ireland Executive and the relevant legislation. We have a broad range of functions carried out in line with statutory duties set out mainly in the Energy (Northern Ireland) Order 2003 and the Water and Sewerage Services (Northern Ireland) Order 2006.

At the core of our duties and functions is the protection of the interests of present and future water, sewerage, gas and electricity consumers in Northern Ireland.

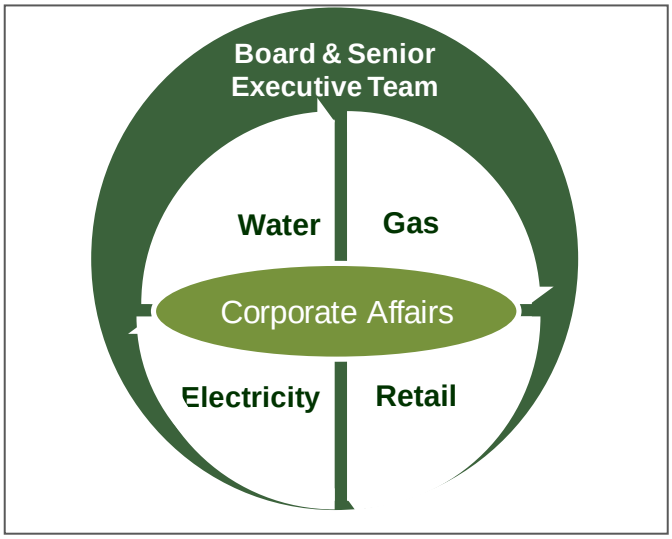
#### The Utility Regulator Structure

The UR currently has four regulatory directorates:

- Electricity
- Gas
- Retail
- Water

The directorates are responsible for the economic and consumer service regulation of the three regulated sectors. They are supported by a Corporate Affairs directorate which is responsible for social and environmental matters; appeals, complaints and disputes; finance and administration; strategy development; legal and communications.

**Figure 1** Utility Regulator's internal structure



The protection of consumer interests through effective regulation of the three regulated sectors is achieved by:

- Protecting the interests of Northern Ireland consumers by effective and transparent scrutiny and regulation of regulated companies.
- Protecting vulnerable consumers of the regulated companies.
- Ensuring that these companies comply with the relevant legislation and licence obligations.
- Encouraging regulated companies to be more efficient and responsive to consumers.
- Controlling the prices these companies charge to consumers.
- Working to encourage competition in the gas and electricity markets.
- Setting and monitoring standards of service which these companies provide to consumers.
- Acting as an adjudicator on certain consumer complaints, disputes and appeals.
- Carrying out our duties with the environment and sustainability in mind.

There are many similarities in the work issues that we deal with in relation to each of the regulated sectors, and to some degree that allows us to be more efficient and to adopt cross-sectoral thinking and approaches to problems. However, there are also many work issues that arise that are specific to an individual regulated sector. This can be the result of the individuality of the sectors with which we interact; but to a significant degree it is also a symptom of the fact that the maturity of the three sectors in the Northern Ireland context is different.

## Statutory Duties

We have a number of principal statutory objectives.

Regarding the electricity industry, our statutory duties refer to protecting the interests of consumers of electricity supplied by authorised suppliers. This includes promoting effective competition, where appropriate, between persons engaged in, or in commercial activities connected with, the generation, transmission or supply of electricity.

In relation to the gas industry, our duties centre promoting the development and maintenance of an efficient, economic and coordinated gas industry in Northern Ireland.

## Electricity

Our principal objective when regulating Northern Ireland's electricity industry is to protect the interests of consumers, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with the generation, transmission or supply of electricity.

We are therefore responsible for price controlling the operation of NIE's regulated businesses: NIE Transmission and Distribution business (NIE T&D), NIE Energy Supply (NIEES) and NIE Power Procurement Business (PPB) and overseeing other regulated companies' activities, in order to safeguard the interests of electricity customers.

The UR also issues licences, subject to the satisfaction of certain criteria, to those who wish to engage in electricity generation or supply. We also ensure that these licences are enforced.

A key focus since November 2007 has been the establishment of the Single Electricity Market (SEM). This has resulted in a single all-island wholesale market for electricity aimed at enhancing security and diversity of supply, encouraging market efficiencies and economies of scale and promoting greater competition. In parallel we have encouraged greater competition at the retail level with completion of non-domestic market opening in 2005 followed by domestic market opening in November 2007.

A significant challenge, both at a Northern Ireland and all-island level, is the further development of effective retail competition particularly for domestic and small business consumers. Domestic competition recently began in June 2010, when Airtricity entry in the market.

To find out more about electricity workstreams, please visit our website: www.uregni.gov.uk.

## Gas

The UR is responsible for regulating Northern Ireland's gas industry. Our principal objective with respect to gas is to promote the development and maintenance of an economic, efficient and co-ordinated gas industry. We also aim to protect the interests of gas consumers with regard to price and quality of service.

Also, as in the electricity sector, the UR is the issuing body of the licences for conveyance, storage or supply of gas.

In 1996 the building by Bord Gáis Éireann (BGE) of an interconnector between Scotland and Dublin made the construction of the Scotland to Northern Ireland Pipeline (SNIP) possible. This pipeline brought gas to Northern Ireland, and since then, a key focus has been on activities to encourage the growth of the network.

Northern Ireland and the Republic of Ireland (RoI) are committed to the development of a single European gas market, which is designed to bring benefits to all European citizens and to contribute to Europe's competitiveness. In this framework, cross-border trading is developing and the interconnectivity of gas networks is increasing.

Also, there is the opportunity to develop the gas industry with the potential for storage facilities, harmonisation of the industry on an all-island level and consideration given to further network expansion as well as increasing connections within areas already serviced.

To find out more about gas workstreams, please visit our website: www.uregni.gov.uk.

## Functions of the Utility Regulator

Our functions originate from a range of domestic and European legislation. The main domestic legislative base for gas and electricity is the Energy Order, Gas Order and Electricity Order[1]. However, some of the UR's electricity and gas functions are drawn from both domestic and European regulations and include the Electricity (Applications for Licences and Extensions of Licences) Regulations (Northern Ireland) 2007. Examples of functions drawn from legislation are set out below.

[1] The Energy (Northern Ireland) Order 2003. 2003 No. 419 (N.I. 6). Northern Ireland.
The Gas (Northern Ireland) Order 1996.
The Electricity (Northern Ireland) Order 1992.

**Gas**

- Grant licences and extensions of licences to authorise the conveyance, storage or supply of gas.
- Modify licences and also implement licence modifications.
- Perform specified functions, concurrently with the Office of Fair Trading (OFT), set out under Part 4 of the Enterprise Act[5] and Part 1 of the Competition Act[6]. These relate to commercial activities connected with the conveyance, storage or supply of gas or to agreements or conduct connected with the conveyance, storage or supply of gas.
- Make references to the Competition Commission.
- Fix maximum charges for reselling gas.
- Provide information, advice and assistance to the Department of Enterprise, Trade and Investment (DETI) and the OFT.
- Keep the market under review and collect information about it.
- Grant consent for construction of pipelines and construction works at a gas storage facility.
- Establish a process for the determination of complaints by the UR and determine those complaints within specified timescales.
- Set price controls for Phoenix Supply Ltd., Phoenix Natural gas and firmus energy Ltd. Distribution.
- Publish (as appropriate) calculation methodology for imbalance charges and for final tariffs.
- Approve penalty charges which exceed actual balancing costs incurred and approve charges (if they exist) for provision of information (by Transmission System Operators, TSOs) on balancing status of network users.
- Cooperate with other regulatory authorities, including the European Commission in relation to energy legislation and the Competition Commission.

**Electricity**

- Grant or modify licences to generate, participate in the transmission and supply of electricity, and to act as the SEM Operator.
- Make references to the Competition Commission.
- Determination of relevant disputes and complaints.
- Invite tenders for further generating capacity and provision of energy efficiency measures to meet a shortfall.
- Make regulations setting standards of performance for suppliers and distributors.
- Set standards of energy efficiency of consumers to be achieved by electricity suppliers.
- Fix maximum prices at which electricity can be resold.
- Issue NI Renewable Obligation Certificates (NIROCs) and issue and register transfer of guarantees of origin.
- Exchange of information functions with the Great Britain regulator.
- Monitor implementation of renewables obligations and compliance by designated electricity suppliers and operators of generating stations.
- Follow any decision taken on behalf of the UR in relation to a SEM matter by the SEM Committee.
- Approve general scheme(s) for the calculation of the total transfer capacity and transmission reliability margin - in relation to the safety, operational and planning standards used and published by TSOs.

[5] Other than sections 166 and 171.
[6] Other than sections 31D(1) to (6), 38(1) to (6) and 51.

## 1.2. Price Controls - A key function in protecting energy consumers

It is argued that effective competition is the best mechanism to protect the interests of consumers. However, there are areas of the gas and electricity industries where companies retain an effective 'natural monopoly' and where it may not be possible to introduce competition. This applies to the transportation of electricity and gas to customers over national and local networks of pipes and wires. Here incentive regulation, such as network price controls, is applied to protect consumers' interests.

The standard price control is normally exerted over natural monopoly network businesses (pipes and wires), however, due to lack of competition in certain electricity and gas supply customer categories (including domestic customers), a 'supply' price control is in place in Northern Ireland for the dominant gas (Phoenix Supply Ltd) and electricity (NIEES) supply companies.

The main objectives of a price control are:

- to ensure that monopolies do not abuse their position (i.e. an unregulated monopoly might charge too high prices and/or provide too low level of quality, resulting in poor value for money for consumers); and
- to provide companies with a future level of revenue and appropriate incentives to meet their statutory duties and licence obligations.

At the same time, price control regulation provides incentives so companies can:

- manage and operate their networks in an economic, efficient and co-ordinated manner;
- offer a good quality of service to customers;
- invest in their networks in a timely and efficient manner;
- help ensure that the long-term security of supply is maintained; and
- make any necessary changes to the networks, for example, helping development of distributed generation and increasing reductions in the amount of electricity lost on the distribution networks.

### Price control methodology

A price control determines the allowed annual expenditure for the utility company. In order to make this determination, the UR analyses each element of the costs submitted from the company. We take into consideration historic costs, forecasts for the period of the control, any changes in the gas or electricity industry, cost drivers and comparisons with Great Britain and RoI. We also consult with the companies, DETI, the Consumer Council for Northern Ireland (CCNI) and other interested parties before making a final determination[7].

The amount of money that a monopoly network business can earn on its regulated business is restricted by a Retail Price Index (RPI) - X price control that is reviewed every few years. It controls prices, not profits, and encourages efficiency within the company. The RPI - X price control takes the retail price index (the rate of inflation) as its benchmark and subtracts X (an efficiency factor) from it. For example, at a time when annual inflation was three per cent, an X of two would allow the company to raise prices by no more than one per cent[8].

[7] http://www.uregni.gov.uk/uploads/publications/Notes_-_Gas_price_controls_outcome_080409.pdf
[8] http://www.ofgem.gov.uk/Media/FactSheets/Documents1/6610-factsheet39_march04.pdf .

The price control also includes incentive mechanisms to encourage companies to deliver what customers require. For example, companies can be rewarded or penalised depending on the quality of service they deliver.

Price controls provide a company with a level of revenue that is adequate to finance an efficient business. This is based on an estimate of the costs companies face in running their business including:

- **Operating expenditure**: this covers the day-to-day costs of running the network, such as staff costs, repairs and maintenance, overhead costs, etc.
- **Capital expenditure**: this covers spending on assets, such as overhead lines, underground cables, etc. The benefits of capital expenditure are expected to last over several years so companies recover these costs over the assumed life of the asset.
- **Financing costs**: this covers the costs in providing a reasonable return to the investors who provide the capital and other financial facilities it requires. The rate of return on investment assets is usually applied through the Weighted Average Cost of Capital (WACC) methodology for transmission price controls, while supply price controls would apply an allow margin on turnover.

| | |
|---|---|
| In WACC methodology the average of the costs of the sources of financing of a company (basically debt and equity), are weighted by its respective use in the situation of the price controlled company. | The allowed margin on turnover is calculated through benchmarking with the margins obtained by other businesses with similar risk characteristics. |

- **Taxation**: the price control must provide sufficient cash flow to cover the tax liabilities, taking into account, for example, the current rate of corporation tax.

## What we price control in the energy sector

In the energy sector we regulate through price control those companies that transport and supply gas and electricity (NIEES, NIE T&D, Phoenix Natural Gas, Phoenix Supply, firmus energy). The Single Electricity Market Operator (SEMO) and the Systems Operator for Northern Ireland (SONI) are also price controlled companies.

But not all supply activities are price controlled. As the liberalisation process has evolved, some of these activities have been taken out from the regulatory price control scrutiny, such as the energy supply to larger non domestic customers. However, we believe that where necessary regulatory frameworks should remain in place until contestability/competition is firmly evidenced and until we believe that customers in Northern Ireland can realistically expect to benefit from competition. Therefore, we intend to monitor the whole energy retail market to understand how competition is affecting different sub-sectors of customers.

In the electricity sector, price control remains over all customers using less than 150 MWh/year. For these customers, NIEES, the incumbent electricity supplier, must offer the same retail tariff in a particular sector of customers.

In the gas sector, price control remains over the domestic sector and industrial and commercial (I&C) customers who consume less than 25,000 therms per annum.

**Table 1** Current electricity price controls

| Document | Implementation | Link to our website |
|---|---|---|
| NIE Energy Supply Price Control | 2010 - 2011 | http://www.uregni.gov.uk/uploads/publications/2010-11_Decision_Paper_for_NIEES_Price_Control.pdf |
| SEMO Revenue and Tariffs (Consultation Paper) | 2010 - 2013 | http://www.uregni.gov.uk/news/view/lanuch_of_semo_price_control_consultation/ |
| NIE Energy (PPB) Price Control Decision Paper | 2009 - 2012 | http://www.uregni.gov.uk/uploads/publications/NIE_Energy_PPB_Price_Control_Utility_Regulator_Decision.pdf |
| NIE T&D Price Control | 2007-2012 | http://www.uregni.gov.uk/uploads/publications/TD_Final_proposals_Sept_06.pdf |
| SONI Price Control Decision Paper | 2007-2010 | http://www.uregni.gov.uk/news/view/utility_regulator_publishes_soni_price_control_decision_paper/ |

**Table 2** Current gas price controls

| Document | Implementation | Link to our website |
|---|---|---|
| firmus energy Price Control 02 | 2009 - 2013 | http://www.uregni.gov.uk/uploads/publications/Determination_for_firmus_energy_market_development_review_summary_(2).pdf |
| Decision on Phoenix Supply Price Control | 2009 - 2011 | http://www.uregni.gov.uk/uploads/publications/Phoenix_Supply_Price_Control_Final_Determination_2009.pdf |
| Phoenix Distribution Price Control Review Final Determination | 2007 – 2011 | http://www.uregni.gov.uk/uploads/publications/PNG_-_Public_Determination.pdf |

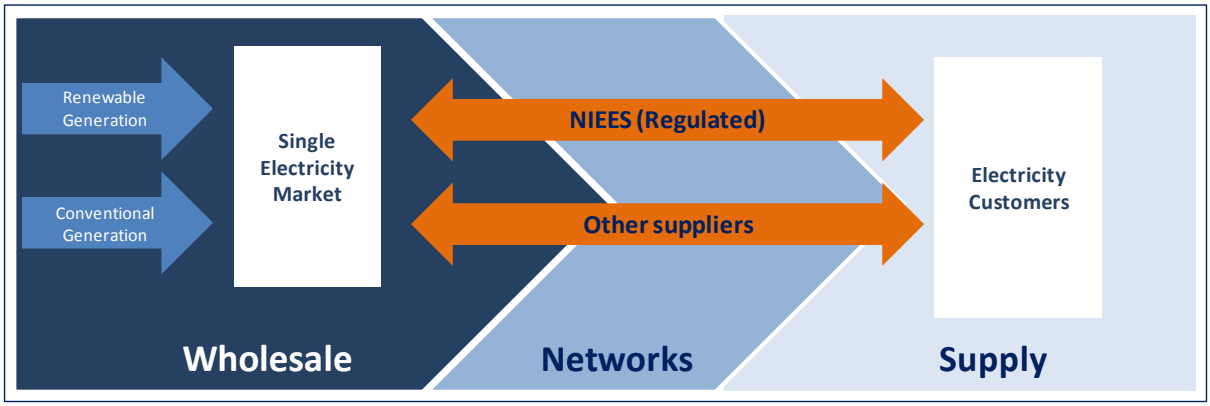
## 1.3. Structure of the Northern Ireland energy sector

**Wholesale market:** In electricity, the wholesale market is where the generators and suppliers trade with each other. Since 2007, this has operated on an all-island basis (known as the Single Electricity Market) and generators across the island of Ireland compete with each other for a share of the total demand. Generators with a capacity greater than 10 MW must have a licence to

operate and must sell their entire output into the Single Electricity Market. Generators with a capacity below 10 MW are able to sell their power directly to suppliers and can decide their own production schedule.

Key regulatory issues in the whole sector are notably electricity generation issues and licenses, SEM, economic purchasing obligations, hedging and wholesale energy purchasing strategies.

Figure 2 Structure of the electricity sector in Northern Ireland

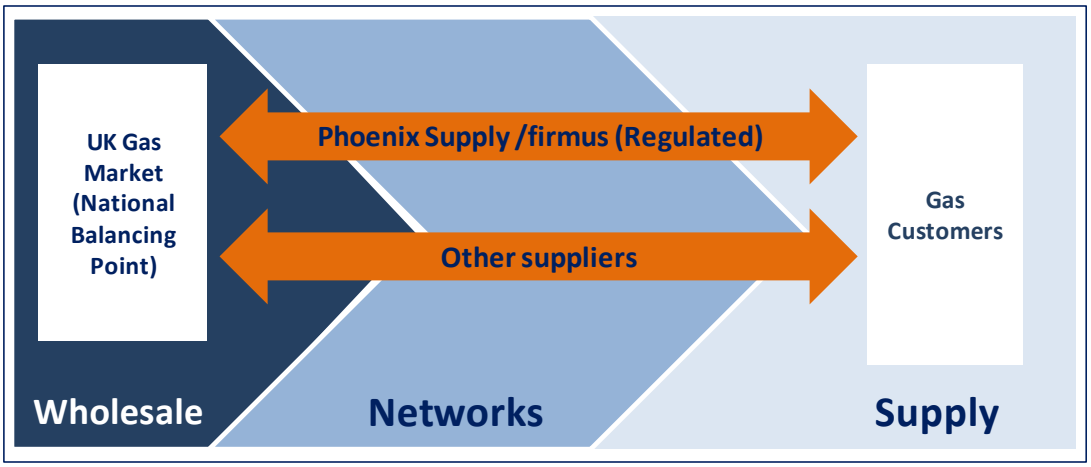



For gas, all natural gas arriving to NI is bought on the UK National Balancing Point, and then transported throughout the country using pipelines. The UR has no direct control over the wholesale gas market.

**Retail markets:** where suppliers trade with customers. Historically there was only one supplier in Northern Ireland. However, since the market began to open up, more suppliers have entered the market providing a choice for customers. Key regulatory issues in the retail sector are developing effective competition that can benefit all customers, supply price control and customer protection in terms of price and service quality.

**Networks:** pipes and wires used for the transportation of electricity and gas to customers. Regulating networks consists mainly of effectively regulating natural monopolies and incentivising efficient behaviour, guarding against market abuse by dominants, establishing a level playing field and third party access to monopoly networks, price controls (including control of those energy retail sectors where monopolistic attributes remain and competition is insufficient to fully protect customers) and all taking into account safety and environmental issues.

**Figure 3** Structure of the gas sector in Northern Ireland

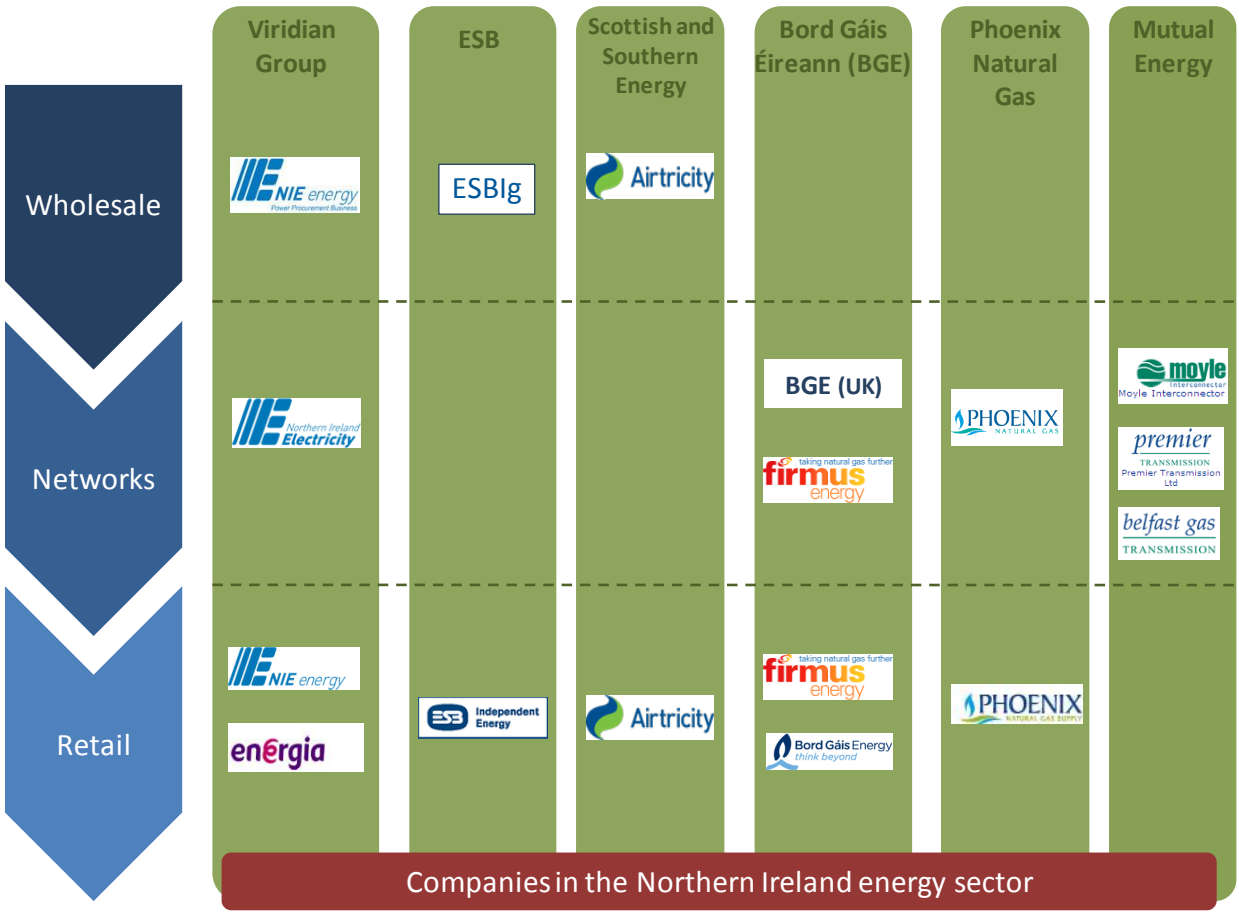



## Energy sector's main agents

This section is aimed at showing a brief overview of the main agents with a role in the gas and electricity sectors in Northern Ireland. Some are also active participants in the RoI or GB energy markets.

The industry players related to the energy regulated sectors can be represented by the following diagram. The names of the main companies, at the top of the diagram have been included only for information purposes.

**Figure 4** Main agents in the energy sector in Northern Ireland




Source: UR

**Viridian Group** www.viridiangroup.co.uk

Viridian Group (Viridian) is formed by several companies including:

- Northern Ireland Electricity (NIE), in charge of transmission and distribution of electricity in Northern Ireland. It comprises the planning, development, construction, operation and maintenance of the transmission and distribution network, used to convey electricity from generating stations in Northern Ireland to customers' premises.

On privatisation, NIE generation division was divided into four companies based on four stations: Kilroot and Belfast West which were coal-fired, and two oil-fired stations, Ballylumford and Coolkeeragh. The stations were assigned long-term off-take deals, Power Purchase Agreements (PPA)[9] with NIE and then sold off. The first two stations were bought by Nigen, after that Belfast West was decommissioned and currently Kilroot is owned by AES Kilroot. Ballylumford was sold to British Gas and converted from oil firing to gas. It has been bought recently (July 2010) by AES. Coolkeeragh was bought by the station's management team and then rebuilt.

[9] Power Purchase Agreements (PPAs) were established in 1992 as part of the restructuring and privatisation of the electricity supply industry in Northern Ireland.

- NIEES supplies electricity to more than 790,000 homes and businesses in Northern Ireland. It was the incumbent supplier before liberalisation of electricity market in Northern Ireland, and has continued to be so for the domestic sector.

- Energia was formed in 1999 as the retail arm of the Viridian Group in the de-regulated markets in Ireland. It obtains wholesale electricity from a number of sources, including principally Viridian's 750 MW Huntstown power station north of Dublin. Energia is a supplier of electricity generated from renewable sources and supplies gas in Northern Ireland and RoI to large I&C customers.

- NIE Energy PPB manages a portfolio of Power Purchase Agreements with a total contracted generation capacity of 1,532 MW. PPB is required, under the terms of both its electricity supply licence and the SEM Trading and Settlement Code, to sell all the electricity generated under the PPAs into this market.

- Powerteam Electrical Services designs, supplies and constructs electrical infrastructure solutions for both substations and overhead lines from low voltage to 400kV.

- Huntstown Power is a power plant located in Dublin which consists of two combined cycle gas turbine stations with a total generation capacity of 747 MW.

- Eco Wind Power is a company formed to capitalise on major opportunities in the field of renewable energy. It is currently developing 121 MW of fully approved wind generating capacity, on top of its existing operational wind farm capacity of 24 MW.

Viridian was originally formed as a new holding company in 1998 following a capital reorganisation under which the group's unregulated activities were separated from NIE. It carried on four regulated businesses in Northern Ireland: transmission and distribution through NIE T&D; power procurement through PPB; transmission system operation through SONI; and supply of electricity through NIEES. In the gas market Energia also has a licence to supply gas in the Greater Belfast area.

In December 2006, Viridian was taken over by an investment bank, called Arcapita, and on August 2007 Viridian was re-registered as a private company.

**ESB** www.esbi.ie/

ESB International (ESBI) is a wholly owned subsidiary of Electricity Supply Board (ESB), Ireland's government-owned energy company. They are part of ESB's non-regulated businesses and have operations across the energy value chain. ESBI also provide engineering design, construction management and strategic consultancy services. Their profit after tax in 2008 was €273 million.

ESBI also operates as a group, which include:

- ESB Independent Energy (ESBIE): was established in 2000 to offer an alternative supply service to industrial, commercial and business energy users on the island of Ireland.
- ESB Independent Generation (ESBIg): is responsible for the portfolio of wind farms and is supported by ESBI O&M Solutions who are responsible for operating and maintaining ESB's wind farms. They also offer short and long term PPAs to independent renewable generators.
- ESBI Investments (ESBI's) is responsible for the identification and development of power generation investment opportunities, with a primary focus on UK and European markets.
- ESBI Carbon Solutions was established in 2008. It develops, finances and participates in greenhouse gas emission mitigation projects under clean development mechanism.

**Scottish and Southern Energy**

Scottish and Southern Energy (SSE) was formed in 1998 following the no-premium merger of Scottish Hydro Electric and Southern Electric. It is an electricity and gas provider, the UK's largest generator of renewable energy, owning and operating over 1,300 MW of hydro and one of the UK's largest operational wind farms.

SSE has businesses in different sectors, many of them energy related, such as generation, energy supply, electricity and gas networks, energy services or gas storage.

SSE Plc bought Airtricity in 2008. Airtricity (www.airtricity.com) is a renewable energy company developing and operating wind farms across Europe. They have 32 operational wind farms throughout Europe, with a further 13 under construction. In the island of Ireland, they have developed 18 onshore wind farms with a capacity of up to 400 MW of electricity, and have over 110 MW under construction.

Airtricity is both a generator and supplier of electricity, having entering the Northern Ireland domestic electricity market in June 2010. It is the first energy utility to enter Northern Ireland's domestic electricity supply market.

**Bord Gáis Éireann UK** www.bordgais.ie/networks/index.jsp?&pID=102&nID=109

BGE was established in 1976. It is a commercial State body, majority owned by the Irish Government, operating in the energy industry. Bord Gáis entered the business electricity supply market in 2001, and the residential electricity sector in 2009. It serves one million customers including 650,000 gas users in 152 population centres in Ireland and 350,000 electricity customers.

BGE is the retail arm of Bord Gáis, selling gas and electricity to all market segments, with related activities including call centre management, billing and sales and marketing.

Bord Gáis Trading is responsible for the procurement of gas and electricity, risk management and hedging strategies. Gas and electricity are bought on wholesale markets by the Energy Trading team.

Bord Gáis Investments is responsible for pursuing and developing growth opportunities in assets in the energy markets in Ireland. The unit is currently constructing a 445 MW gas-fired power plant, operating 218 MW of wind generation with a further 565 MW of wind generation being developed, and investing in up to 300 MW of peaking plants to support renewable energy. It is also evaluating the viability of developing a salt cavern gas storage facility in Northern Ireland.

Bord Gáis Networks develops, operates and maintains the natural gas transmission and distribution networks in Ireland and provides gas transportation services to suppliers and shippers, including BGE. It is also responsible for new gas connections and for work on service pipes and meters at customers' premises.

Bord Gáis activities in Northern Ireland are carried out by two separate businesses; BGE (Northern Ireland) and firmus energy.

BGE (Northern Ireland) is licenced to convey gas along two transmission pipelines in Northern Ireland - the North-West Pipeline and the South-North gas pipeline. The North-West gas pipeline, from Carrickfergus to Londonderry, was commissioned in October 2004 and serves the Coolkeeragh power station and also enables the development of gas networks adjacent to the route. The South-North gas pipeline runs from Gormanston to Belfast, where it links into the North-West pipeline.

firmus energy (www.firmusenergy.co.uk) is a subsidiary of Bord Gáis operating in Northern Ireland. It won the supply and distribution licences for ten towns in 2005. firmus energy supplies gas to 90% of the large industrial and commercial businesses in these towns. In addition, it holds supply licences for both the natural gas market in Greater Belfast and electricity across Northern Ireland.

**Phoenix** www.phoenix-natural-gas.co.uk

EU Directive 2003/55/EC required that the supply and distribution functions of the Phoenix group would be separated into two separate businesses as they had over 100,000 customers using natural gas. Currently, the Phoenix Natural Gas Group has the following structure:

- **Phoenix Natural Gas Limited (PNG)** is the largest gas distribution business in Northern Ireland, being the owner and operator of the distribution network in the Greater Belfast area and Larne. The distribution business is responsible for the development of the pipeline network and also for providing operational and transportation service platform to gas suppliers under the rules of the company's network code.

- **Phoenix Supply Limited (PSL)** is Phoenix's supply business which supplies natural gas to customers in the Greater Belfast and Larne area. Phoenix Supply also trades gas on the wholesale market and provides billing services for its expanding customer base from its offices in Belfast. The business is regulated under licence by the UR.

- **Phoenix Energy Services Limited** is a provider of natural gas boiler and appliance servicing, emergency response, gas metering and meter reading services in Northern Ireland.

- **Phoenix Energy Ltd** was incorporated in 2008 to supply natural gas in the ROI and expand the service offering of Phoenix Supply across the whole of Ireland.

**Mutual Energy** www.mutual-energy.com

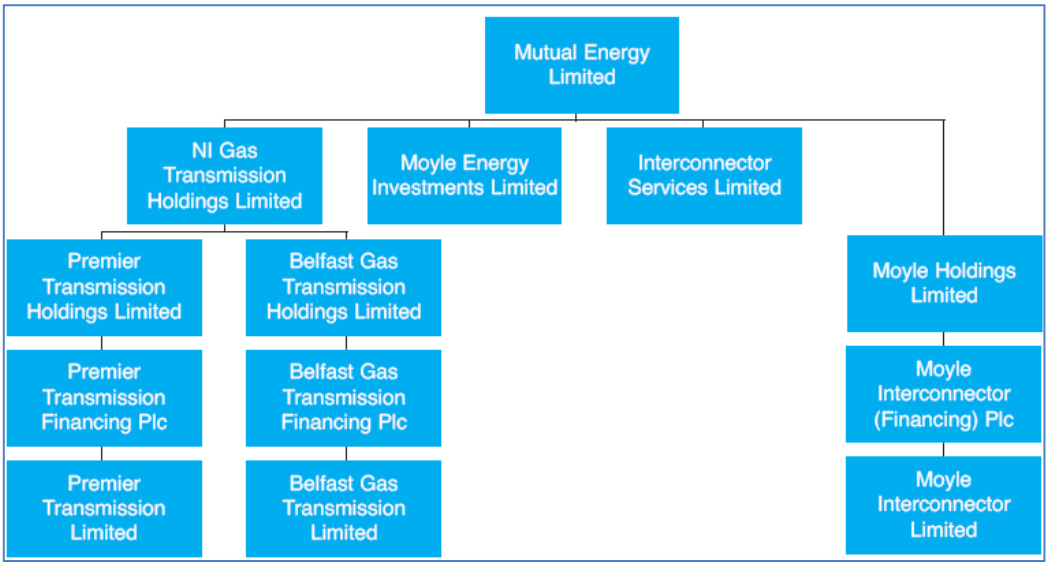
Mutual Energy, formerly Northern Ireland Energy Holdings is a mutual company which manages energy assets in the long- term interests of Northern Ireland's energy consumers. Having no shareholders, all financial surpluses are used for the benefit of energy consumers. This combined with long term secure finance has allowed the company to manage major energy assets at a low cost. It was created to help address high energy prices in Northern Ireland.

Premier Transmission Limited (PTL) is the owner and operator of the Scotland to Northern Ireland natural gas transmission pipeline, the Scotland to Northern Ireland Pipeline (SNIP) which links Scotland with the Ballylumford power station in Co. Antrim.

Belfast Gas Transmission Limited (BGTL) is the owner of the Belfast Gas Transmission Pipeline system (BTP) – a part of the Premier Transmission Pipeline System which runs from Ballylumford power station to the Belfast distribution network.

Since 2005, Mutual Energy own and operate the Moyle Interconnector, which links the electricity grids of Northern Ireland and Scotland through submarine cables.

**Figure 5** Mutual Energy Group structure




Source: Mutual Energy, Annual report and accounts 2010

The table below shows the summary of the main energy assets located (totally or partially) in Northern Ireland and their owners and which organisation they are regulated by.

**Table 3** Main energy assets

| ACTIVITY | ASSETS | OPERATOR & OWNER | REGULATED BY | HOW WE REGULATE? | PRICE CONTROL |
|---|---|---|---|---|---|
| Power station | **Ballylumford** CCTG (1,213 MW) | AES | UR | Electricity Generation Licence. SEM from 1/11/2007 | NO |
| Power station | **Coolkeeragh** CCTG (455 MW) | ESBIE | UR | Electricity Generation Licence | NO |
| Power station | **Kilroot** (Coal, Heavy Fuel 618 MW) | AES | UR | Electricity Generation Licence | NO |
| Interconnector | **Moyle Interconnectors** | Mutual Energy | UR | Moyle Interconnector Transmission licence | NO |
| Transmission lines | **North/South tie-lines**<br>Tandragee - Louth<br><br>Strabane-Letterkenny<br>Enniskillen-Corraclassy<br>Tyrone – Cavan | NIE T&D<br>Operated by SONI<br><br>(subject to public inquiry) | UR | Transmission licences | YES |
| Transmission system | **275 kV and 110 kV network** | NIE T&D<br>Operated by SONI | UR | Transmission licences | YES |
| Distribution System | **33 kV, 11 kV, 6.6 kV and 400 V network** | NIE T&D | UR | Transmission Licence | YES |
| Transmission pipeline | **SNIP** | PTL (Premier Transmission Limited) | UR | Gas Transmission Licence | NO[1] |
| Pipeline | **BGTP** | Belfast Gas Transmission Pipeline | UR | Gas Transmission Licence | NO |
| Transmission pipelines | **NW** (Northwest) **& SN** (South North) pipeline | Owned by BGE (UK) | UR | Gas Transmission Licence | YES |
| Distribution pipelines | **PNG network**<br>**firmus network** | Phoenix Natural Gas<br>firmus energy | UR | Gas Distribution Licence | YES |

[1] To improve the rate at which the SNIP and BGTP could be financed the normal regulatory control over any allowed operational expenditure accrued by both PTL and BGTL has been removed. The resulting transfer of risk onto consumers, through potential inefficient operating costs, can be limited through corporate governance licence conditions contained within the conveyance licences held by both PTL and BGTL. One of which is a condition that, in the form of a shadow price control, allows the Utility Regulator to review the level of operating expenditure forecast to be incurred by PTL and BGTL.

**System Operator (SONI)** www.soni.ltd.uk

SONI Ltd is the TSO in Northern Ireland and is a wholly owned subsidiary of Eirgrid plc, the TSO in the Republic of Ireland. Its role is to dispatch the generators in a way that minimises the cost of producing electricity across the island of Ireland, while maintaining the security, stability and safety of the supply of electricity. As electricity cannot currently be stored in any meaningful quantity, SONI must balance the generation with the demand in real time.

In conjunction with Eirgrid, SONI is the SEMO responsible for the operation of the Single Electricity Market on the island of Ireland.

SONI holds two licences: SONI SEM Operator Licence and SONI TSO Licence.

**Market Operator (SEMO)** www.sem-o.com

SEMO is the Single Electricity Market Operator, responsible for the administration of the wholesale electricity market operating in the ROI and Northern Ireland. SEMO is a joint venture between EirGrid PLC, the transmission system operator for the Republic of Ireland, and the SONI.

It is licensed and regulated cooperatively by the Commission for Energy Regulation (CER[10]) in Ireland and the UR, since 2004, when a memorandum of understanding was signed by both regulatory authorities.

The SEM is the wholesale electricity market operating in the ROI and Northern Ireland. The SEM represents the first market of its kind in the world as a gross mandatory pool, operating with dual currencies and in multiple jurisdictions. The market encompasses approximately 2.5 million electricity consumers, 1.8 million in ROI and 0.7 million in Northern Ireland.

**Consumer Council for Northern Ireland (CCNI)** www.consumercouncil.org.uk/

The General Consumer Council (the Consumer Council) was set up in 1985 and is funded by the DETI. It is an independent statutory body that aims to promote and safeguard the interests of all consumers in Northern Ireland. It has statutory responsibilities for energy (including natural gas, electricity and coal), passenger transport and food, and from April 2007 became the consumer representative body for water and sewerage services.

Essentially the Consumer Council provides free, impartial information and handles complaints on behalf of consumers who have been unable to resolve problems directly with their energy supplier or meter operator.

The Consumer Council have an energy division that represents energy consumers in Northern Ireland. They deal with complaints about electricity, natural gas and coal and provide consumer advice in relation to energy issues, liaise with customers, energy companies and other relevant parties. They also undertake research and produce publications on issues such as fuel poverty, energy efficiency, renewable energy and fuel prices.

[10] The Commission for Energy Regulation (CER) is the independent body responsible for overseeing the liberalisation of Ireland's energy sector. www.cer.ie

## 1.4. Wholesale markets

### Conventional generation

Northern Ireland has three major electricity generating stations:

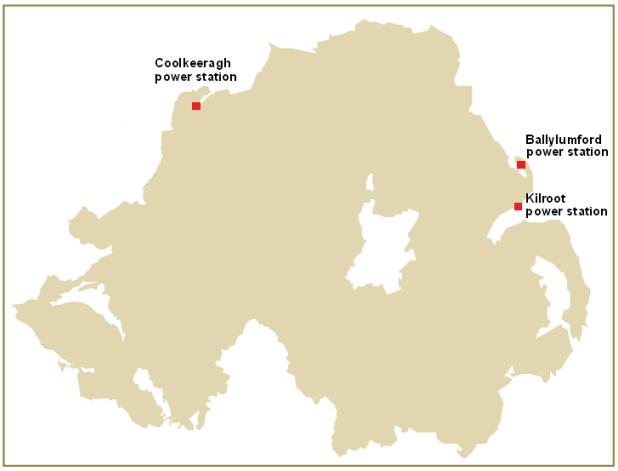
**Ballylumford power station**, located in Co. Antrim, is a natural gas-fired power plant which consists of three stations and has 1,213 MW of total installed capacity. It is Northern Ireland's largest power station. It belonged to Premier Power Ltd from 1992 and has been recently bought (July 2010) by AES, an American power firm. The Ballylumford facility consists of the 587 MW C station, which is a Combined Cycle Gas Turbine (CCGT[11]) unit; the 510 MW B Station, a conventional thermal plant; and two Open Cycle Gas Turbine (OCGT[12]) units which provide an additional 116 MW nominal capacity for grid support and emergency response.

**Coolkeeragh power station**, in Co. Derry, is a natural gas fired combined cycle power plant with 402 MW of capacity, and a 53 MW OCGT. Its total capacity is 455 MW. It started to operate in 2005. It was constructed on the site of the old Coolkeeragh power station by Coolkeeragh Power Ltd. and ESB International.

**Kilroot power station** is the only coal fired plant left in Northern Ireland. It is a dual coal and oil fired facility with 618 MW total capacity, located in Co. Antrim on the north shore of Belfast Lough. It comprises two generators each capable of producing 300 MW when firing oil. It has belonged to AES Kilroot Power Ltd (Aes Corporation) since 1992, when NIE sold its four power stations in Northern Ireland.

In Northern Ireland, electricity is also obtained from GB through the Moyle Interconnector, the undersea link between the electricity grids of Northern Ireland and Scotland. It was opened in 2002. The link has an importing capacity of 500 MW and an exporting capacity of 80 MW.

**Figure 6** Power plants in Northern Ireland



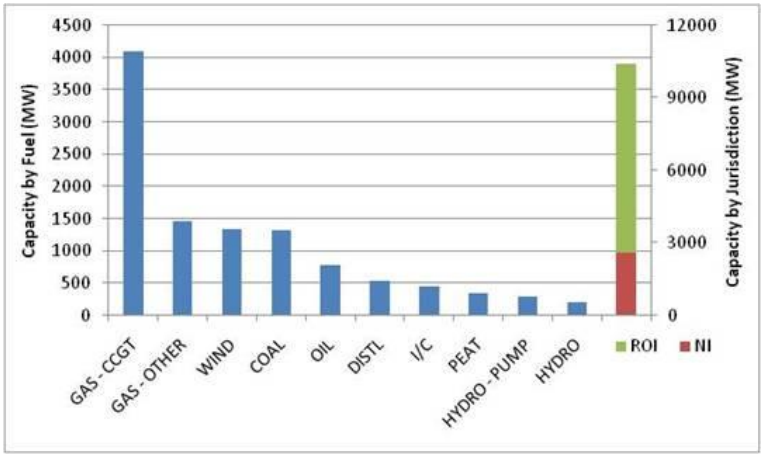

Source: SONI and the UR

In relation to the overall SEM on the island of Ireland, the generation fuel mix is shown in the following chart. Most of the generation capacity is gas-fired, with more than 4,000 MW of combined cycle plant and around 1,500 MW of other gas-fired plant including open cycle.

[11] Combined Cycle Gas Turbine (CCGT): A unit whereby electricity is generated by a gas powered turbine and also a second steam-powered turbine. The hot exhaust gases expelled from the first turbine are fed into the heat exchanger to generate steam which powers the second turbine. Joint Capacity Statement 2010.

[12] Open Cycle Gas Turbine (OCGT): A unit whereby electricity is generated by a gas powered turbine and no use is made of the hot exhaust gases.

**Figure 7** Generation capacity per fuel type in 2010



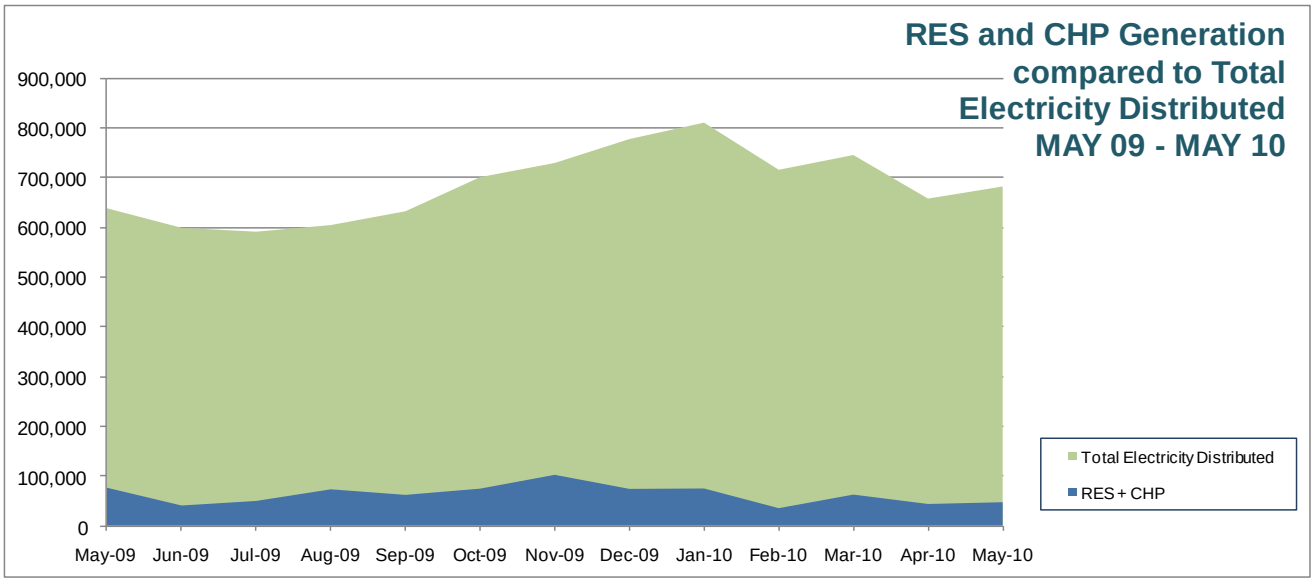

Source: The UR

## Renewable Energy Sources

In 2009 (April 09 – March 10) 9.61% of electricity supplied in Northern Ireland was generated from Renewable Energy Sources (RES). The following chart compares the total electricity distributed in NI against the generation of electricity through renewable energy and Combined Heat and Power[13] (CHP). The percentage of RES and CHP over the total electricity distributed varied during the period between 5% and 14%. The highest percentage of the analysed period was reached in November 09, due mainly to the amount of wind generation, which covered 13% of the total electricity distributed over the month.

[13] Combined Heat and Power (CHP): The simultaneous generation of electricity and heat for use within buildings or processes, by recovery of the heat produced in the power generation process. As such, CHP represents the highest efficiency means of generating electricity.

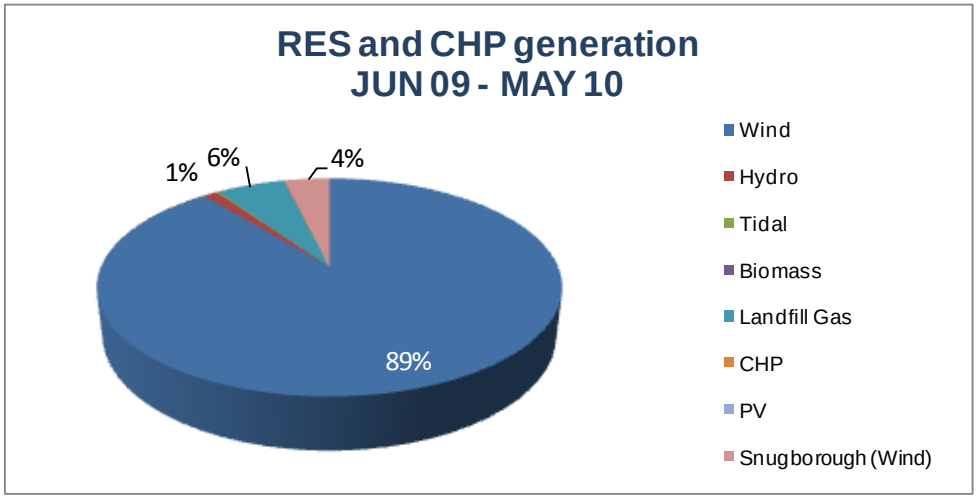
**Figure 8** Renewable and CHP generation vs. total electricity distributed




Source: NIE

The following chart shows the breakdown of RES production from June 2009 to May 2010. Over the year, wind has produced almost 90% of the total generation with RES and CHP.

**Figure 9** Renewable and CHP generation from Jun 09 to May 10




Source: NIE

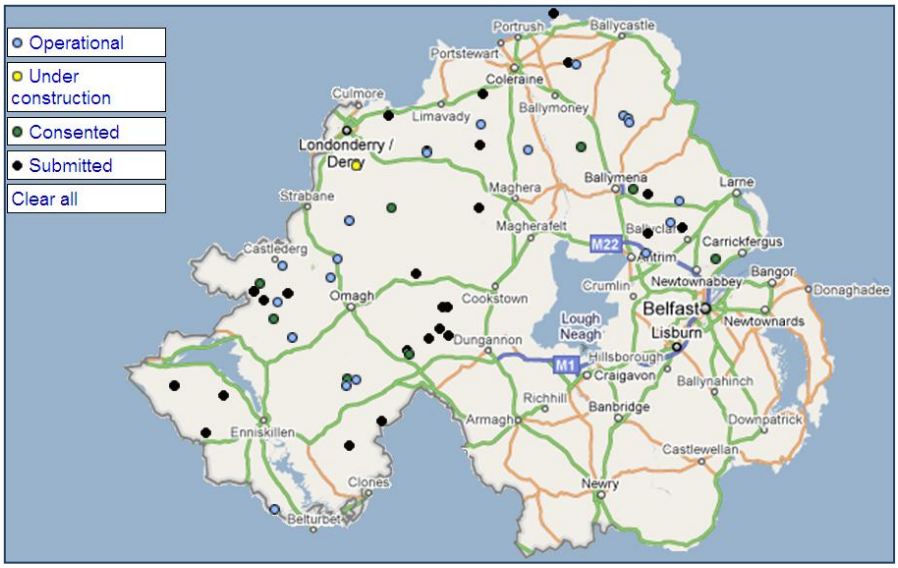
There are 28 wind farms in NI, totalling 314.73 MW generating capacity in Northern Ireland[14].

**Table 4** Wind farms in NI

| State | Number of wind farms | Installed capacity (MW) |
|---|---|---|
| Operational wind farms | 28 | 314.73 |
| Under construction | 2 | 30.00 |
| Consented projects | 13 | 234.60 |
| Projects in planning | 48 | 859.20 |

Source: BWEA

**Figure 10** Map of wind farms in Northern Ireland




Source: BWEA

## Electricity generation licences

Current generation licences in Northern Ireland are:

- AES Kilroot Generating Ltd
- AES Kilroot Ltd (Kilroot Power Ltd)
- Altahullion Wind Farm
- Ballylumford Power Ltd
- Church Hill Energy Ltd
- ContourGlobal Solutions (NI) Ltd

[14] http://www.bwea.com/statistics/

- Coolkeeragh Power Ltd
- Crighshane Energy Ltd
- Crockagarran Wind Farm Ltd
- Curryfree Wind Farm Ltd
- Garves Wind Limited
- Gruig Wind Farm Ltd
- Hunters Hill Wind Farm Ltd
- Lendrum's Bridge Wind Farm Ltd
- Lough Hill Wind Farm Ltd
- Mantlin Ltd (Slieve Rushen Wind Farm)
- Owenreagh Wind Farm Ltd
- ScottishPower Renewables (UK) Ltd
- Screggagh Windfarm Ltd
- Slieve Divena Wind Farm Ltd
- Tappaghan Wind Farm (NI) Ltd
- Thornog Wind farm Ltd
- SSE Renewables Developments (UK) Ltd

For further information on current Electricity Licences, please visit the following link: http://www.uregni.gov.uk/electricity/

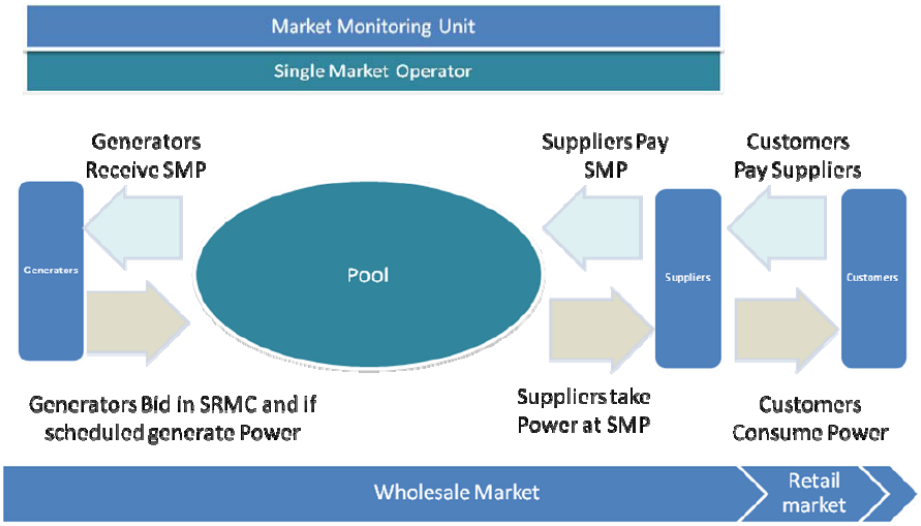
## Single Electricity Market

The SEM was established in November 2007, combining the two separate wholesale markets, North (approximately 0.8 million electricity customers) and South (around 1.8 million customers) into the first cross-border market of its kind in Europe. The establishment of the SEM involved the input and cooperation of all parties in the electricity industry across the whole island.

All electricity produced on the island is sold into one large pool, while supply companies buy their power out of this pool with equal access for all suppliers. The SEM ensures that the price of electricity charged to consumers is reflective of the costs incurred by the generators to actually produce the electricity, with the most efficient generators that are available to meet demand being used on an all-island basis. The market is specifically designed to set the cheapest possible price for electricity at all times and to ensure that no company has an undue influence over electricity prices. In 2009 the total number of registered participants had a registered market capacity of 9,899 MW[15].

[15] SEM Committee Annual Report 2009. SEM-10-027.

**Figure 11** Diagram of how the SEM works




Source: SEM Committee Annual Report 2009

The SEM is regulated by the SEM Committee and monitored by the UR's Market Monitoring Unit. It can be considered an important development for the energy sector on the island, with benefits to all customers such as improving choice across the island and enhancing electricity security of supply.

## Gas sources

Gas initially arrived in Northern Ireland in 1996 with the completion of the Scotland-Northern Ireland Pipeline, and pipelines of Belfast Gas Transmission Limited which delivered gas to the Ballylumford power station and to the Phoenix distribution network in Greater Belfast. The North-West and South-North pipelines were completed in 2004 and 2006 respectively allowing the development of distribution networks.

Natural gas is the least polluting fossil fuel and it provides a further fuel choice for industry. Since its arrival, it has brought considerable environmental, economic and social benefits. Natural gas also provides domestic customers with the opportunity to convert from inefficient central heating systems to highly efficient gas condensing boilers and in due course to domestic combined heating power.

Combined Cycle Gas Turbine technology is used to produce electricity from natural gas combustion. It offers lower cost and the least environmentally damaging form of fossil-fuelled electricity generation.

There are no indigenous sources of gas in Northern Ireland, it all comes from GB. However, the availability of natural gas is desirable because of the environmental and social benefits. Natural gas as an energy option has the following advantages:

- Less atmospheric pollution: the use of natural gas as a fuel creates less $CO_2$ emissions than traditional generation (natural gas produces 25% less carbon dioxide emissions than other fossil fuels).

- Efficiency: the combined cycle power plants have an approximate efficiency of 55%, while in coal or fuel generation plants the comparative figure is approximately 30-35%.
- Security of supply: through diversification of energy sources.

## 1.5. Networks

### Electricity Transmission and Distribution networks

The Northern Ireland electricity grid comprises a number of interconnected networks of overhead lines and underground cables. There are approximately 2,100km (110kV and 275kV) of transmission network, of which some 80km are underground, and approximately 42,900km of the distribution system, of which some 13,100km are underground.

There are more than 800,000 customers connected to the distribution system, which has a maximum demand of about 1,850 MW[16], and links the three power stations and external interconnectors to 30 main substations. SONI direct the output of each generating unit on the Northern Ireland system to match supply to demand.

The transmission and distribution assets belong to NIE who are responsible for planning, developing and maintaining the transmission system in Northern Ireland. They are under Price Control. NIE holds the NIE Plc transmission & Distribution licence (http://www.uregni.gov.uk/uploads/publications/Electricity_Licensees_for_UR_Website_10_09_10.pdf).

The transmission and distribution business derives its revenue principally through Use of System (UoS) charges levied on suppliers that use the transmission and distribution systems. The 'Statement of Charges for Use of the Northern Ireland Electricity plc Transmission System' and 'Statement of Charges for Use of the Northern Ireland Electricity plc Electricity Distribution System' are annually published by SONI and after receiving the UR's approval. Charges are also applied for the System Support Services (SSS).
(http://www.uregni.gov.uk/uploads/publications/2010-11_TUoS_CHARGING_STATEMENTv11.pdf ;
http://www.nie.co.uk/suppliers/pdfs/DUoS_Statement_Oct09-Sept10.pdf).

### Interconnectors

Northern Ireland's electricity grid is linked to RoI through one major interconnector between the two grids. The current Louth to Tandragee interconnector consists of a 275kV double circuit overhead line and it has an approximate capacity of 500 MW. Since the establishment of the SEM, this link remains as an interconnector from a technical perspective. However, commercially it is treated as an ordinary transmission line for trading purposes.

There are also two small existing 110kV standby North-South interconnectors (Strabane - Letterkenny and Enniskillen – Corraclassy) which allow NIE and ESB to provide mutual short term technical assistance.

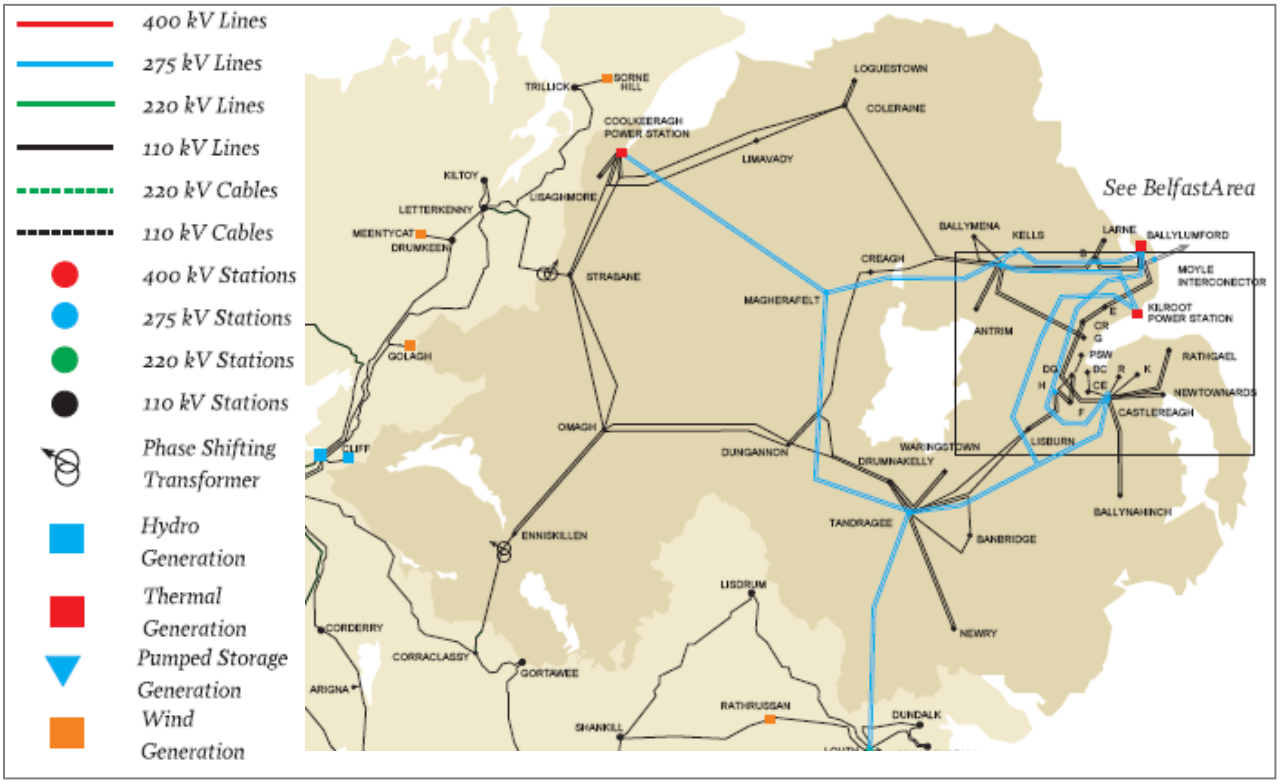
In order to provide greater transfer capacity a new North-South interconnector, which will further connect the electricity systems of Northern Ireland and the ROI, has been planned for completion

[16] NIE Transmission Charging Statement (March 2008).
http://www.nie.co.uk/marketopening/pdfs/NIE_Transmission_Charging_Statement_March_2008.pdf

by 2012, although this is subject to planning permission. The Tyrone to Cavan interconnector will help reduce network operating costs and strengthen electricity supply on both power systems. It will also support greater competition in the electricity market and facilitate more electricity generated from renewable sources being brought onto the system.

Also, there is the Moyle Interconnector, which holds the Moyle Interconnector Transmission licence (http://www.uregni.gov.uk/uploads/publications/Electricity_Licensees_for_UR_Website_10_09_10.pdf). This transmission asset has been also included above as a generation asset.

**Figure 12** Northern Ireland Electricity Transmission System




Source: SONI and Eirgrid

**Figure 13** Moyle interconnector


Source: SONI (http://www.soni.ltd.uk/interconnector_moyle.asp).

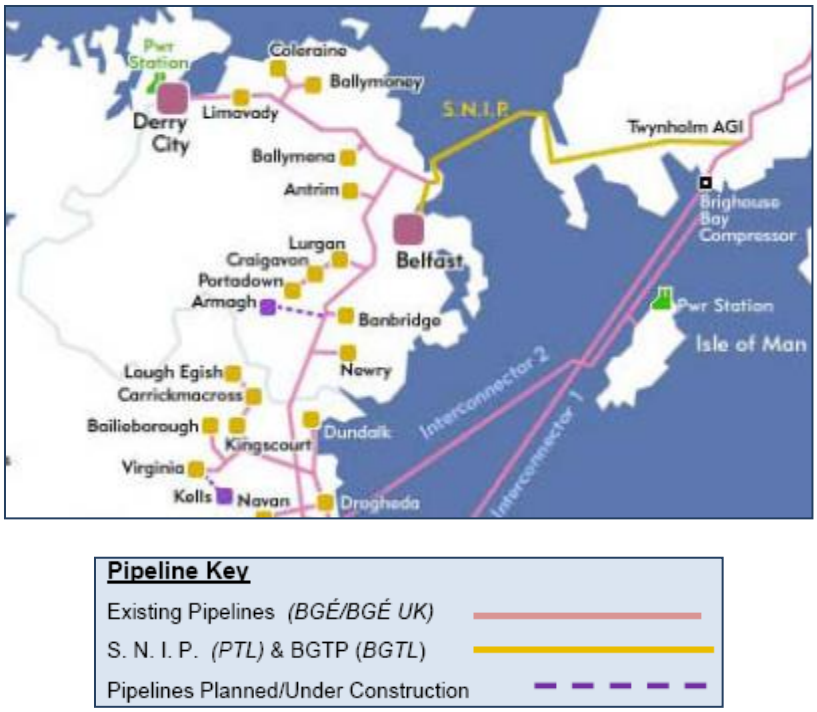
There are currently two transmission licence holders, Northern Ireland Electricity plc, who holds combined licences for transmission and supply, and Moyle Interconnector Ltd.

## Gas Transmission and Distribution pipelines

After the construction of the Scotland to Northern Ireland Pipeline in 1996, two further transmission pipelines were constructed. The North-West Pipeline was completed in 2004 to transport gas from Belfast to Londonderry, and the South-North Pipeline in 2006, from Belfast to Gormanstown in the RoI. These pipelines have allowed the development of distribution and supply networks servicing a number of towns along the routes (the ten towns).

Currently all Northern Ireland demand is supplied via the Scotland to Northern Ireland Pipeline, however, arrangements are in place to facilitate the use of the South-North Pipeline in the event of an emergency in Northern Ireland or in the ROI.

**Figure 14** The gas transmission network in Northern Ireland




Source: Joint Capacity Statement 2010

Northern Ireland has three TSOs, namely Premier Transmission Limited (PTL), Belfast Gas Transmission Limited (BGTL) and BGÉ (UK) Ltd. The transmission companies are required under their respective conveyance licences to prepare plans for the operation, development and maintenance of the transportation system. Additionally, the transmission companies are required under their respective network codes to jointly publish a Northern Ireland Capacity/Pressure Report each gas year.

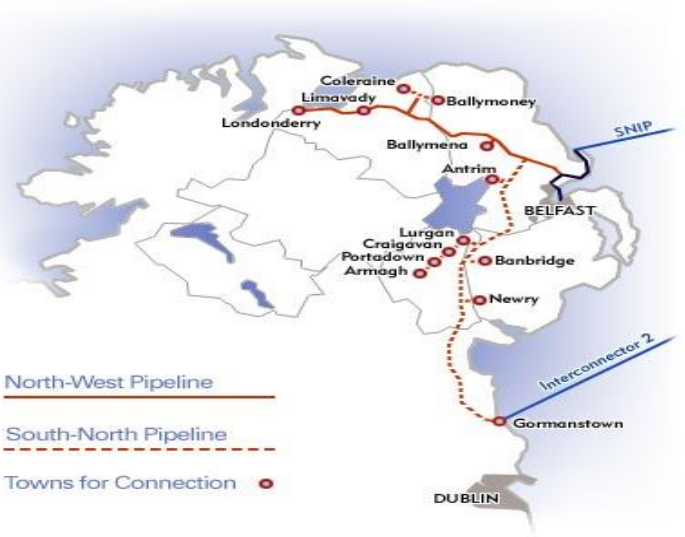
The Northern Ireland distribution system is comprised of two networks – the Phoenix Natural Gas network in the Greater Belfast and Larne area which has around 130,000 customers and the firmus energy network in the ten towns along the South-North Pipeline and North-West Pipeline which has about 6,000 customers. Planning and development of the distribution network is the responsibility of the respective distribution system operators with development and capacity obligations set out in the respective licences.

**Figure 15** Maps of Northern Ireland gas distribution systems

Map of the Phoenix Area (all areas shown in colour)


Source: Phoenix Natural Gas Limited Licence for the conveyance of gas in NI[17]

Map of the BGE and firmus area




Source: firmus energy (http://www.firmusenergy.co.uk/about-us/index.htm)

## Gas Conveyance licences

Gas conveyance licences cover transmission and distribution of gas. The conveyance licensees are:

- Premier Transmission Limited (formerly Premier Transco Ltd)
- BGE UK Transmission
- BGE (firmus Energy Towns)
- Phoenix Natural Gas Limited
- Belfast Gas Transmission Limited (formerly PNG T)

For further information on current gas licences, please check the following link: http://www.uregni.gov.uk/uploads/licenses/Current_Gas_Licences.pdf

## Other gas developments: extending the gas network

The DETI and the UR have received the results of a study to consider possible extension to the Northern Ireland gas transmission network. DETI is considering the way forward in light of the report's conclusions.

[17] PNG's licensed area includes also some other areas not shown in the map above. Those are detailed in the licence (http://www.uregni.gov.uk/uploads/licenses/GAS_Phoenix_Natural_Gas_Limited_Distribution.pdf).

## 1.6. Supply sector

### Supply Licensees in electricity sector

Current electricity supply licence holders are:

- Airtricity Energy Supply Ltd
- Bord Gais Eireann
- ContourGlobal Solutions (Northern Ireland) Ltd
- Electricity Supply Board
- Energia (Viridian Energy Supply Ltd)
- ESB IE (NI) Ltd
- firmus energy (supply) ltd
- NIE Energy Ltd (Supply)
- NPower
- Power & Gas Ventures Ltd
- Premier Power Ltd, supplying Ballylumford power station
- Quinn Energy Supply Ltd
- Regent Electricity (NI) Ltd
- Scottish Power Energy Retail Ltd
- Trade Link Solutions Ltd

Some of these licensees above are dormant or only supply affiliated power stations. Licence holders who remain active in the market are NIE Energy (NIEES), Airtricity, ESB Independent Energy, Bord Gais Eireann, Energia, Quinn Energy Supply and firmus.

Since November 2009 we have revoked four electricity supply licences under the request of the licensees (Lowlands Health & Energy Ltd, E ON, SSE (Ireland) Ltd and SSE Energy Supply Ltd).

### Supply Licensees in gas sector

In relation to gas, there are currently 11 gas supply licence holders, three of which hold licences to supply Ballylumford power station.

- British Gas Trading Ltd, supplying Ballylumford power station
- ESB International Investments Ltd
- BGE (NI) Supply (firmus Energy), supplying Towns
- BGE (NI) Supply (firmus Energy), supplying Greater Belfast
- Northern Ireland Electricity plc, supplying Ballylumford power station
- Phoenix Supply Limited.
- Power & Gas Ventures Ltd
- Premier Power Ltd, supplying Ballylumford power station
- VAYU Ltd
- Viridian Energy Supply Ltd, supplying Ballylumford power station and Greater Belfast gas market
- Airtricity Energy Supply NI Ltd

# PART TWO: CORE RETAIL INFORMATION

## Introduction

In this section of the report we intend to present data that will provide information to stakeholders and those interested in Northern Ireland's retail markets. This will help us to monitor the behaviour of the main market participants and the functioning of the retail sectors as they begin to open fully to competition. We intend to put greater emphasis on retail market monitoring in our energy sectors than before.

In the short- term, we now plan to use our Energy Retail Report, along with a new set of quarterly transparency reports (on number of active suppliers in the market, switching activity, market shares and prices/bills) as vehicles to more closely monitor the development of competition in our energy supply sectors and its potential impact on customers.

In the long-term, we will collect, analyse and publish information in the form of a set of indicators, as recommended by the European Commission (via the European Regulators Group for Electricity and Gas, known as ERGEG). We intend to issue a paper in the coming months to consult on defining the appropriate longer-term supply market monitoring framework going forward. When deciding on the framework for long-term retail market monitoring, some decisions will have to be made, such as:

- what indicators ought to be used for gathering information that is representative of the markets,
- what information is reasonably able of being collected and delivered by the companies,
- what market segments will be more appropriate to reflect the impact of the competitive environment in all groups of customers,
- how often should the information be requested, monitored and released, etc.

Some elements of this market monitoring project will be progressed in parallel with CER.

# 2. Retail orientated parameters

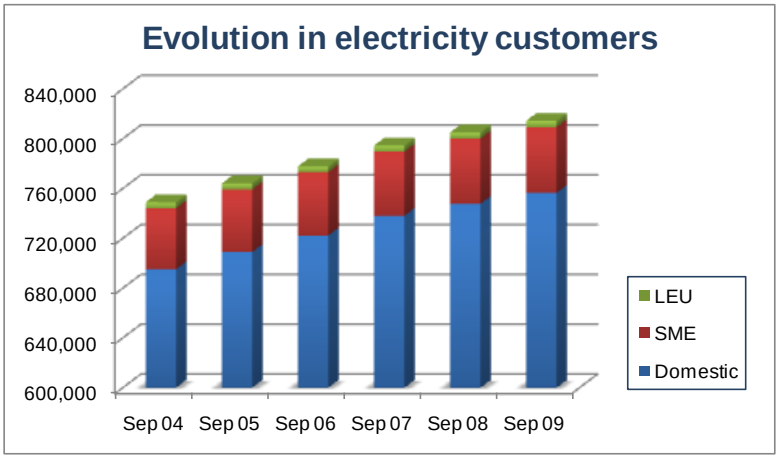
## 2.1. Retail electricity parameters

### (i) Customer numbers (Electricity)

By September 2009 there were more than 814,000 electricity customers in Northern Ireland, of which 93% were domestic. Approximately 30% of the domestic customers use keypad meters.

Small and Medium Enterprises (SME) accounted for a further 6% of total customers in Northern Ireland, and Large Energy Users (LEU) less than 1%. The evolution in the number of customers per sector is shown in the chart beside.

**Figure 16** Northern Ireland electricity customers



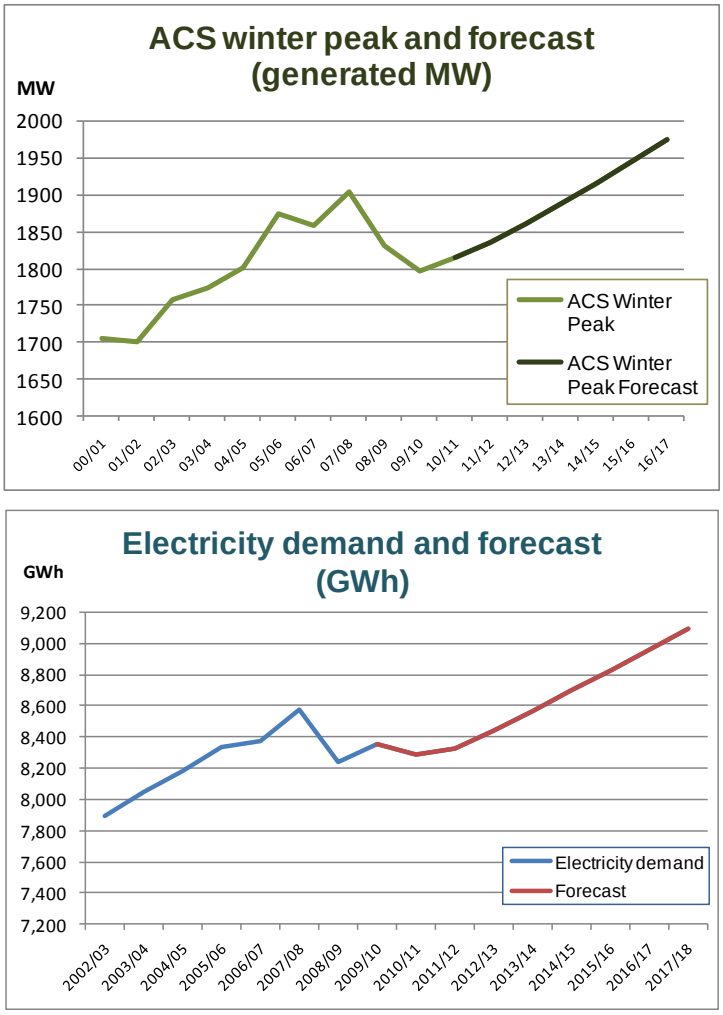

Source: NIE T&D

### (ii) Demand/consumption (Electricity)

Electricity demand in Northern Ireland in the year 2008/09 was 8,238GWh, which indicated a decrease in consumption of approximately 3.9% from the previous year. The following charts show evolution in electricity demand and ACS[18] winter peak and their forecasts for the coming years.

[18] Average Cold Spell. ACS demand correction enables more meaningful comparisons to be made between outturn demands and allows forecasts to be made on a weather base that also conforms to security standard planning requirements.

**Figure 17** Electricity demand, ACS winter peak and forecasts.

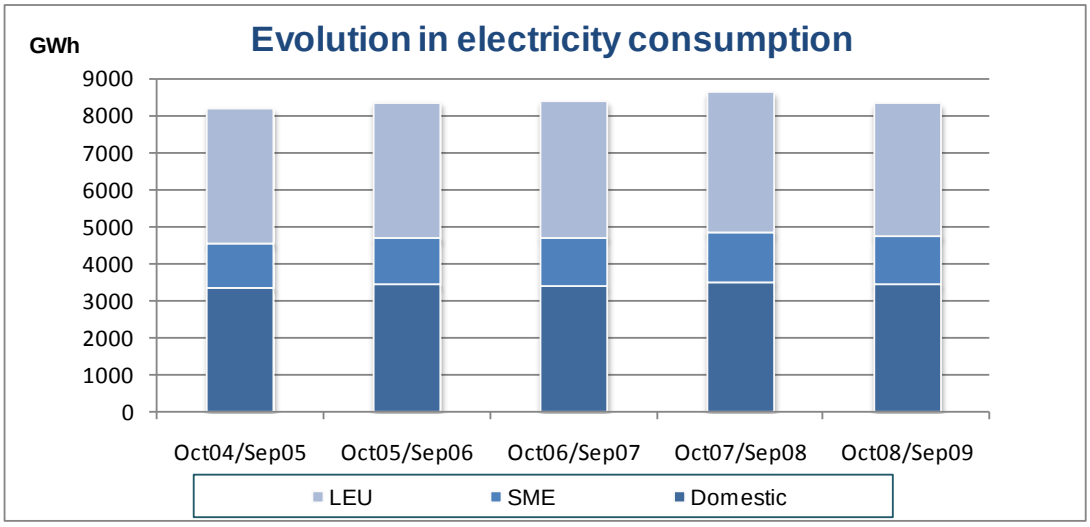



Source: SONI

Around 40% of total consumption is located in the domestic sector. The evolution in consumption by market segment (domestic, SMEs and LEUs) since 2005 is reflected in this chart below.

Total electricity demand in Northern Ireland increases at a trend average rate of 2% per annum.

**Figure 18** Northern Ireland electricity consumption.




Source: NIE T&D

## (iii) Market shares/switching (electricity)

### Survey work on attitudes

The research on customer attitudes in the electricity sector, 'Findings from 2009/2010 research on residential and business attitudes and experience of the electricity market across the island of Ireland', shows that the majority of Northern Ireland residential consumers declared an interest in switching their energy supplier when competition became available. 36% stated they would be 'very interested' in switching immediately if competition were available, while 24% stated they would be 'interested'. The interest in switching is driven by a desire for reduced costs (89% stated as a reason) with quality of service also significant (54% gave this as a reason).

Among the business customers the level and awareness of switching options suggests competition still needs fostered, with Northern Ireland businesses less likely to switch than RoI businesses and much less awareness of the available electricity suppliers. The low level of shopping around (considering multiple suppliers when considering switching) suggests a lower level of engagement among the business consumers in the electricity supply market than their RoI counterparts.

- 20% of Northern Ireland SME's have switched and 22% have considered switching over the last 12 months - where switching occurred 68% did not consider any other supplier.
- 16% of Northern Ireland LEU's have switched and 35% have considered switching over the last 12 months - most LEU's (75%) who switched did not consider any other supplier.
- On average, Northern Ireland SME's could recall without being prompted 1.9 suppliers. Among NIEES's SME customers, the average recall was lower at 1.5 which means that in many cases no other supplier was remembered. On average, NI LEU's could recall without being prompted 2.4 suppliers. Among SME's, this suggests a poor knowledge of alternative suppliers.

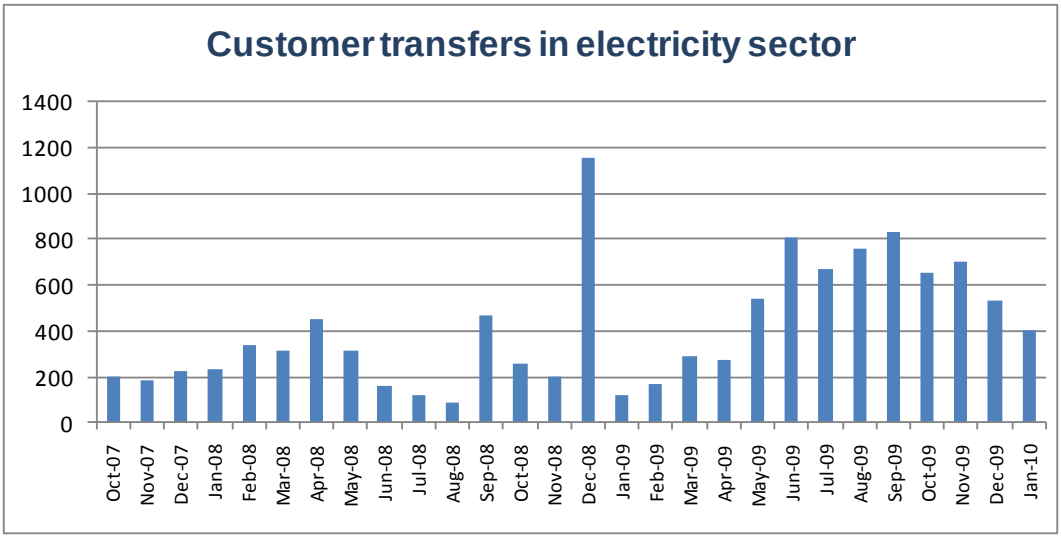
Cost was the most common factor cited in the switching decision (89% of SME's and 88% of LEU's who had switched in the previous 12 months identified cost as a factor in the decision to

switch). Good service provided by supplier was the most commonly stated reason for not switching (45% of SME's and 50% of LEU's who did not switch identified good service provided by their current supplier as a reason for not switching).

**Switching data**

The graph below shows the available information we have on the transfer of customers in the Northern Ireland electricity sector (as competition for domestic customers did not arrive until this year, the data relates business customers). The total transfers in the year between October 08 and September 09 were 6,087, while in the same period last year they were about half this amount. The chart below shows customer transfers from October 07 to January 10. It shows some peaks in certain months – we understand this is likely to be due to particular contract rounds and procurement cycles of larger customers.

**Figure 19** Evolution in electricity customer transfers

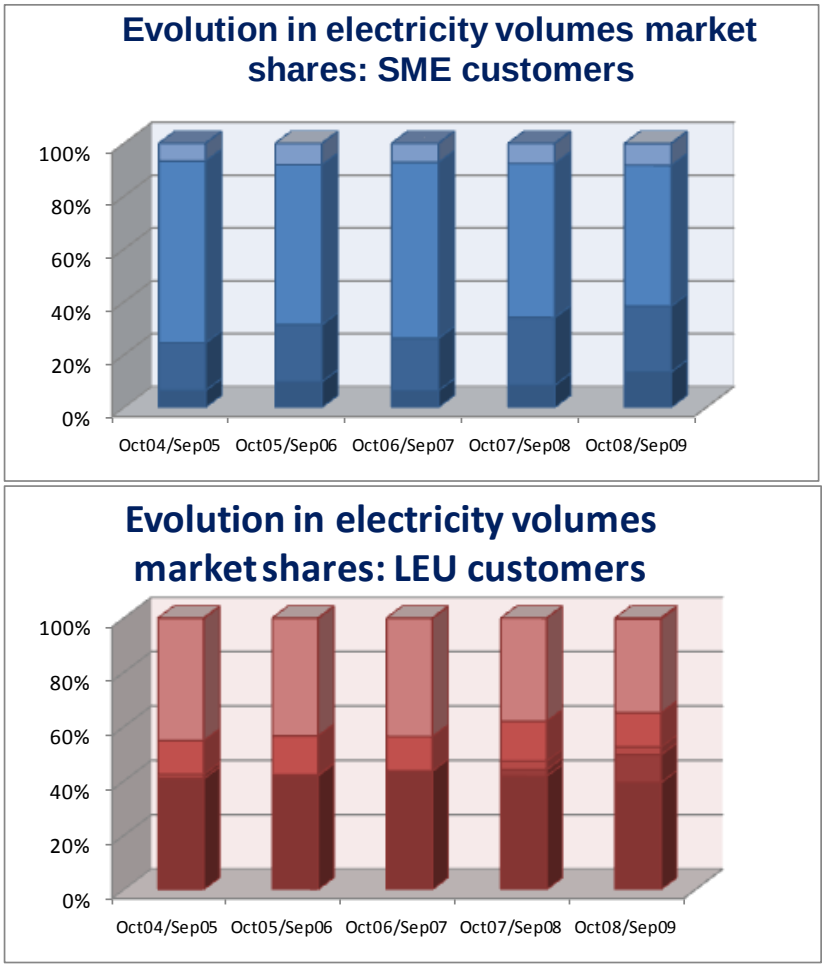



Source: NIE T&D

Competition in the Northern Ireland electricity supply sector at domestic level recently started. In addition, we understand that firmus energy will fully enter the whole domestic electricity market in 2011, however, at the moment they are only supplying farms. Clearly competition in this sector is at an early stage, and most domestic consumers are still supplied by the previous monopoly incumbent (NIEES). In contrast, there is more active competition in SME and LEU sectors. It is possible to observe in the charts below how new suppliers have entered the market and widened their market shares since 2005. Two suppliers are no longer active in the SME and LEU electricity market, while a new supplier entered the market during this year.

Following a recent review, we have approved and agreed with NIE that the current interim market system and support arrangements for domestic electricity switching are capable of dealing with an increased number of switches (churn capacity) per month from the current limit of 6,000 to 7,500. The existing overall switching limit ceiling capacity of 125,000 is currently under review by NIE. For more information on this, please follow this link: http://www.uregni.gov.uk/news/view/utility_regulator_publishes_increase_to_domestic_electricity_switching_capa/.

**Figure 20** Evolution in Northern Ireland electricity market shares (suppliers anonymised).




Source: NIE T&D

The domestic electricity market is currently supplied by different suppliers, NIEES, Airtricity and firmus energy. Although non-incumbent suppliers are increasing their market shares since their recent entrance in the Northern Ireland domestic market, more than 99% of this market, in volume, still belongs to NIEES, and more than 98% in terms of customer connections. The non-domestic market is currently supplied by eight companies.

The tables below show, for the period September 2009 to August 2010, market shares in the Northern Ireland electricity retail market by various key aggregated market segments. (Consideration of whether these segments are appropriate in terms of identifying different electricity retail sub-markets is a question that will be considered in a future consultation paper).

**Table 5** Consumption and customer connections market shares by market segments.

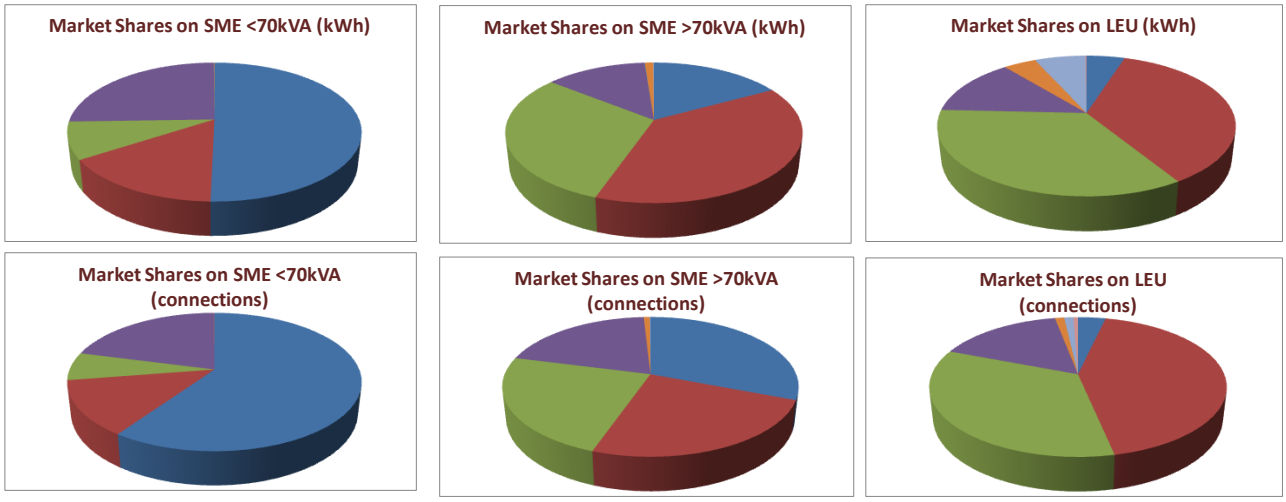
| Market Segments | Sept09 - Aug10 Consumption (kWh) | Supplier 1 | Supplier 2 | Supplier 3 | Supplier 4 | Supplier 5 | Supplier 6 | Supplier 7 | Supplier 8 |
|---|---|---|---|---|---|---|---|---|---|
| Domestic Credit | 2,441,355,342 | 2,438,639,332 | - | - | 2,697,220 | - | 18,790 | - | - |
| Domestic Keypad | 955,055,593 | 955,055,593 | - | - | - | - | - | - | - |
| SME <70kVA | 1,302,995,899 | 656,103,902 | 201,709,163 | 112,906,432 | 331,156,551 | 73,699 | 972,844 | 73,308 | - |
| SME >70kVA | 2,111,560,095 | 360,291,081 | 809,041,139 | 639,737,099 | 276,749,326 | 670,195 | 23,107,991 | 1,963,264 | - |
| LEU | 1,515,406,866 | 75,061,575 | 548,704,775 | 524,107,245 | 201,434,281 | - | 64,113,127 | 99,880,344 | 2,105,520 |
| Total | 8,326,373,796 | 4,485,151,483 | 1,559,455,076 | 1,276,750,776 | 812,037,378 | 743,894 | 88,212,752 | 101,916,917 | 2,105,520 |

| Market Segments | Customer Connections AUG 10 | Supplier 1 | Supplier 2 | Supplier 3 | Supplier 4 | Supplier 5 | Supplier 6 | Supplier 7 | Supplier 8 |
|---|---|---|---|---|---|---|---|---|---|
| Domestic Credit | 511,032 | 505,306 | - | - | 5,708 | - | 18 | - | - |
| Domestic Keypad | 251,131 | 251,131 | - | - | - | - | - | - | - |
| SME <70kVA | 53,432 | 31,849 | 6,896 | 3,508 | 11,163 | - | 14 | 2 | - |
| SME >70kVA | 4,930 | 1,521 | 1,208 | 1,166 | 992 | - | 39 | 4 | - |
| LEU | 167 | 6 | 72 | 57 | 27 | - | 2 | 2 | 1 |
| Total | 820,692 | 789,813 | 8,176 | 4,731 | 17,890 | - | 73 | 8 | 1 |

Source: NIE T&D

Through the charts below, which reflect market shares by size in the non-domestic market, and in terms of both volumes and connections, it is possible to observe how the level of concentration changes with the size of customers. In the SME less than 70 kVA segment, the highest market share is slightly over 50%, and includes four suppliers with a market share above 5%. In the LEU segment however, there are six suppliers with a market share above 4%. Switching to date has led to the following patterns in the non-domestic sectors.

**Figure 21** Market shares by market segment.



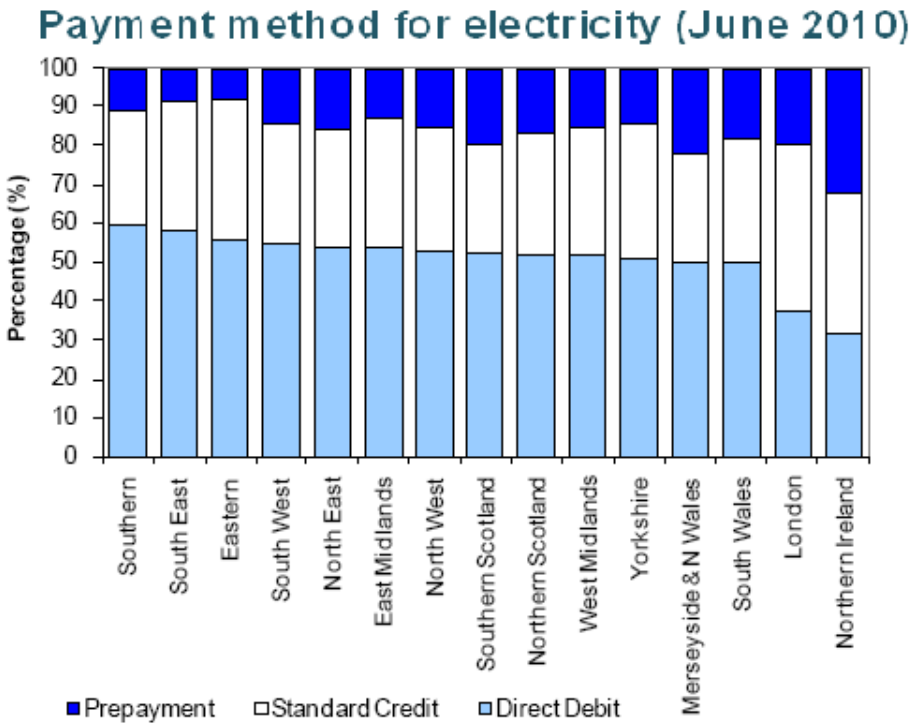

Source: NIE T&D

## (iv) Methods of Payment (electricity)

Domestic customers in Northern Ireland can pay their electricity bill in different ways. Prepayment (associated with a pay-as-you-go meter) where customers can top-up their electricity as they foresee their short-term consumption. Standard credit, where for example authority is given to the supplier to charge the customer each quarter with an amount equal to the quarterly bill. And direct debit, where a direct debit mandate is established instructing the supplier to debit the customer's bank account each month with a fixed amount, based on the expected annual cost of the bill, or each quarter with an amount equal to the quarterly bill.

The chart below shows the UK regional variation of payment method for standard electricity.

**Figure 22** Regional variation of payment method for standard electricity.




Source: DECC. Quarterly Energy Prices, September 2010

In Northern Ireland prepayment meters are chosen by many domestic customers in preference to credit meters for other reasons than dealing with debt problems. Subsequently, at around 32% Northern Ireland had the highest percentage of pre-payment customers in the UK. Consequently, Northern Ireland has the lowest percentage of direct debit customers, 32% of customers paying by this method.

## 2.2. Retail gas parameters

### (i) Customer numbers (gas)

The gas market in Northern Ireland is split into two distinct geographical and licenced areas – those licenced separately to Phoenix Distribution and to firmus energy.

At the end of 2009, Phoenix distribution licensed area, the Greater Belfast area, had 3,018km of network in operation, making gas available to 274,430 premises. , with a total of 130,673 (48%) already connected.[19]

firmus energy has been in the process of developing gas networks and supply in the 10 main urban areas outside the Greater Belfast area since 2005. The number of properties connected in both distribution areas is shown in the figure below.

The gas network in Northern Ireland continues to be extended.

There were more than 130,000 customers in Phoenix's distribution licensed area, and more than 6,700 customers in the firmus energy distribution licensed area at the end of 2009. The domestic sector represents the biggest share of the total number of customers, with 92% and 84% respectively in each licensed area. The shares go down to 8% and 12% respectively in each of the licensed areas in the segment of I&C up to 25,000 therms, and to 0.4% and 4% in the biggest market segment, above 25,000 therms.

The following table illustrates the number of gas customers (other than the power plants) across Northern Ireland's gas market including both Phoenix and firmus energy distribution licence areas, broken down by market segments.

**Table 6** Connected **g**as customers in Northern Ireland

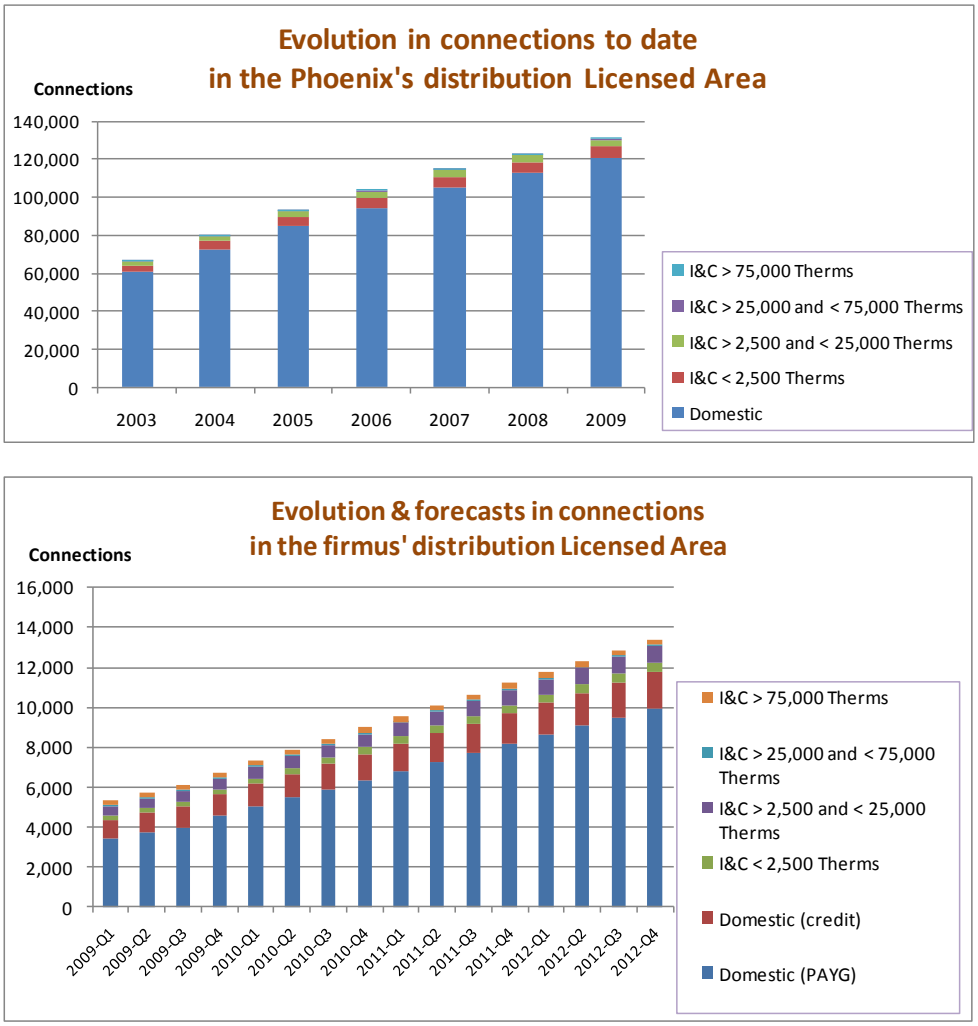
| Number of gas customers end 2009[20] | Phoenix's distribution Licensed Area | firmus' distribution Licensed Area |
|---|---|---|
| Domestic | 120,362 | |
| Dom PAYG | | 4,565 |
| Dom Credit | | 1,084 |
| I&C < 2,500 therms | 6,269 | 255 |
| I&C > 2,500 and < 25,000 therms | 3,549 | 553 |
| I&C > 25,000 and < 75,000 therms | 376 | 44 |
| I&C > 75,000 therms | 117 | 260 |
| **TOTAL** | **130,673** | **6,761** |

Source: PNG and firmus

[19] Kellen Group Annual Report and Accounts 2009.
[20] Energia has a very small fraction of the I&C market.

The evolution and current number of connections in both distribution areas are shown below, including forecasts of connections in the firmus energy distribution licensed area. By the end of 2012 firmus energy expects to have a total number of connections above 13,000, keeping the current split of around 80-20% between domestic and non-domestic customers.

**Figure 23** Connected **g**as customers in Northern Ireland

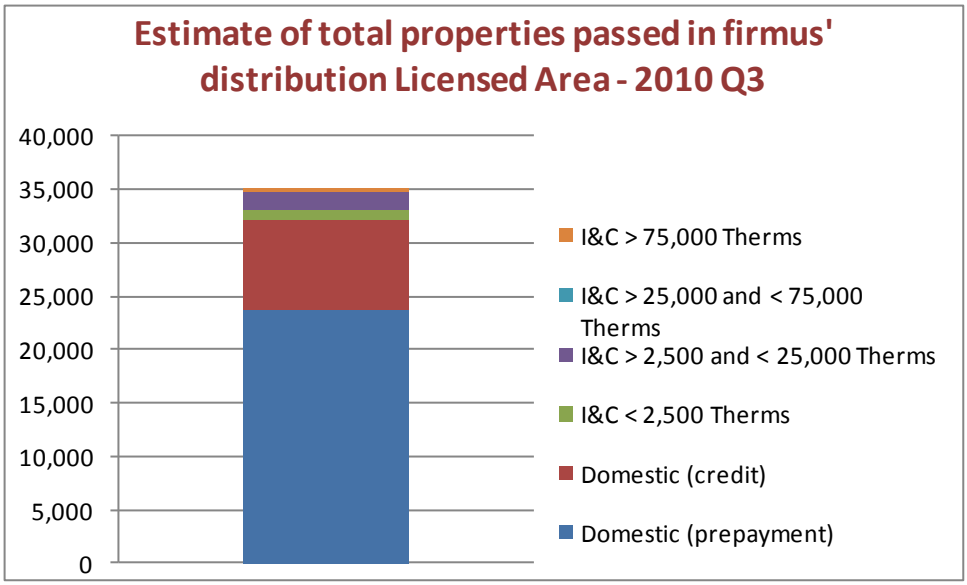



Source: PNG and firmus

In Phoenix distribution licensed area the cumulative number of premises passed to the end of 2009 was 274,430.

Information is provided below on the firmus energy licenced area, in terms of the extent and type of properties passed by the gas network. firmus energy had a total of 35,081 properties passed in September 2010. The break down by market segments has been estimated by firmus based on the apportionment of the number of connections, which at that point were 8,443.

**Figure 24:** Number of properties passed (estimated) in firmus' distribution Licensed Area




Source: firmus energy

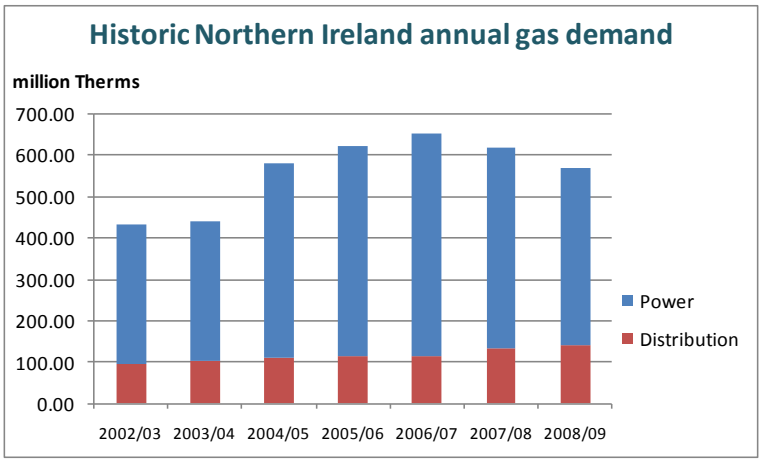
## (ii) Demand/consumption (gas)

Historical Northern Ireland gas demand is shown in the next chart. The category called 'distribution' includes the gas demand of Phoenix Natural Gas and firmus energy, while the power sector includes the Ballylumford and Coolkeeragh power stations – both of which are fuelled by natural gas. The total Northern Ireland annual demand has grown by 31.7% over the period 2002/03 – 2008/09 (or c4.5% p.a.).

From 2006/07 to 2008/09 the Northern Ireland power demand for gas has contracted by 10.2% p.a. as a result of the economic recession and lower dispatch order at the Ballylumford power station.

The distribution (households and businesses) sector grew by 7.2% p.a. with the expansion of the Phoenix distribution system in the Greater Belfast area and the firmus energy distribution systems along the North-West Pipeline. The distributed gas volume in the Phoenix Natural Gas Ltd licensed area (Phoenix Distribution system which includes Greater Belfast and Larne) has grown by 25%, averaging 3.9% p.a. over the period 2002/03 to 2008/09. Growth in the PNG licensed area has been driven primarily by the organic growth in consumers of natural gas, the majority of whom are domestic customers.

**Figure 25** Historic Northern Ireland annual gas demand.




Source: Joint Capacity Statement 2010

There are three active gas suppliers in this area, Phoenix Supply Limited (PSL), firmus energy and Energia.

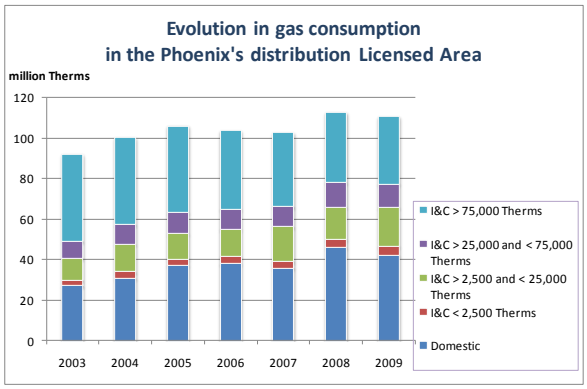
firmus energy started to supply natural gas in the firmus distribution licensed area[21] (10 large towns outside of the Phoenix licenced area) in 2005, increasing their sales significantly in the following years, mainly in the I&C sector. firmus currently retains the exclusive rights to supply gas to all customers in their licensed area (we have recently published a consultation on 'The options for co-ordinating the relinquishing of firmus energy's supply exclusivity in the ten towns area'[22]).

Gas consumption in both distribution licensed areas is shown in the figures below. Total volume transported was 111 million therms through PNG's network and circa 30 million therms through firmus energy's network. In terms of total consumption, the domestic sector represented almost 40% in the PNG's distribution Licensed Area, and 6% in firmus' Licensed Area. The shares for the I&C segments are 21% and 9% respectively among those customers with consumption up to 25,000 million therms, and 41% and 84% in the segment above 25,000 million therms consumption.

[21] ten towns: Antrim, Armagh, Ballymena, Ballymoney, Banbridge, Coleraine, Craigavon, Derry, Limavady and Newry.ALREADY PROVIDED THIS INFO

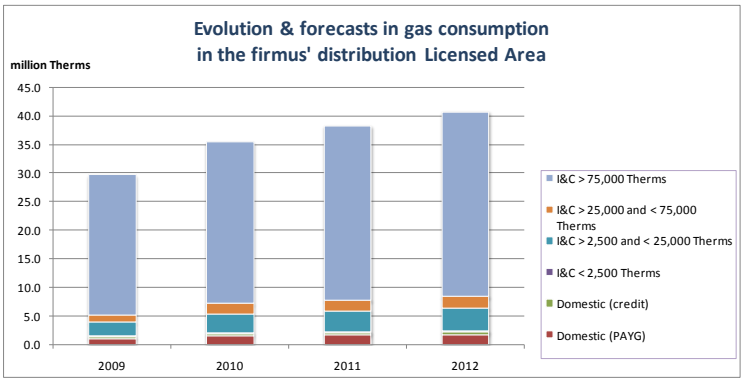
[22] http://www.uregni.gov.uk/news/view/consultation_on_relinquishing_of_firmus_energys_supply_exclusivity_to_10_to

**Figure 26** Evolution of gas consumption in the Phoenix Licensed Area.




Source: PNG

**Figure 27** Evolution and forecasts of gas consumption in the firmus' distribution Licensed Area.




Source: firmus

Regarding peak demand on gas distribution systems, Phoenix Natural Gas recorded its highest ever daily system demand on Friday 8 January 2010. Demand on this day was 21.8 GWh and coincided with a 20.4 Fahrenheit degree day at Aldergrove Airport. Daily Metered[23] (DM) consumer demand accounted for 4.5 GWh (20.6%), whilst Non Daily Metered[24] (NDM) consumers accounted for 17.3 GWh (79.4%).

firmus energy recorded its highest peak day to date on 7 January of 4.719 GWh/d. This consisted of I&C demand circa, 4.389 GWh/d, and residential circa 0.330 GWh/d[25].

## (iii) Market shares/switching (gas)

The firmus distribution licensed area is not currently open to competition, hence firmus energy has 100% market share in terms of both volumes and customer numbers, and in all customer categories.

In the Phoenix distribution licensed area, Phoenix Supply Limited has around 120,000 residential and 8,000 industrial and commercial customers[26]. Competition in terms of gas supply in the Phoenix distribution area is still very immature, and PSL supplies over 99% of customers within the Phoenix distribution Licensed Area. As mentioned previously, we intend to publish a set of quarterly energy transparency reports from next year. At present, it is our intention that these reports will cover both electricity and gas sectors, and will include information on switching activity and market shares, broken down in different market segments. Our intention is to collect data on market shares by both, customer numbers and consumption, in the format shown below, for both Phoenix and firmus energy gas distribution areas.

[23] Daily Metered (DM) Customer: A customer that has a meter that is read daily by remote means.
[24] Non-Daily Metered (NDM): A meter that is read monthly or at longer intervals.
[25] Joint Capacity Statement 2010.
http://www.uregni.gov.uk/uploads/publications/GAS_2010726_Joint_Capacity_Statement_2010.pdf
[26] http://www.phoenixsupplyni.com/about-us/

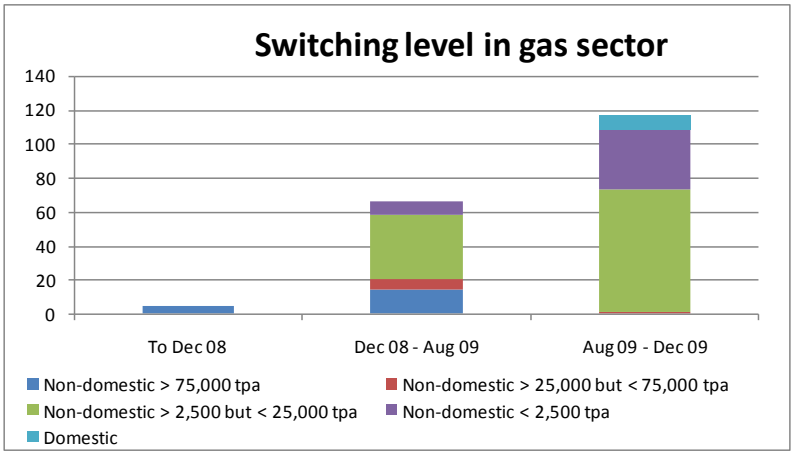
**Table 7** Market shares in Northern Ireland gas retail market

| Market Segment | | Customer Connections | Supplier 1 | Supplier 2 | Supplier 3 |
|---|---|---|---|---|---|
| **Domestic (prepayment)** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **Domestic (credit)** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **I&C < 2,500 Therms** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **I&C > 2,500 and < 25,000 Therms** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **I&C > 25,000 and < 75,000 Therms** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **I&C > 75,000 Therms** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **Total** | Total Market Customer Connections | | | | |
| | Suppliers Total No. of Customer Connections | | | | |

| Market Segment | | Volume (million Therms) | Supplier 1 | Supplier 2 | Supplier 3 |
|---|---|---|---|---|---|
| **Domestic (prepayment)** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **Domestic (credit)** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **I&C < 2,500 Therms** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **I&C > 2,500 and < 25,000 Therms** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **I&C > 25,000 and < 75,000 Therms** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **I&C > 75,000 Therms** | Segment Total | | | | |
| | Supplier % of Segment Total | | | | |
| **Total** | Total Market Demand | | | | |
| | Suppliers Total Demand | | | | |

As previously stated, competition has not yet arrived in the firmus area, and is very immature in the Phoenix area. The figure below shows switching levels in the gas sectors in the Phoenix distribution licensed area since the opening of the market.

**Figure 28** Level of switching in the gas sector (by number of switches).



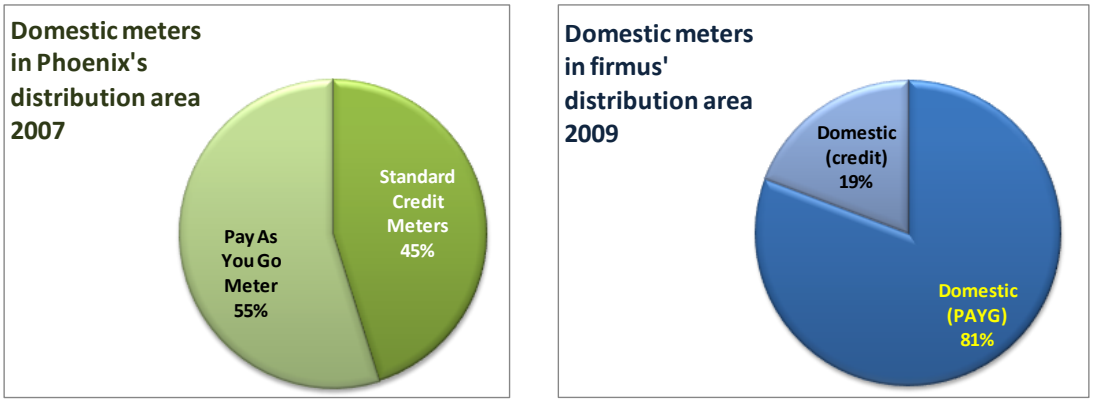

Source: PNG

## (iv) Methods of Payment (gas)

Gas suppliers offer domestic customers a range of payment methods. Phoenix Supply are obligated to offer a range of payment methods in their licence. They offer their domestic customers a domestic home energy tariff, which can be paid quarterly or through direct debit (with the associated discount), and a pay as you go tariff. firmus offer also the direct debit system (using a fixed monthly payment or variable direct debit on a quarterly basis), and the prepayment option.

In the figure below we have shown percentages of customers with prepayment meters and the percentage of customers paying by credit options.

**Figure 29** Domestic meters in both distribution areas




Source: PNG and firmus energy[27]

[27] The terminology on meters has been homogenised for simplicity when comparing type of meters in both areas.

# 3. Energy Prices

The UR directly regulates the prices of suppliers who are in a dominant monopoly position in the domestic and small business sectors of the market. We act on behalf of consumers to ensure prices are as low as they can be, while still allowing regulated companies an allowed supply margin and to make the necessary investment for the future.

## 3.1. Make up of a typical domestic bill

### Electricity

For consumers who consume less than 150 MWh per year, NIEES publishes a range of tariffs which have to be approved by the UR. We take an active role in scrutinising and approving these retail tariffs, which are the final prices customers pay. The tariffs are reviewed (usually annually), and new tariffs usually commence on 1 October each year.

Electricity retail tariffs are made up of a number of components that are subjected to regulatory scrutiny[28]

**Table 8** Electricity tariff components

| ELECTRICITY | Service | Regulatory Instruments/Scrutiny |
|---|---|---|
| Generation costs | Costs of procuring electricity including MO charges, contracting costs, cost of electricity, constraints and capacity charges. | Competitive and regulated wholesale market, approval of NIEES hedging methodology and annual approval of NIEES wholesale costs by the Regulator. SEMO Revenue and Tariffs 2009-10. |
| SSS charges | For system planning, operation and dispatch (SONI). | SONI Price Control. |
| PSO levy | Public Service Obligation costs which must be spread across all customers. | NIE Energy (PPB) Price control and annual approval of other costs. |
| Use of System charges | Costs of transmission and distribution of electricity across the wires network[29]. | T&D Price Control. |
| Supplier charges | Costs to supply electricity to customers e.g. billing. | NIEES Supply Price Control. |

[28] NIE Energy Supply's 1 October 2010 Tariff Review. A Regulatory Briefing http://www.uregni.gov.uk/uploads/publications/Electricity_Tariff_Announcement_-_Retail_Tariff_Background_Briefing_-_Sept_10_FINAL.pdf

[29] http://www.uregni.gov.uk/uploads/publications/2010-11_TUoS_CHARGING_STATEMENTv11.pdf ; http://www.nie.co.uk/suppliers/pdfs/DUoS_Statement_Oct09-Sept10.pdf

| | | |
|---|---|---|
| NIRO costs | Net costs of Northern Ireland Renewable Obligation (NIRO), related to government obligation on suppliers to sell a proportion of their output as renewables. | Audited on behalf of the UR by Ofgem as part of its UK-wide audit. |
| Correction factor | The difference between allowed revenue and actual recovered revenue (mechanism whereby differences between forecasts for tariff-setting and actuals can be recouped or returned to customers) and first year effect. | Analysis of variances between forecasts used for setting tariffs and out-turn costs. |
| Margin | Allowed margin above costs for NIEES. | This is determined by the UR as part of price control. Includes working capital costs. |

Several of these components, such as market operator charges, System Support Service (SSS) charges, PSO levy, use of system charges, transmission and distribution charges, are common across all suppliers. As a result, the customer must pay these regardless of who their supplier is. These costs are regulated because they represent parts of the industry which remain under monopoly ownership and therefore not open to competition. Independent suppliers are free to enter the market and purchase power. However, they must add the components of the tariffs outlined above before setting the final price to sell to customers.

## Gas

Due to the lack of competition in the tariff market (those using less than 25,000 therms per annum) and as determined by their licence, from 2007 Phoenix Supply have been subject to price control. The price control only applies to the domestic sector and to I&C customers who consume less than 25,000 therms per annum.

A price control does not exist for the firmus energy supply tariff, for the following reasons:

- firmus energy is still in the early stages of its development. With around 6,700 customers at the end of 2009, firmus is very much focused on growing their business and attracting as many new customers as possible. A necessary requirement to achieving this is to price as competitively as possible against alternative fuels (e.g. home heating oil, fuel gas). A price control on the supply tariff is not deemed necessary at this stage.
- firmus energy is incentivised through the distribution price control to maximise volume throughput over the control period. To achieve this firmus must price competitively in order to win new customers and increase the demand for gas flowing through its distribution network.

In the gas sector, the components of the tariff differ from those in the electricity sector. The components of the gas supply tariff for Phoenix Supply Ltd are set out in the following table.

**Table 9** Gas tariff components

| GAS | Service | Regulatory Instruments/Scrutiny |
|---|---|---|
| **Gas costs** | This is the cost of the gas bought in GB, and is the most volatile component. | This is a pass through cost and is reviewed at every tariff review by the UR. |
| Transmission charges | Charges for transporting gas through the Northern Ireland transmission system. | Tariffs approved by the UR and published every July.[30] |
| Distribution charges | Charges for using smaller pipeline network in the Greater Belfast and Larne areas. | Tariffs approved by the UR and published every September. Tariffs are based on the regulatory determination in the distribution price control. |
| Supply costs | This is the operational cost of running PSL's business. | Costs are approved and published by the UR. |
| Correction Factor | As gas costs are forecast and fixed in advance, actual costs may differ from forecast and the difference is then included in the tariff. This can be positive or negative. | Analysis of variances between forecasts used for setting tariffs and out-turn costs. |
| Margin | Allowed profit margin for PSL. | This is determined by the UR as part of price control. |

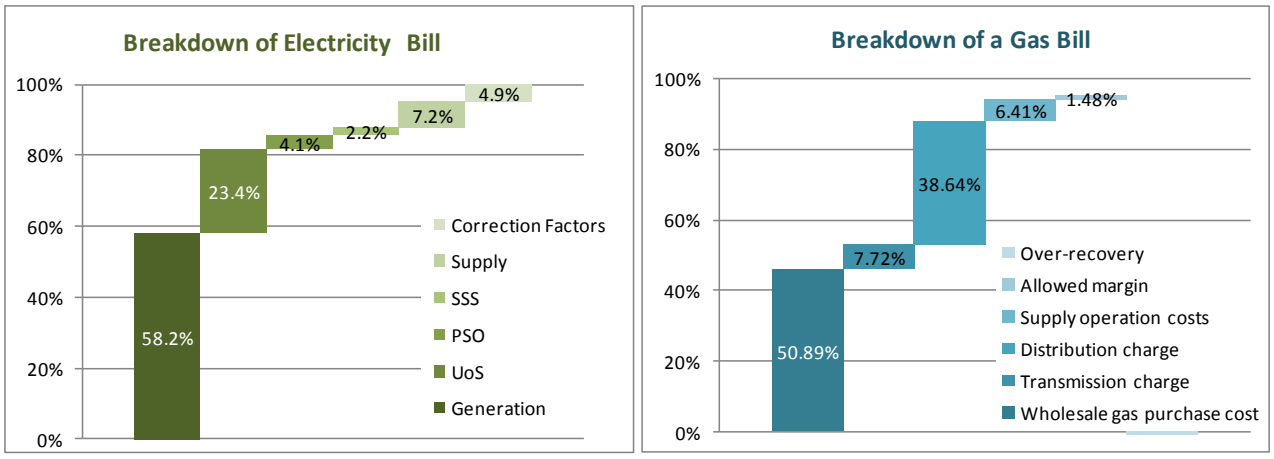
## The Constituent parts of an average domestic customer's bill

To ensure that readers see the relative importance of the various elements that make up final bills, the following figures illustrate the percentage components of the electricity and gas[31] bills for regulated customers. The electricity chart related to electricity relates to the required revenues of NIEES for all of its regulated customers for the year 2009/10 (starting in October). The breakdown of the gas bill corresponds to all PSL regulated customers in August 2010.

[30] The transmission tariffs are published on the websites of BGE(UK) and PTL/BGTL. For BGE(UK) see http://gasmap.ie/networks/index.jsp?1nID=102&2nID=109&pID=311&nID=319 and for PTL/BGTL see http://www.premier-transmission.com/

[31] Note the make-up of the gas tariff in this diagram relates only to the PSL tariff.

**Figure 30** Make-up of regulated electricity and gas bill




Source: UR, NIEES and PSL

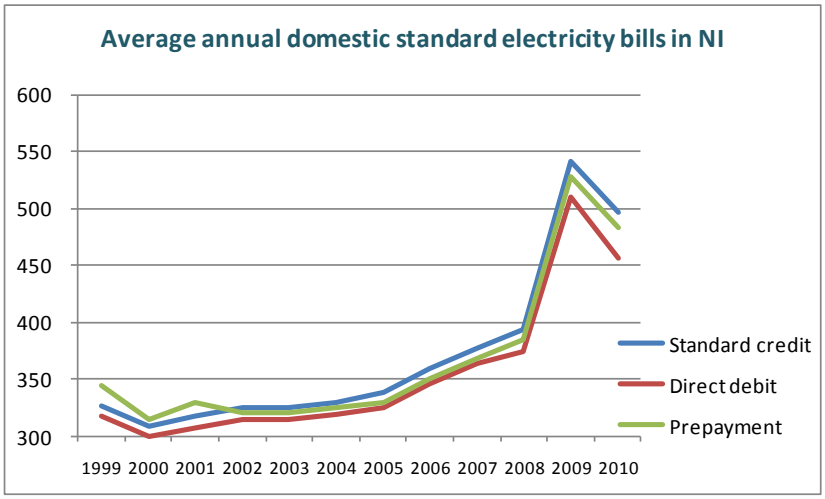
## 3.2. Electricity prices: evolution and comparisons

### Electricity prices in Northern Ireland

Regulated electricity tariffs in Northern Ireland still exist for customers who consume less than 150,000 units per year (equal to 150 MWh). For these customers, NIEES published a range of tariffs approved by the UR. Alternative suppliers compete for customers against these published tariffs (i.e. offering a discount). The last tariff review, with effect from 1 October 2010, concluded with the agreement that there would be no change in NIEES' tariff. It was considered prudent to make no change at this time while keeping tariffs under review through the year.

The chart below shows the average annual standard bills for Northern Ireland domestic customers since 1999. It relates to a total bill received in the year, e.g. covering consumption from Q4 of the previous year to Q3 of the named year. Those bills have been calculated assuming an annual consumption of 3,300kWh, and includes VAT.

**Figure 31** Average annual domestic standard electricity bills in Northern Ireland




Source: DECC, Quarterly Energy Prices. September 2010

Business customers who consume more than 150,000 units per year can obtain an individual quotation from each of the active electricity suppliers. However, although these customers are not subject to price controlled tariffs, we also protect them, as explained below.

In November 2009 the UR conducted an inquiry into business tariffs in Northern Ireland[32]. The inquiry took the form of a data collection exercise, followed by structured interviews with 17 customers and four suppliers. In parallel, the project team undertook modelling of the prices paid by the customers and the underlying costs in the market.

The inquiry highlighted a number of issues, including competition, communication, risk management and customer understanding. The UR decided to undertake a set of actions to deal with the issues raised, which included the production of a Buyer's Guide for business customers, organise an information seminar[33], and monitor the main indicators of competitiveness in the market for business customers.

The retail electricity prices paid by business customers within their contracts largely depend on three main factors that determine the price that a specific customer will pay for its electricity supply. These are:

- the time of day/year that the electricity is consumed at, which is known as the consumption profile. The higher the ratio of peak time units to off-peak units, the higher the average unit price will be. This is because electricity is more expensive to produce and transport at periods of high demand (note this does not apply to all customers supplied by NIEES on a regulated tariff);
- the voltage that the customer is connected. Lower voltage customers use more of the system than high voltage customers and therefore pay more; and
- the taxes that the supplier has to charge, which depend on the amount of green energy supplied and if the customer is in a 'climate change agreement' with the government. It is important to note that not all suppliers are subject to the same taxes. This should be

[32] http://www.uregni.gov.uk/uploads/publications/Business_Tariff_Inquiry_Report_March_2010.pdf
[33] http://www.uregni.gov.uk/uploads/publications/28610_tariff_briefing_presentation.pdf

examined in detail when comparing the quotations from different suppliers, to ensure that the lowest total cost option is chosen.

The UR would like to gather more information on prices paid by business customers for their energy costs. There is a lack of existing data sources in non-domestic prices, so to get a better picture on trends, we probably need to turn to the agents involved, for example potentially requesting information from electricity suppliers on their prices for I&C customers. However, we also understand that supply prices are a matter of confidentiality, as they are linked to supplier selling strategies and individual contracts.

In this sense, we are about to commence work to develop a short term framework to collect and publish figures on electricity prices on the business sector on a comparable basis to the electricity price information already collected for the UK as a whole by DECC. We will discuss this with the regulated companies in due course. Once we obtain the data, to deal with the confidentiality issues, we would propose to aggregate the figures to produce one price per size band in Northern Ireland (suppliers will be anonymised). As the data will align aith that collected by DECC, this will allow us to compare Northern Ireland prices to the UK as a whole and to other regions and/or countries at EU level.

As noted, we intend to discuss more fully the request of information to suppliers and in the context of the issuing the anonymised data via the transparency quarterly reports (on number of active suppliers in the market, switching activity, market shares and prices/bills) mentioned previously). The thinking is still under development, but the initial idea is to follow DECC's format when asking for information on prices, as per the table below.

**Table 10** Electricity prices in the non-domestic sector

| Size of consumer | Annual consumption MWh | Volume sold MWh | Value excluding all taxes £000 | Value excluding VAT £000 | Value including all taxes £000 |
|---|---|---|---|---|---|
| Very small | <278 | | | | |
| Small | 278 - 2,777 | | | | |
| Medium | 2,778 - 27,777 | | | | |
| Large | 27,778 - 277,777 | | | | |
| Very large | 277,778 - 1,111,112 | | | | |
| Extra large | >1,111,112 | | | | |

Source: DECC

## Relationship between wholesale and retail (electricity)

There is widespread recognition of the interplay between wholesale/generation and retail markets, and of the impact that wholesale energy cost movements can have on end retail tariffs. As shown before, a large percentage of a customer's electricity and gas bills is made up of the costs of the commodity, which takes its price in the wholesale market. The impact in Northern Ireland of an increase in the wholesale market prices is obvious, as most of the power is generated using natural gas, coal or heavy fuel. Therefore, it is fundamental to have confidence that prices are set against a benchmark that actually reflects the clearing price for the whole market.

Within the SEM it remains important to ensure competition is not distorted by anti-competitive behaviour or structures. As a result SEM is monitored on a daily basis by both the UR and CER.

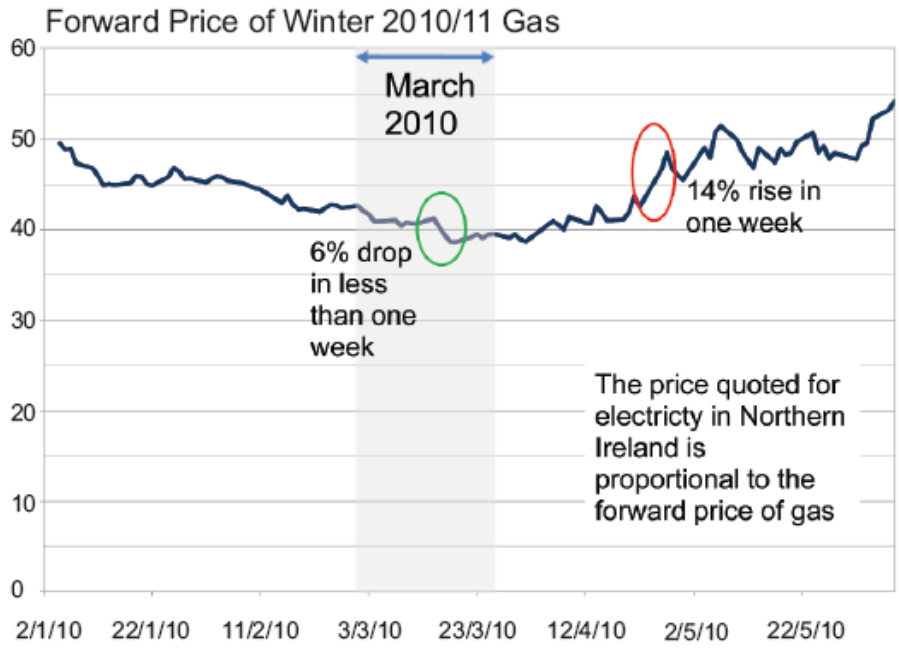
Since its establishment, both regulators have seen good progress towards improving the competitive structure of the market.

Suppliers have a number of different strategies related to buying electricity in the wholesale market. These include hedging, which is buying of wholesale gas and electricity ahead of physical delivery, so suppliers can buy gas or electricity months in advance. As a result, this can be linked to the reasons why they cannot pass on increasing or decreasing costs immediately to customers. Also, bigger suppliers can find good purchasing options when buying large volumes of electricity or gas, getting lower prices per unit that can be passed through to their customers.

Moreover, suppliers incur costs when changing prices, that might prevent the retail price from reflecting at a given moment of time the wholesale cost faced by the supplier.

The figure below shows an example of the volatility of the underlying costs associated with electricity.

**Figure 32** Forward price of winter 2010/11 gas




Source: Electricity Buyer's Guide, the UR

## Comparison of electricity domestic prices with GB and RoI

Historically, electricity prices in Northern Ireland have tended to be higher than GB. Key disadvantages that have led to higher prices in Northern Ireland are:

- higher energy transport costs;
- economies of scale in GB owing to the size of the market there compared to Northern Ireland;
- the additional cost of long- term legacy generation and associated contracts (not present in GB markets); and

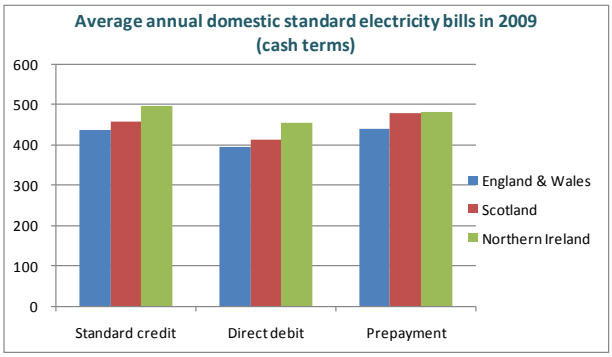
- the different fuel mix in GB (i.e. Northern Ireland has a reliance on gas while GB's generation mix is spread between nuclear, gas and coal).

The difference in prices between Northern Ireland and GB can be seen in detail in the following charts, which show the average annual standard bills for UK countries in the domestic sector.

**Figure 33** Average annual domestic standard electricity bills in 2009 for UK countries, in cash terms.

Pounds

| | Standard credit | | | Direct debit[5] | | | Prepayment | | |
|---|---|---|---|---|---|---|---|---|---|
| | Home suppliers | Non-home suppliers | UK | Home suppliers | Non-home suppliers | UK | Home suppliers | Non-home suppliers | UK |
| Cash terms | | | | | | | | | |
| 1990 | .. | .. | 245 | .. | .. | .. | .. | .. | 264 |
| 1991 | .. | .. | 269 | .. | .. | .. | .. | .. | 290 |
| 1992 | .. | .. | 288 | .. | .. | .. | .. | .. | 310 |
| 1993 | .. | .. | 287 | .. | .. | .. | .. | .. | 308 |
| 1994 | .. | .. | 288 | .. | .. | 285 | .. | .. | 308 |
| 1995 | .. | .. | 299 | .. | .. | 295 | .. | .. | 319 |
| 1996 | .. | .. | 297 | .. | .. | 291 | .. | .. | 317 |
| 1997 | .. | .. | 285 | .. | .. | 277 | .. | .. | 302 |
| 1998 | .. | .. | 268 | .. | .. | 258 | .. | .. | 285 |
| 1999 | 266 | 245 | 264 | 255 | 233 | 253 | 281 | 270 | 281 |
| 2000 | 260 | 241 | 257 | 249 | 231 | 245 | 275 | 273 | 274 |
| 2001 | 255 | 237 | 250 | 245 | 227 | 239 | 268 | 262 | 267 |
| 2002 | 256 | 233 | 249 | 247 | 223 | 237 | 270 | 256 | 265 |
| 2003 | 258 | 237 | 250 | 248 | 226 | 238 | 268 | 261 | 266 |
| 2004 | 265 | 243 | 257 | 257 | 231 | 244 | 281 | 264 | 274 |
| 2005 | 295 | 272 | 285 | 283 | 256 | 269 | 309 | 297 | 304 |
| 2006 | 343 | 332 | 338 | 327 | 302 | 313 | 355 | 365 | 359 |
| 2007 | 391 | 372 | 383 | 370 | 335 | 349 | 397 | 405 | 401 |
| 2008 | 420 | 387 | 405 | 402 | 359 | 376 | 433 | 416 | 424 |
| 2009 | 482 | 438 | 461 | 453 | 401 | 421 | 485 | 445 | 466 |
| 2010 | 456 | 425 | 440 | 426 | 382 | 397 | 462 | 435 | 448 |




Source: DECC, Quarterly Energy Prices. September 2010

Prepayment method is the slightly more expensive option in England, Wales and Scotland. However, in Northern Ireland, standard credit is more expensive, as prepayment has historically included a discount for domestic customers. The chart shows average bills received in the year, e.g. covering consumption from Q4 of the previous year to Q3 of the named year. The bills have been calculated assuming an annual consumption of 3,300kWh, and including VAT.

Below is the comparison of the NIEES domestic standard tariff to the equivalent ESB urban and rural tariffs. The domestic electricity cost is based on average annual consumer usage of 3,300kWh, again including VAT (which is charged at a higher rate in RoI), using a euro exchange rate of 1.21 for Oct 2010 and a rate of 1.16 for October 2009. For more information on the tariff review, please see http://www.uregni.gov.uk/uploads/publications/Electricity_Tariff_Announcement_-_Retail_Tariff_Background_Briefing_-_Sept_10_FINAL.pdf.

**Table 11** Electricity previous tariff announcements

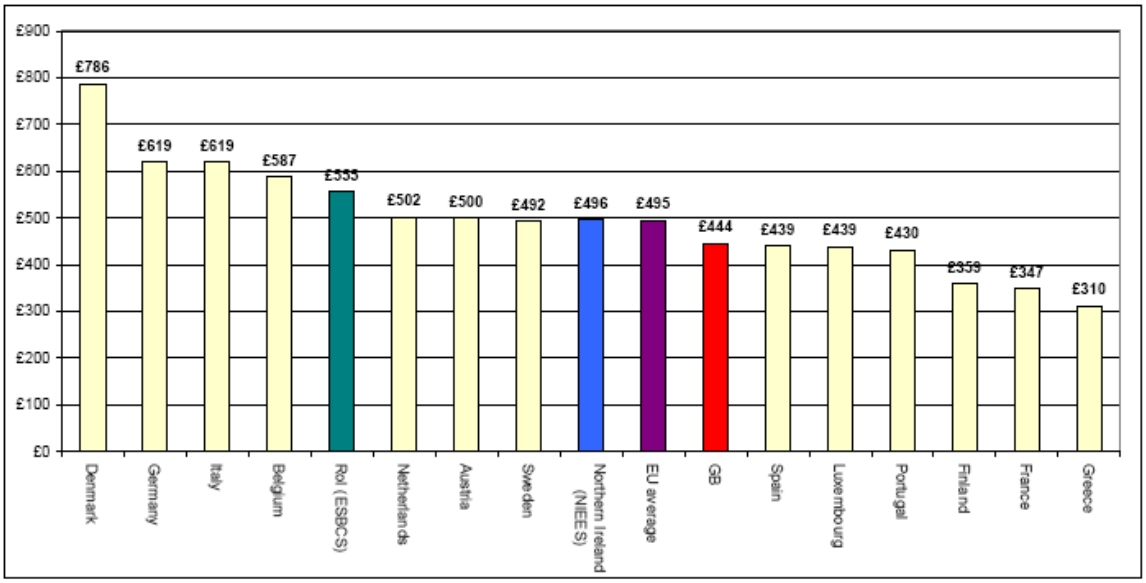
| | October 2009 | Higher than NIEES £ | Higher than NIEES % | October 2010 | Higher than NIEES £ | Higher than NIEES % |
|---|---|---|---|---|---|---|
| NIEES | £496 | | | £496 | | |
| ESB – urban | £545 | £49 | 9.9% | £553 | £57 | 11.5% |
| ESB – rural | £575 | £79 | 15.9% | £582 | £86 | 17.3% |

Source: The UR 2010 Tariff Review, a regulatory briefing

### Price comparison at EU level

The following figure reflects domestic price comparisons including VAT between Northern Ireland, RoI, GB and different European countries. Prices for Northern Ireland and RoI are those set up for October 2010, while the GB price is relevant to September 2010. European prices are the average of the second semester of 2009 prices for an annual consumption of 3,300kWh.

**Figure 34** NIEES tariffs per average customer compared to RoI, GB and EU.




Source: NIEES and Eurostat.

## 3.3. Gas prices: evolution and comparisons

### Domestic and Small I&C Tariffs in Northern Ireland

The Phoenix Supply tariff review normally runs for a 12-month period from 1 April each year. In September 2010, as an outcome of a mid-year review carried out, Phoenix Supply Ltd. announced that there would be no change to its current gas price[34]. This announcement on keeping gas prices unchanged from 1st October 2010 was made after a period of formal consultation with the UR, CCNI, and the DETI.

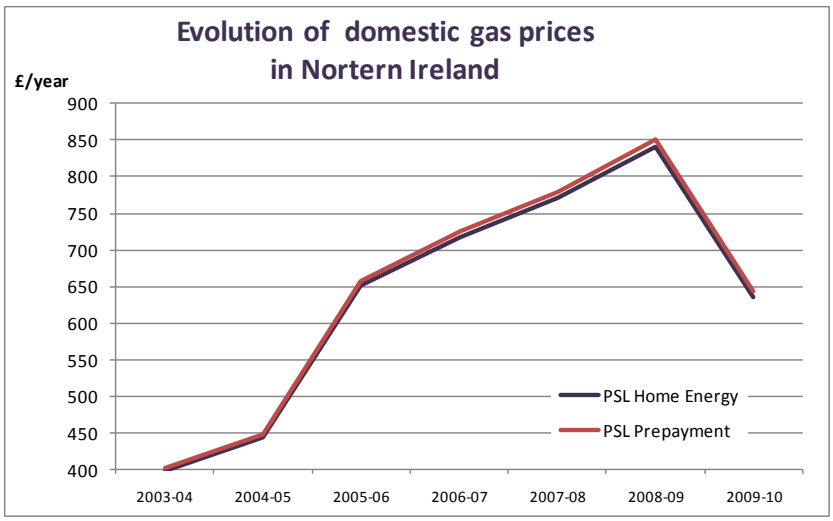
Also in September 2010, firmus energy announced a 12-month freeze on current Northern Ireland gas prices.

Northern Ireland domestic regulated gas prices are shown in the figure below. 'Home Energy' represents the tariff charged to direct debit and credit domestic customers. For the purposes of these calculations, the direct debit discount has been ignored. In some of the gas years, tariffs changed during the year and in those cases, the tariffs shown below are an average for these years. The difference between Home Energy tariff and prepayment tariff is £7 per year in 2010.

[34] http://www.uregni.gov.uk/news/view/utility_regulator_says_no_change_on_gas_prices_a_good_outcome_for_consumers

Annual costs have been assessed using an assumed average consumption 18,000 kWh per annum[35].

**Figure 35** Evolution of the average annual gas bill for PSL domestic customers.




Source: PSL

## Gas price comparison with GB

Historically, gas prices in Northern Ireland have tended to be higher than in GB for a variety of reasons. The main causes of the differential in price between Northern Ireland and other parts of the UK are:

- Northern Ireland has no indigenous supply of natural gas and is totally reliant on imports from the UK mainland grid;
- there are extra costs associated with bringing gas through the Scotland to Northern Ireland Pipeline (SNIP);
- Northern Ireland's gas infrastructure is relatively new and none of the assets have yet been paid off; and
- the gas market is still maturing.

The table below compares the average annual bill for a Phoenix Supply customer with other GB gas suppliers. It can be observed that the historical tendency for prices to be higher in Northern Ireland is not the case at the moment. The reason for this is unclear, but this may be due to a number of factors, including possibly higher margins being earned in the GB market than in the Northern Ireland gas supply market.

As above, Home Energy represents the tariff charged to direct debit and credit domestic customers. For the purposes of these calculations, the direct debit discount has been ignored. In some of the gas years, tariffs changed during the year and in those cases, the tariffs shown below are an average for these years.

[35] This assumption will allow comparisons with prices reflected on DECC report.

**Table 12** Average annual bill for a gas customer: Northern Ireland and GB countries.

| Gas year (runs from Oct to Oct) | Phoenix Supply | |
|---|---|---|
| | Home Energy | Prepayment |
| 2003-04 | 398 | 403 |
| 2004-05 | 443 | 448 |
| 2005-06 | 651 | 658 |
| 2006-07 | 717 | 725 |
| 2007-08 | 771 | 779 |
| 2008-09 | 841 | 850 |
| 2009-10 | 636 | 643 |

Pounds

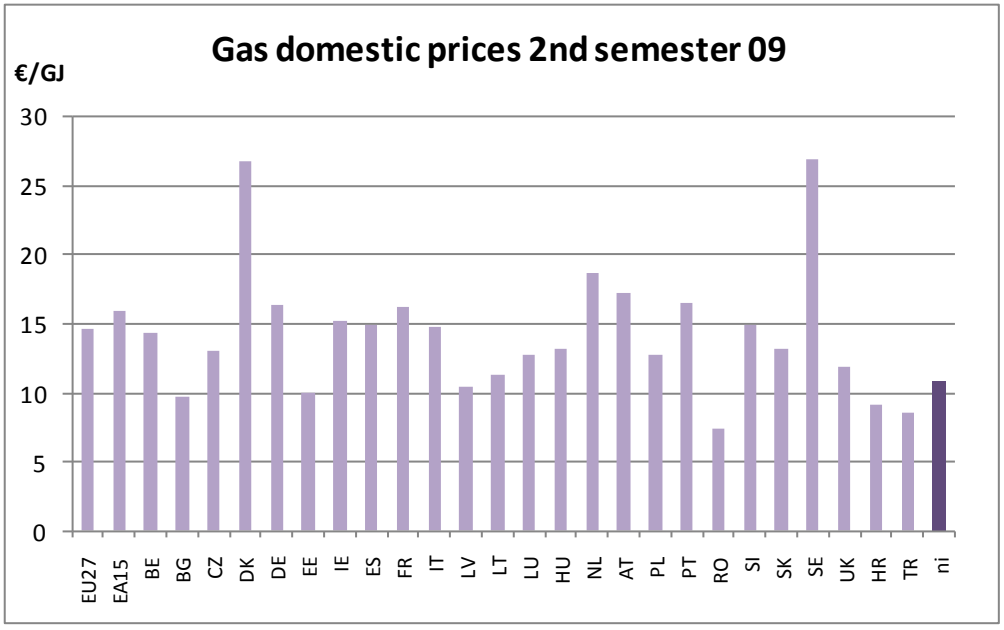
| | Standard Credit | | Direct debit | | Prepayment | |
|---|---|---|---|---|---|---|
| | England & Wales | Scotland | England & Wales | Scotland | England & Wales | Scotland |
| Cash terms | | | | | | |
| 1998[3] | 315 | 313 | 277 | 275 | 331 | 331 |
| 1999 | 304 | 307 | 268 | 268 | 318 | 318 |
| 2000 | 295 | 297 | 264 | 262 | 311 | 310 |
| 2001 | 293 | 295 | 266 | 263 | 309 | 308 |
| 2002 | 310 | 311 | 281 | 279 | 327 | 327 |
| 2003 | 320 | 320 | 292 | 291 | 336 | 335 |
| 2004 | 333 | 332 | 309 | 305 | 351 | 351 |
| 2005 | 386 | 384 | 353 | 347 | 401 | 400 |
| 2006 | 475 | 469 | 425 | 418 | 498 | 501 |
| 2007 | 553 | 547 | 498 | 487 | 589 | 588 |
| 2008 | 570 | 563 | 527 | 504 | 618 | 612 |
| 2009 | 718 | 710 | 650 | 635 | 745 | 754 |
| 2010 | 684 | 674 | 633 | 620 | 688 | 690 |

Source: Phoenix Supply and DECC

## Price comparison at EU level

The following chart compares gas household prices across Europe for the second semester 2009. Northern Ireland price is below the average of the EU members.

**Figure 36** Gas price comparisons at EU level




Source: Eurostat Data in focus 21/2010

## PART THREE: KEY FUTURE RETAIL WORK AREAS

Since its creation in November 2008, the Retail Directorate at the UR has pursued a policy centered on creating a fertile environment for greater levels of electricity supply competition to emerge, particularly in the domestic retail sector, where competition was non-existent. This policy approach emanates from our strategic policy drivers, the local legislative framework and wider national and EU-level policy frameworks.

Our policy drivers include the direction of 'enhancing competition in the energy regulated sectors'. The UR Corporate Strategy 2009-2014[36] noted that *'*at a time of great concern over high and volatile energy prices, consumers can benefit from having access to openly competitive supply markets and a real choice of suppliers and products. Where it is appropriate and cost-effective to do so, and to further protect consumer interests, we shall seek to further boost competitive pressures in the regulated sectors'. This strategic goal was substantiated by our work plan during 2010-11[37], and it is an essential part of the work that will be carried out over 2011-12 and the next few years.

Also, the statutory remit given to the UR places a high value on competition as a means to deliver consumer benefits. Competition is a key feature, particularly in electricity, where it is the UR's primary statutory objective *'*to protect the interests of consumers…wherever appropriate by promoting effective competition'.

EU law is equally explicit about the central role of competition to deliver consumer benefit. 2009 EU Directives[38] continue the pursuit of effective competition as an EU-wide policy goal and focus also on consumer rights and roles within retail markets 'in order to allow consumers to take full advantage of the opportunities of a liberalised internal market'.

In theory, there are benefits for the customers in a more competitive energy sector, such as downward pressure on costs, increased standards of service and increased amount of innovation. However, we are aware of the need to move forward gradually, and with due regard to the complexity of issues involved with delivering competition in a relatively small market like Northern Ireland.

The 'ideal' vision we have for a future energy supply customer environment is one where:

- consumers benefit not just from competitive prices, but also from improved or differentiated service and tariff choices which better suit their requirements;
- well-informed customers have clear knowledge and awareness of suppliers, products and tariff / service choices;
- consumers can switch supplier quickly and easily;
- there is transparency regarding price, product and service, resulting in uncomplicated, high-quality decision-making by consumers;
- all sections of consumers either benefit from competition or are protected from being worse off by ongoing regulatory action (the latter might involve ongoing price controls of the incumbent supplier that new entrants can beat; price controls for non-switchers; non-discrimination conditions, etc);

[36] http://www.uregni.gov.uk/news/view/utility_regulator_publishes_corporate_strategy_2009_14/
[37] http://www.uregni.gov.uk/news/view/2010_11_forward_work_plan_published/
[38] Directive 2009/72/EC concerning common rules for the internal market in electricity; and Directive 2009/73/EC concerning common rules for the internal market in natural gas.

- we achieve and leave open entry from more supply businesses offering a greater diversity of product and service bundles and who can find commercial space to grow;
- successful competition of suppliers would not be necessarily dependent on vertical integration; and
- effective competition limits the scope and extent to which formal regulatory price control is required over currently regulated supply entities.

The main retail projects we will be working on for the rest of 2010/11 and over the 2011/12 year are shown in the table below.

**Table 13:** Retail work programme

| Strategic theme | Actions to develop through into 2011-12 |
|---|---|
| Monopoly regulation | Price control: Complete and implement NIEES supply price control.<br>Tariff review: Electricity tariffs approvals. Ensure transparent, accurate approval and effective communication of regulated elements of the supply tariffs. Appropriate in-year review work. |
| Protection | Annual statement, billing information and clarity of bills, EU-required consumers checklist, deal with issues coming out of DSD Fuel Poverty Review, supplier marketing, implement any decisions coming from Third Package regarding vulnerable customers, policies to avoid customer confusion, Codes of Practice (in 2012-13), and ensure all consumer related aspects of Third Package are implemented. |
| Competition | Electricity systems to enhance competition: Stage 3 implementation of the Enduring Solutions Options Study (ESOS) project to implement long term electricity switching process.<br>Policy Position Paper: review of policy position on supply competition in light of current experience.<br>Ensure that all necessary preparations are achieved to manage new supplier entry and ensure customer protection. |
| Harmonising | Progress harmonised systems via Harmonisation Working Group and Harmonisation Steering Group ongoing issues. Ensure smooth roll-out of stage 3 go live in the context of all-island supply processes. |
| Regulatory framework | Retail Market Monitoring in the short and long- term. |

## 4. Continue to work on improving our retail policy framework

To achieve, or get as close as possible to, the retail customer environment described above, we will need to keep our policies on retail competition under review to ensure they are right and define improved policy approaches going forward.

We believe that retail competition can potentially deliver benefits for consumers, so long as it is developed efficiently, delivers truly contestable retail conditions in all market sectors, and consumers are empowered to fully engage with these markets. Contestability is a concept that describes the extent to which a given market is actually or potentially capable of being open to competitive forces. It is not just about evidenced competition in terms of active market participants, but also describes the potential competitive effects that restrain current market participants from monopolistic behaviour.

**Contestable markets**

Contestability would include several aspects:

1. Legal framework: A contestable legal market is when there is no legal impediment for a supplier to enter and compete to supply any customer.
2. Technical: i.e. the existence of effective switching systems.
3. Economic: low barriers of entry, low costs for a new entrant, low exit barriers.
4. Competitive potential: the potential for real switching on the customer side.

We understand that contestability can be measured through both qualitative and quantitative information.

We believe that regulatory frameworks should remain in place until contestability/competition is firmly evidenced, and until we believe that customers in Northern Ireland can realistically expect to benefit from competition. We need to try to ensure that all customers groups benefit from competition and switching opportunities, or at least are made no worse off. Where they do not, we need to ensure the regulatory structure continues to offer customer protection – competition where it is effective, regulation remaining where not.

Going forward, our overall philosophy in developing retail competition is to develop, change and where appropriate, reduce the regulatory framework in a way that seeks to crystallise and maximise consumer benefit from competition. We contend that this can be achieved through maximising the degree to which the energy retail market is truly contestable and competitive. Competitive entry (or the effective threat of it) and customer empowerment are the engines that can realise the benefits of competition.

In order to provide the necessary analytical background for taking future policy decisions, it is vital to define a framework of monitoring the retail markets, and to ensure that customers are protected while gradually moving towards competition.

### Customers' views and attitudes towards competition

The Omnibus Research conducted in 2010 on 'Views of the general public on utility issues and regulation' which covered a fully representative sample of the Northern Ireland adult population. The research showed that the lack of competition is still the second most important reason for customer dissatisfaction (38% of those dissatisfied state this as a reason for their dissatisfaction) and fostering competition is among the top three most supported future developments. Three quarters (73%) state they would consider changing their supplier if more gas and electricity companies were available in Northern Ireland.

The level of competition is seen among respondents as having the strongest influence on electricity and gas prices. 29% of interviewees think this is the main reason for price decreases the last six months, compared to only 17% who attribute the price decreases mainly to falling wholesale energy costs.

The CER and the UR decided to undertake a research project to better understand consumer attitudes to electricity supply competition[39], with the ultimate objective of better informing policy making in this area. The research was completed in June 2010. We have extracted the findings related to expectations and attitudes towards of competition and interest in switching from Northern Ireland customers.

The research found that the majority of Northern Ireland residential consumers expect little or no competition within the next two years. However, the majority of consumers stated an interest in switching when competition is available. It is worth highlighting that the interest in switching is driven by cost, with service also being significant.

Among the business customers, the level and awareness of switching options suggests competition is not strong with Northern Ireland businesses. They are also less likely to switch than RoI businesses and much less aware of the available electricity suppliers. The low level of shopping around (considering multiple suppliers when considering switching) suggests a low rate of engagement among the business consumers in the electricity supply market (68% of SMEs and 58% of LEUs do not review their electricity usage more often than once a year) and lack of effective communication among electricity suppliers in the Northern Ireland business market. Cost was the most common factor cited in the switching decision. Good service provided by supplier was the most commonly stated reason for not switching among both SME's and LEU's. Prices have historically been the main factor linked to the development of competition. However, customers' views are progressively more orientated towards non-price factors.

As mentioned previously, in November 2009 the UR conducted an inquiry into business electricity tariffs in Northern Ireland, which results were published in March 2010. In this inquiry concerns were raised about the lack of competition between electricity suppliers in Northern Ireland. Customers also compared the electricity suppliers with other suppliers they deal with on a day to day basis and were surprised that the electricity suppliers were not 'knocking on their doors' more frequently and more vigorously.

[39] http://www.uregni.gov.uk/uploads/publications/140610_Consumer_research_report_on_electricity_supply_companies_-_Retail.pdf

# 5. Retail Market Monitoring

We are aware that close attention is required to the market context and behaviour of participants in order to ensure electricity retail competition delivers a net benefit to all electricity customers. We need to improve our knowledge and processes of retail market information collection and transparency in order to build up our own regulatory knowledge-bank for policy decisions, particularly given the current developments in retail competition, and to comply with mandatory requirements coming from the Third Package.

Moreover, the inquiry conducted by the UR into business tariffs in Northern Ireland had a series of outcomes, one of which was the future monitoring of the main indicators of competitiveness in the market for business customers.

Also, we need to cover the expectations of our stakeholders in terms of providing the necessary figures to keep them sufficiently informed. Finally, to enable consumers to make good tariff choices, they need accurate information about their own energy consumption and costs.

Given the above, we plan to undertake the following two projects in relation to energy retail market monitoring.

1. **Short-term** project: to scope initial retail market monitoring requirements in light of competition developments, develop data collection regime and collect and issue data in the form of quarterly monitoring/transparency reports. This will cover gas and electricity and it is our intention to cover also domestic and non-domestic sectors.
   Key data aspects are: market share evolution per supplier per customer category; switching rates and supplier net customer flows in/out; and prices/bills, split by domestic and I&C and per customer category. We intend to publish these quarterly reports for market share, switching and prices/bills.

2. **Longer-term** project: to define a set of competition indicators to assess the development and functioning of our retail energy markets. This contestability indicators framework will be designed to provide information that would assist us to meet statutory and European legislative requirements.

   A wide list of indicators (see table 15) has been recommended by EU (via ERGEG: Consultation Paper on 'Draft Guidelines of Good Practice on Indicators for Retail Market Monitoring[40]). We will analyse ERGEG's final decision paper, and indicators suggested, and see what is necessary and/or relevant in the Northern Ireland context, collate the information and publish it in due course. We will develop a consultation process to identify appropriate indicators of competition in the retail market.

   The set of proposed indicators relate to areas not only directly linked to competition issues (i.e. price, retail margin, market concentration), but also areas of the market where a customer interacts with a service provider (i.e. customer complaints). We have to take into account that the retail market development goes beyond mere monitoring and seeks to address whether or not progress is sufficient (i.e. % of small customers switching).

   This project has just begun and will be progressed also in concert with CER who are commencing similar market monitoring thinking.

[40] http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/CUSTOMERS/GGP%20retail%20market%20monitoring/CD

The benefits of the information gathered in the short and long- term projects within market monitoring would be:

- to fulfill Third Package requirements on retail market monitoring;
- to better assess customer gains from the implementation of full retail competition. The underlying principle of regulation in the retail market is that competition will ultimately provide the best for customers, through lower prices, better goods and services and increased efficiency. Consequently, it will be important to monitor the state of this competition;
- to inform the public how competition is developing, how it has impacted on consumers and how they can take part in the market by themselves. The lack of knowledge of consumers can lead to them being unable to make clear and informed purchasing decisions. In this sense, the information collected in this report has the objective of enhancing active participation by energy customers in retail Northern Ireland markets. It is clear that retail competition in energy markets requires active participation from the demand side, i.e. from consumers.

**Table 14:** Suggested indicators for retail market monitoring

| Category | No. | Indicator / Measurement |
|---|---|---|
| Customer Satisfaction | 1 | Customer complaint<br>*Number of customer complaints by category* |
| | 2 | Customer enquiries<br>*Number of customer enquiries by category* |
| | 3 | Customer information<br>*Is there a reliable price comparison website available for customers?* |
| Retail Market Outcomes | 4 | End-user prices<br>*End-user price for typical household customer* |
| | 5 | Retail margin<br>*Retail margin for typical household customer* |
| | 6 | Price spread<br>*Price spread on comparable products for typical household customer* |
| | 7 | Diversity of contracts (offers)<br>*Number of current offers to typical household customer* |
| | 8 | Regulated end-user prices<br>*Percentage of customers eligible to receive a regulated end-user price*<br>*Percentage of eligible customers supplied under regulated end-user prices* |
| Market Structure | 9 | Number of suppliers<br>*Number of active suppliers that are selling electricity and/or gas to household customers across the same market* |
| | 10 | Market concentration<br>*Market shares by consumption and/or number of customers* |
| | 11 | Branding<br>*What percentage of customers is served by a DSO that*<br>*- has/does not have a separate branding from the supply branch of its vertically integrated undertaking?*<br>*- is totally separate from the supplier of that customer?* |
| Market Condition and DSO services | 12 | Switching rates<br>*Number of switches for household customers as a percentage of customer numbers* |
| | 13 | Renegotiations<br>*Number of renegotiated contracts for household customers* |
| | 14 | Delays in switching process<br>*Number of delayed switches* |
| | 15 | Failure to fulfil the switch<br>*Number of failures in relation to the total switching rate* |
| | 16 | Connections<br>*Average time until connection* |
| | 17 | Repairs<br>*Average time until repair* |
| | 18 | Disconnection rates<br>*Relative number of disconnections* |
| | 19 | Maintenance services<br>*Is there a charge for execution of maintenance services?*<br>*Average time taken for execution of maintenance services*<br>*Average charge for execution of maintenance services* |

Source: ERGEG Consultation Paper on Draft Guidelines of Good Practice on Indicators for Retail Market Monitoring

# 6. Customer Protection

## 6.1 The Third Package

For some years we have been improving contestability of Northern Ireland's energy retail markets to facilitate new entry of suppliers. The arguments for promoting competition are well-rehearsed (innovation, efficiency, downward cost pressure) but fundamentally come down to creating benefits for consumers. The Third Package, also called the Third Energy Package or IME3, concentrates on overall policy terms as it takes the twin track of developing internal markets, competition etc, but also adds new significant customer protection and information aspects.

The Third Package was published in August 2009, and consists of the EU's latest legislative measures to further liberalise its gas and electricity markets. The package consists of two directives (covering the gas and electricity markets separately), and three regulations:

- Directive 2009/72/EC concerning common rules for the internal market in electricity;
- Directive 2009/73/EC concerning common rules for the internal market in natural gas;
- Regulation (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity;
- Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks; and
- Regulation (EC) No 713/2009 establishing an Agency for the Cooperation of Energy Regulators.

The key elements of the Third Package include more enhanced consumer protection measures; more stringent requirements for unbundling network operations from other activities; ensuring fairer competition between companies within the EU and those outside the EU; more powers and independence for national regulators; greater cooperation between Member States; and the creation of a European energy agency. Many of the requirements are not new, and were part of the second European package on market liberalisation in the energy sector.

To a large extent consumer protection measures in the Directives build on the requirements under the 2003 Directives. Some of the measures are intended to apply to all customers, while others apply to domestic customers only.

In particular, the Directives require Member States to ensure that for household customers, consumer protection measures include:

- the right to a fair and transparent contract, in advance of signing, which contains all relevant information in clear and comprehensible language including duration of the contract, service quality levels, remedy where these are not met and complaints, company contact and consumer rights information;
- notice from the supplier of its intention to modify contractual conditions;
- access to transparent information on pricing and tariffs and a wide choice of payment methods, the premium/discount on which must be cost-reflective;
- a good standard of service and complaint-handling;
- access to consumption data for comparing suppliers' offers and regulating use; and
- free switching within three weeks and prompt final billing on changing supplier.

The Directives also require Member States to define vulnerable customers and ensure these customers have adequate protection and that all customers are provided with an energy consumer checklist detailing practical information on energy consumer rights.

DETI intends to consult on the Third Package implementation, including required changes to consumer protection measures, during Autumn/Winter 2010/11.

## 6.2 Our Work Streams in terms of customer protection

For some years we have been improving contestability of Northern Ireland's retail markets to facilitate new entry of suppliers. The arguments for promoting competition are well-rehearsed but fundamentally come down to creating benefits for consumers. IME3 is interesting in overall policy terms as it takes the twin track of developing internal markets, competition etc; but also adds in now significant customer protection/information aspects – arguably reflecting a policy stance that even well-functioning competitive energy markets need a sound protective regulatory framework of customer protection placed around them. Markets may fail to deliver best customer outcomes, if nothing else because of asymmetries in information between companies and customers and may certainly fail certain sub-groups of customers. We also know that well-informed consumers can drive innovation and efficiency.

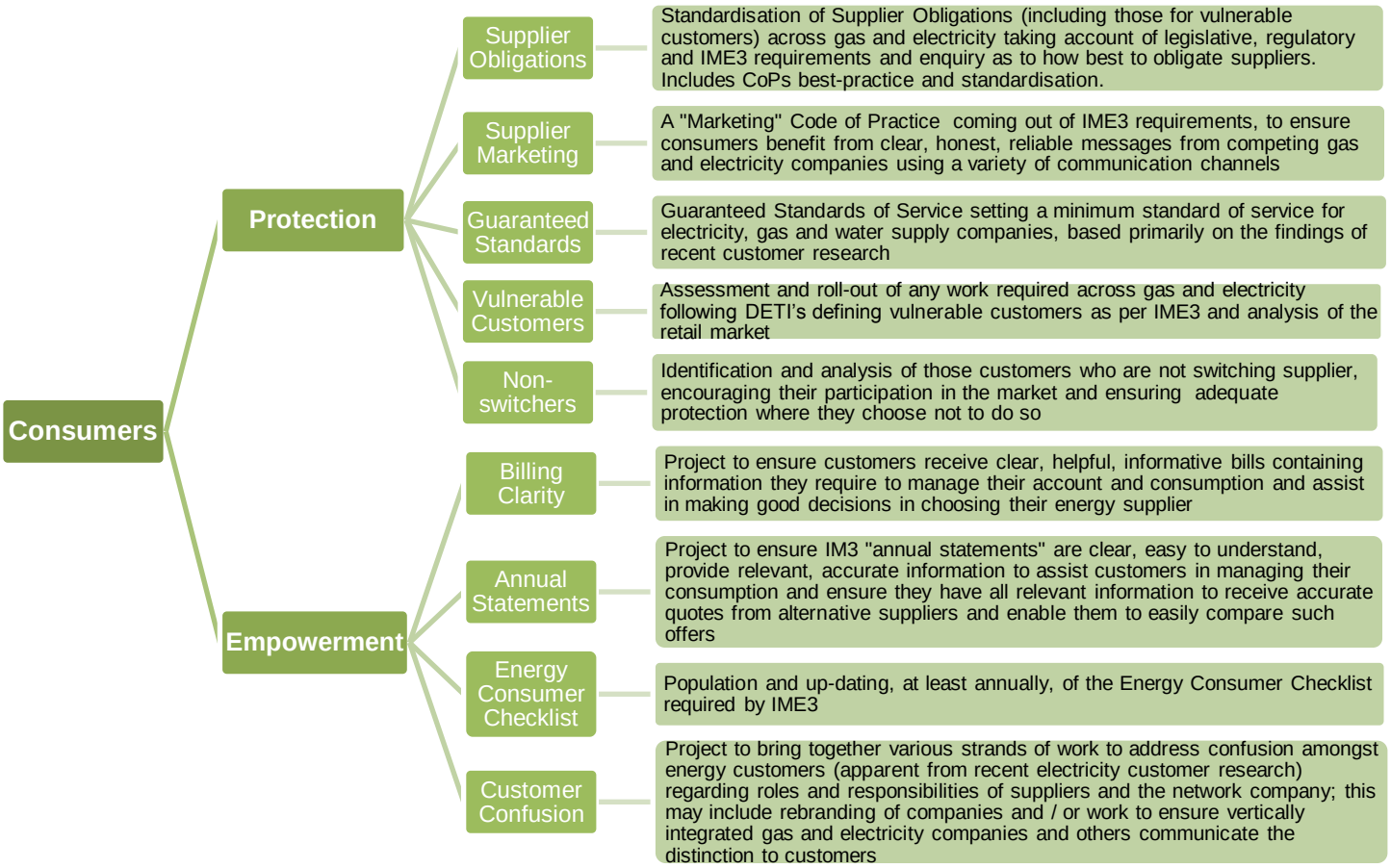
Ensuring customers are properly protected and appropriately informed for the competitive market environment will drive competitiveness of that market thereby improving outcomes. Recent developments have highlighted the need for an 'umbrella' of projects to be taken forward by UR in the overall vein of customer protection. These are:

- the Third Package requires a range of measures designed to facilitate consumers' understanding of the retail market and new entry of suppliers. Such measures include transparent information on prices, provision of relevant consumption data in an understandable format, appropriate measures to protect vulnerable customers and transparency of contractual terms and conditions. National Regulatory Authorities are to have a general objective to ensure customers benefit from the efficient functioning of the competitive market by promoting competition and helping ensure consumer protection (Article 36(g) Dir 2009/72/EC and Article 40(g) Dir 2009/73/EC). The Directives also confer specific powers and duties on NRAs including helping to ensure, together with other relevant authorities, that consumer protection measures, are effective and enforced (Article 37.1(n); Article 41.1(o));
- our recent inquiry into business electricity tariffs in Northern Ireland found business customers, some of whom have been able to choose their supplier for 10 years, still lack understanding of complex tariff structures, including energy cost risk management options, hindering rational decision-making. The inquiry also found just 34% of customers in the business electricity market had switched since the market opened to competition;
- a recent joint research report with CER on consumer attitudes and opinions on the electricity market found that both domestic and business customers lacked understanding of the industry structure. Whilst this may be expected in a pre-competitive market, we would expect business customers to have a clearer understanding of the roles and responsibilities of suppliers and the network company. Improving understanding of the industry amongst customers enables them to better understand and compare tariff and service offerings and make well-informed decisions. The research also found that almost half of business customers were dissatisfied with both the level and quality of competition and a high proportion of business customers felt competition had no, or a detrimental impact across a number of indicators including options available and responsiveness to needs and service. We believe empowering customers to

engage fully and confidently in competitive markets will increase levels of satisfaction amongst business consumers and drive competition in the business and domestic marketplaces; and

- Airtricity has recently started offering to supply domestic electricity customers in Northern Ireland and a number of other suppliers have shown interest in entering the domestic gas and electricity markets. The domestic natural gas market in Greater Belfast has been open since January 2007 and work to improve the consumer switching processes will facilitate entry for alternative suppliers from November 2010. If domestic consumers are to secure benefits of competition they must be well-informed and confident in the protection and enforcement framework afforded to them.

We have defined a number of areas of customer-protection focused work to be co-ordinated




across both gas and electricity sectors going forward. Priorities and timelines are under discussion in the context of work on our draft forward work plan and resource availability.

## 6.3 Transparency of information: fuel mix disclosure

Electricity generation is directly related to the emissions of atmospheric pollutants. In Northern Ireland, emissions from the energy sector[41] represent more than 70% of total greenhouse gas emissions. Power generation is still the largest source of $CO_2$ in Northern Ireland with road transport the second largest source. Greenhouse gas emissions from power generation (mostly $CO_2$) represent approximately 35% of total emissions from the energy sector, and more than 25% of total emissions.

Disclosure of the generation mix and environmental impact is important so consumers can make informed decisions about the goods and services they purchase and the companies from which they choose to buy. Whilst the UR and CER are currently working on an enduring solution with regard to calculation of fuel mix and environmental impact in the SEM, there is an interim solution in place for 2008 onwards.

Under the Internal Market Directive (Directive 2003/54/EC), Member States are required to ensure that electricity suppliers indicate in or with bills, and in promotional materials made available to final customers, the contribution of each energy source to their overall fuel-mix in the previous year. Suppliers are also obliged to provide at least a reference to existing sources of information regarding the environmental impact resulting from the electricity produced by the fuel-mix of the supplier in question over the same period.

Following the mentioned legislation and the Interim Arrangements for Fuel Mix Disclosure in the SEM, the UR has published the 2009 fuel-mixes and CO2 emissions factors for suppliers licensed in Northern Ireland and operating in the SEM [42].

In the first table in the figure below, each supplier's fuel-mix figures are listed by fuel type for 2009. The all-island fuel-mix is also indicated for comparison (note that each percentage figure is rounded to one decimal place and so figures may not sum to 100). In the second table, the tonnes of CO2 per MWh of electricity supplied are given for each supplier as well as an overall figure representative of the all-island electricity market.

[41] Electricity generation, petroleum refining, manufacturing, industry and construction, transport, etc.
[42] Fuel Mix and CO2 Emission Factors Disclosure 2009.
http://www.uregni.gov.uk/uploads/publications/Fuel_Mix_2009_Paper.pdf

**Figure 37** Fuel Mix Disclosure

Figure 1: Suppliers' Fuel-Mix by Fuel Type in 2009

| Supplier[2] | Gas | Coal | Peat | Renewables | Oil | Other |
|---|---|---|---|---|---|---|
| **Airtricity** (All-island) | 29.1% | 6.7% | 3.2% | 59.6% | 1.2% | 0.2% |
| **Airtricity** (N Ireland) | 44.1% | 10.2% | 4.8% | 38.8% | 1.8% | 0.3% |
| **Bord Gáis Energy** (All-island) | 66.3% | 15.3% | 7.2% | 8.0% | 2.7% | 0.5% |
| **Bord Gáis Energy** (NIreland) | 66.6% | 15.4% | 7.2% | 7.5% | 2.7% | 0.5% |
| **Viridian** (All-island) | 63.1% | 14.6% | 6.9% | 12.4% | 2.6% | 0.5% |
| **Viridian** (N Ireland) | 59.9% | 13.8% | 6.5% | 16.9% | 2.5% | 0.4% |
| **ESB IE** (All-island) | 66.9% | 15.4% | 7.3% | 7.1% | 2.7% | 0.5% |
| **ESB IE** (N Ireland) | 68.6% | 15.8% | 7.5% | 4.8% | 2.8% | 0.5% |
| **NIE** | 68.6% | 15.8% | 7.4% | 4.8% | 2.8% | 0.5% |
| **Quinn** (All-island) | 29.1% | 6.7% | 3.2% | 59.7% | 1.2% | 0.2% |
| **Quinn** (N Ireland) | 0.0% | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% |
| **All Island** | **61.8%** | **14.2%** | **6.7%** | **14.2%** | **2.5%** | **0.4%** |

Figure 2. **Suppliers' CO2 Emissions for 2009**

| Supplier Emissions | tCO2/MWh |
|---|---|
| Airtricity (All- island) | 0.237 |
| Airtricity NI | 0.360 |
| Bord Gais (All-island) | 0.541 |
| Bord Gais NI | 0.544 |
| ESB IE (All-island) | 0.547 |
| ESB IE NI | 0.560 |
| Energia (All-island) | 0.516 |
| Energia NI | 0.489 |
| NIE | 0.559 |
| Quinn (All-island) | 0.237 |
| Quinn NI | 0.000 |
| All Island | 0.504 |

[2] Where suppliers operate on an all-island basis both their fuel-mix associated with their Northern Irish electricity supply licence and their combined Irish and Northern Irish fuel-mix is listed

Source: The UR

## 7. Monopoly Regulation and Enhancing Competition

There are retail market work areas other than those specifically focused on customer protection and market monitoring issues. We will continue to play a leading role in the scrutiny of the

regulated electricity supplier – NIEES, and formulate a price control for that business to ensure customers are protected.

We will continue to work in a joint effort with CER on the harmonisation of the North and South retail market systems. The Harmonisation Steering Group (HSG) continues to meet every six weeks as does the Harmonisation Working Group (HWG). A North-South change control process has been agreed with all suppliers through the HWG and approved by HSG. This will ensure that any changes to the RoI or Northern Ireland market systems will be assessed first to ascertain if they have any impact on the harmonised all island market arrangements. If they do they will be taken forward as part of the ongoing harmonisation work stream to ensure no divergence from the agreed all island market market arrangements. Also, we will ensure a quality delivery of Stage 3 of the Enduring Solution project following the takeover of NIE by ESB.

We are working on enhancing the switching limits to allow full switching of customers without limits. The current limit within the domestic electricity sector is 7,500 switches per month.

We will closely look at market entry issues, particularly in relation to Airtricity and firmus energy market entry. A review of Airtricity market entry and any associated issues will be held in January 2011. Alongside this, the UR will deal effectively with any market entry issues as they arise and ensure optimum functioning of all retail market systems and processes and that suppliers are fully engaged in this process via the Suppliers Interface Group (SIG) and Harmonisation Working Group (HWG) forums.

## Contact Information

We would like to use this and future editions of the report to monitor and collect information on the extent of competition in our energy supply markets and the extent to which participants view our supply markets as readily contestable. Also, we would ask for stakeholders' assistance to make future editions of this report as useful as possible. Whilst this is not a formal consultation, comments on this report are very welcome and should be sent to:

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## List of figures



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