

# ENVIRONMENT REPORT

## Phoenix Energy Holdings

REPORT FOR FINANCIAL YEAR ENDING: December 2009

### MAIN ACTIVITIES:

The Phoenix Energy Group companies comprise of three entities: Phoenix Natural Gas Ltd, Phoenix Supply Ltd and Phoenix Energy Services. Phoenix natural gas is responsible for the construction and safe operation of a gas distribution network comprising of over 3,064km and 127.700 natural gas customers. The core responsibility of Phoenix Supply is to supply natural gas to customers. Established in 2001 Phoenix Energy Services provide servicing and maintenance activities as well as emergency services.

### POLICY & MANAGEMENT ARRANGEMENTS:

Environment Policy:  Publicly available  From [www.phoenixnaturalgas.com](http://www.phoenixnaturalgas.com)

Responsibility for environmental issues rests with: Commercial Operations Director

Formal Environmental Management System:  Certified (e.g.IS014001, EMAS)

### Management arrangements:

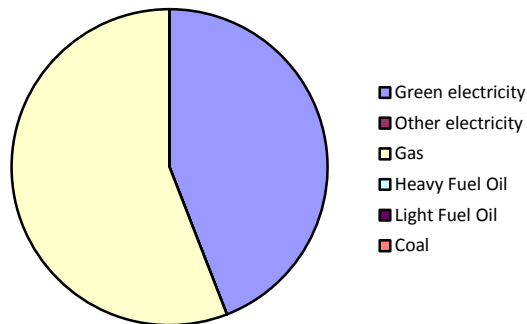
Overall responsibility for environmental strategy is led by our CEO and company directors. Day to day operational management rests with the Phoenix Group managers supported by the Health Safety and Environmental department. The environmental strategy is delivered through Environmental committees, improvement groups and management reviews. In addition, Phoenix's CSR programme, LIFE (Leadership in the Market Place, Investing in our People, Fostering our community and Environmental Responsibility) provides the overarching framework for the range of initiatives undertaken by Phoenix to positively impact the marketplace, workplace, environment and community.

## ENERGY & PROCESS ENERGY

Building and process energy use: 1,173,109 kWh

CO2 emissions from building and process energy use: 118.2 Tonnes

Normalised CO2 emissions from building and process energy use: 0.0293 Tonnes/m<sup>2</sup>



### Summary of recent performance and initiatives:

**The Phoenix building** - Low energy design principles have been adopted in the design and construction of the Phoenix office headquarters in order to minimise the use of energy for heating and cooling. The design of the building fully exploits daylight and natural ventilation but is structured in such a way as to allow the installation of comfort cooling to the majority of the building. The building has been awarded the BREEAM (Building Research Establishment Environmental Assessment Method) energy rating of "very good". Day lighting, optimum window areas, sun shading, thermal mass and good insulation together with high efficient gas fired boilers all significantly contribute to reducing CO<sup>2</sup> emissions. In addition, in 2008 Phoenix began a partnership with a renewable source electricity provider to power the building. By switching to this renewable source, 270 tonnes of CO<sub>2</sub> have been saved from being released into the atmosphere in 2009.

## TRANSPORT

Vehicle fuel consumption: 523,143 Litres

CO<sub>2</sub> emissions from vehicle fuel: 1,373.5 Tonnes

Normalised CO<sub>2</sub> emissions from vehicle fuel: 0.01076 Tonnes/Connection



Additional information on transport related emission:

These figures represent the total mileage undertaken by both Phoenix and our construction contractor, McNicholas Construction.

### Summary of recent performance and initiatives:

The daily construction and operation of a natural gas network depends heavily on vehicle transport, predominantly in urban areas. Vehicle emissions are therefore an environmental impact which we must minimise wherever possible. We aim to reduce our mileage by a combination of optimum construction techniques and careful travel planning programmes. Journey planning also plays a key role in minimising total annual mileage. This is done by the zoning of our distribution network into two areas with dedicated construction teams based in each zone and the detailed scheduling of all our planned construction works to ensure excessive driving is minimised. Upgrading our Fleet has meant we have gone from the Euro 3 Standard engine to the Euro 5 Standard. 2009 saw further reductions in CO<sub>2</sub> emissions with the introduction of a vehicle tracking system on all commercial fleet, which monitors mileage and enables more efficient journey and resource management.

*To view the Phoenix Transport Policy please use link below:*

## **WASTE**

Waste generated: 24,147 Tonnes

Landfill: 99.901%      Diverted: 0.0994%

### **Summary of recent performance and initiatives:**

Excavated Material Waste - Excavated material waste from our construction activities is a significant environmental impact and is currently sent to landfill. Looking forward Phoenix are continually investigating the use of treated recycled material and, on a wider scale, a joint initiative has been established by NIRAUC (Northern Ireland Road Authority and Utilities Committee) regarding the re-grading/recycling of excavated material in Northern Ireland.

Left over cuts of gas pipe are a by-product of building and growing the natural gas network and until recently Phoenix Natural Gas has been transporting unused pipe ends over to Scotland to be recycled for use in other industries. In 2008 Phoenix, in conjunction with our contract partner McNicholas Construction, worked with Radius Systems to develop a local programme which turned recycled pipe off-cuts into products that actually re-enter the gas supply chain in Northern Ireland. The new initiative provides a local, sustainable, efficient and cost effective method of recycling pipe that actually benefits the Northern Irish gas industry. This scheme has now paid for its set up costs and beginning to generate a profit along with offering a savings to purchase new item. This waste pipe is now recycled to produce products which can be re-used with the natural gas industry such as ducting and valve riser boxes. What we have now is a local sustainable, efficient and cost effective method of recycling pipe waste that actually benefits the Northern Irish gas industry.

*To view the Phoenix Waste Minimisation and Management Policy please use link below:*

## **WATER**

Water consumption: 1,768 m<sup>3</sup>

Normalised water figures: 7.07 m<sup>3</sup>/Person

## **ENVIRONMENTAL INCIDENTS**

No. of environmental incidents: 0

## **FREE CHOICE ENVIRONMENTAL INDICATORS**

### **Indicator 1**

CO<sub>2</sub> savings gained by conversion of properties to natural gas from other fossil fuels (tonnes) = 230,200 tonnes

#### **Summary of recent performance and initiatives:**

As a forward-thinking company, Phoenix is dedicated to helping make Northern Ireland a cleaner, healthier place to live and work by delivering the benefits of natural gas to homes and businesses throughout the area. As natural gas is the cleanest fossil fuel, producing 25% less carbon dioxide emissions than other fossil fuels, we have been able to contribute towards the enhanced quality of air in Greater Belfast and the surrounding area. Compared to alternative fossil fuels, the conversion of natural gas customers in 2009 prevented around 230,000 tonnes of carbon dioxide from entering the atmosphere. In the last 12 years Phoenix customers across business, public sector and domestic households have prevented over 2.4 million tonnes of CO<sub>2</sub> from entering the atmosphere - equal to removing approximately 743,000 cars from Northern Ireland's roads over the same period.

### **Indicator 2**

PE Recycling (tonnes) = 23

#### **Summary of recent performance and initiatives:**

Left over pipe is a by-product of building a natural gas network. We established a recycling project within our supply chain in 2008. This waste pipe is now recycled to produce products which can be re-used with the natural gas industry such as ducting and valve riser boxes. 23 Tonnes have now been recycled to date. We have covered initial set up costs and are now beginning to share profits with our alliance partner, McNicholas Construction.

"What we have now is a local sustainable, efficient and cost effective method of recycling pipe waste that actually benefits the Northern Irish gas industry."

## **HIGHLIGHTS & ACHIEVEMENTS**

### **Highlights:**

Phoenix has recognised that understanding the amount of carbon produced by a business is an important step towards reducing their impact on climate change. In order to assist businesses with this Phoenix has developed the PNG Carbon Model. The PNG Carbon Model is intended to provide businesses with an absolute number that measures their overall savings of tonnes of carbon dioxide by switching from alternative fuels, such as oil, gas oil and other heavy fuels, to natural gas. The model has been used to provide organisations with this valuable information and promote their carbon reduction through conversion to gas. Phoenix recently supported a group of Environmental Management MSc students from Queens University Belfast's Management School to undertake a project based on the PNG Carbon Model and its commercial viability.

### **Achievements:**

Reducing Greenhouse emissions in Northern Ireland

Natural gas is the least carbon-intensive fossil fuel and since 1996, Phoenix customers across business, public sector and domestic households have realised a reduction of 2.4 million tonnes of CO<sub>2</sub> emissions, compared to what would have been emitted by existing fuels. This is the equivalent of removing approximately 3/4 of a million cars from Northern Ireland's roads.

### **Awards and recognition:**

Phoenix Natural Gas was ranked in the Platinum Quintile of the Arena Network Environmental Survey in 2009. Phoenix also retained their ISO 14001 accreditation in 2009.

## **FEEDBACK**

For further information on our environmental performance or details of our initiatives in this area, please contact:

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