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Sarah Brady
Social and Environmental Branch
Utility Regulator
Queens House
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BELFAST
BT1 6ER

Reference: NIAUR consultation on the Regulator's role in sustainability

1 August 2008

Dear Ms Brady

WWF Northern Ireland welcomes this consultation and the opportunity to comment on it.

WWF Northern Ireland is part of the world's largest independent conservation organisation in the world which operates in over 90 countries. WWF is a challenging, constructive, science-based organisation that addresses issues from the survival of species and habitats to climate change, sustainable business and environmental education. WWF has some five million supporters worldwide and approximately 90% of our income derives from voluntary sources such as people and the business community.

WWF works to

- conserve endangered species - such as tigers, great apes and whales;
- protect endangered spaces - such as forests, savannahs, wetlands and seas;
- address global threats to the planet - such as climate change and toxic chemicals

for the benefit of people and nature.

If you have a further queries on this submission please do not hesitate to contact me.

Yours sincerely

Malachy Campbell
Policy Officer WWF Northern Ireland

Consultation Response Pro Forma

Chapter 1

1.1 Respondents to the consultation are asked to comment on whether or not they think any of the proposals in this paper would impact on equality of opportunity or good relations for any of the Section 75 Groups.

This is an area beyond WWF's core expertise. However, WWF Northern Ireland does not believe that the proposals in this paper are likely to have an adverse impact on Section 75 Groups, though it does recognise that since Northern Ireland has a higher proportion of homes in fuel poverty than other parts of the UK any change in the price of energy (especially a price rise) is likely to have a greater impact in Northern Ireland than other parts of the UK.

Chapter 3

3.1 Respondents are asked to comment on the balance between present and future climate change costs.

The Stern Review of 2006 made clear the need for early action to tackle climate change. The report estimated that if we don't act the overall costs and risks of climate change will be equivalent to loosing at least 5% of global GDP each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to 20% of GDP or more. In contrast the costs of action – reducing greenhouse gases to avoid the worst of climate change – can be limited to around 1% of global GDP each year.

This makes a very clear and persuasive argument in economic terms alone that climate change must be tackled urgently and the sooner the better not least in terms of cost. However, Lord Stern in a recent article in the Guardian on 26th June 2008 claimed that the costs of tackling climate change have already doubled since his 2006 report and estimated that £28bn may be need to tackle climate change.

It is clear then that climate change must be tackled urgently.

It is also important to point out that taking action to reduce our emissions and to be more sustainable can also have economic benefits, primarily through the job creation opportunities offered by investment in renewable technologies. The potential for job creation in NI from renewables was explored in a recent (2006) study carried out by Action Renewables. This study found that almost 6,000 short term and 400 long term jobs could be sustained in Northern Ireland exclusively by developing renewable energy within the region. WWF Northern Ireland believes this potential must be exploited and that rather than being viewed as a cost, action to increase the sustainability of Northern Ireland's energy supply could actually offer financial as well as environmental and social rewards.

According to the 2005 Carbon Trust Vision Study (CTVS) Northern Ireland could reduce its CO_2 emissions by 60% by 2050 and the estimated the cost of achieving this is £775 million. Although the CTVS target of a 60% reduction in CO_2 and the costs of achieving this are now likely to be out of date, the CTVS provides good guidance for tackling climate change and the costs of doing so in a Northern Ireland context and could provide a blueprint for further action. The CTVS is available at http://www.carbontrust.co.uk/Publications/publicationdetail.htm?productid=CTC520

3.2 Respondents are asked to give their views on the relationship between sustainability and security and diversity of supply.

WWF Northern Ireland believes that there is a mutually beneficial positive correlation between increasing sustainability of our energy supply and increasing the diversity of energy supply, as well as other potential benefits, not least in terms of energy security and independence. This positive correlation was clearly highlighted in the report "*Implications of the UK meeting its 2020 Renewable Energy Target*" produced by

independent experts Poyry, commissioned by WWF and Greenpeace and launched on 1st August 2008 which shows how renewables and energy efficiency can plug the mythical energy gap and exposes the 'energy gap' as no more than a myth.

The report, available on the WWF UK website at http://www.wwf.org.uk/news/n_0000005256.asp finds that, if the UK Government is able to achieve its commitments to meet EU renewable energy targets and its own ambitious action plan to reduce demand through energy efficiency, then major new power stations (burning either coal or gas) would not be needed to ensure that Britain can meet its electricity requirements up to at least 2020. The report also concludes that a strong drive for energy efficiency and renewable energy can reduce emissions and assist energy security.

WWF Northern Ireland believes that in order to increase the sustainability of Northern Ireland's energy supply three principal changes are needed:

(1) The amount of energy consumed in absolute terms must be reduced.
(2) The amount of energy generated by fossil fuels must be reduced
(3) The amount of energy produced from renewable energy sources must be increased

In order to achieve this three pronged approach, WWF Northern Ireland firmly believes that a long term energy strategy is needed, as a matter of priority. The passing of the Assembly Motion proposed by Mark Durkan Chair of Enterprise Trade and Investment Committee on 30th June 2008 is relevant and significant as amongst other issues it specified the need for the Executive to co-operate with other Governments, including through the British Irish Council, to develop a longer-term strategy for these islands.

The full text of that motion is as follows:

That this Assembly notes with concern that rising energy costs are hitting families in Northern Ireland harder than in the rest of the UK; and calls on the Executive to:
(i) give further priority to measures to promote energy efficiency and combat fuel poverty;
(ii) drive a coordinated energy policy to diversify our energy supplies, reduce our reliance on fossil fuels, increase competition in our energy market and harness the full potential of renewable energy;
(iii) cooperate with other Governments, including through the British Irish Council, to develop a longer-term strategy for these islands, and;
(iv) urge the UK Government to re-direct the windfall VAT revenue from higher energy bills to be used to mitigate the escalation of fuel poverty in Northern Ireland".

Northern Ireland could learn from the approach being taken by the Welsh Assembly Government (WAG) which, on 19th February 2008, launched a consultation on the Renewable Energy Route Map for Wales, which will lead to the production of comprehensive climate change and energy strategies for Wales by the end of 2008. The WAG's targets include generating 100% of Wales' electricity demand from renewable sources within the next 20 years or sooner and that that demand should not exceed electricity consumption level of 2007, that all new buildings should be zero carbon by 2011 and supporting the development of distributed generation and energy supply companies.

Reducing the amount of energy we consume is vital, given that Northern Ireland imports approximately 99% of its primary energy requirements. As such reducing the amount we consume will not only reduce our energy bill but also offer greater energy security and independence while also offering the potential for inward investment and job creation. The potential benefits of reducing demand, both in economic and environmental terms, was outlined by the Performance and Innovation Unit's 2002 Energy Review, for example on page 182, where it says

"*The current, apparently cost effective, potential for energy efficiency is approximately 30% of final energy demand. The potential financial benefits in reduced costs to customers (net of taxes) are £12 billion annually. And the potential carbon reductions are 40 Mtc/year*…"

In this report the Performance and Innovation Unit also proposed a domestic energy efficiency target of 20% by 2010 and a further 20% by 2020, and stated that in relation to this target

"*The gains in terms of energy savings in a year could reach about 0.25% of GDP by 2020, over and above the cost of the investment needed to unlock these savings*."

Given it is possible to reduce our energy consumption by one third or more, mostly based upon behaviour change but also using currently available technology, and the fact that doing so does indeed appear to offer a win-win opportunity both in terms of economic and environmental impact, reducing our overall energy consumption must be a cornerstone of all energy strategies. Reducing the amount of energy we consume would be the quickest, most cost effective means of reducing our emissions and would also make achieving any renewable energy targets easier (by helping to increase the relative % of energy supplied by renewables).

The importance of energy efficiency was clearly highlighted in the DETI report "Delivering Northern Ireland's 1% Energy Efficiency Target An Overview" which states (page 5) that

"*Reducing overall energy demand offers the potential for the most social, environmental and economic gains*"

The report also states on page 11 that

"*The Northern Ireland Authority for Utility Regulation (NIAUR) also recommends energy efficiency as the best opportunity to reduce emissions and energy bills in the near to medium term*"

The target referred to above, to reduce Northern Ireland's energy consumption by 1% annually between 2007 and 2012, was outlined in the DETI Strategic Energy Framework (SEF) from 2004. However, according to a review of the sustainable energy market done by Arthur D Little Limited of electricity consumption in NI between 1992 and 2007 and the DETI report "Delivering Northern Ireland's 1% Energy Efficiency Target An Overview" (page 14), NIE historic data shows the standard growth in electricity consumption to be 1.8% per annum. The discrepancy between the DETI SEF target of 1% annual reduction in consumption and the reported 1.8% annual growth in consumption is disappointing and needs to be turned around as a matter of urgency if this already weak and unambitious target is to be met and DETI's role in the achievement of this target requires further exploration. However, WWF Northern Ireland recommends that a much higher target for a reduction in absolute energy consumption is needed. The target for reducing energy consumption in Northern Ireland could match that suggested by the Performance and Innovation Unit, or that of the City Council of Portland Oregon, which, further to the establishment of the Portland Peak Oil Task Force, passed a resolution on 7 March 2007 setting a goal of reducing community fossil fuel use by 50% in 25 years.

At the same time the contribution made by renewable energy sources needs to be increased. Northern Ireland has huge potential for wind power yet only approximately 5% of NI's electricity comes from renewables, of which approximately 92% is wind generated, at the moment. This limited contribution from renewables is very disappointing given the huge potential that exists in NI for renewables and falls well short of the target in DETI's Strategic Energy Framework (2004) for 12% of electricity consumed to be generated from indigenous renewable sources, though WWF Northern Ireland understands that a significant amount of wind power is in the planning pipeline and may soon come on line. Meeting the longer term target outlined in the NI Sustainable Development (SD) Strategy for 40% of electricity consumed to be generated from indigenous renewable sources by 2025 is likely to prove challenging.

There are a number of major policy drivers for the greater development of renewable energy across the UK, primarily the EU Energy package announced in January 2008, and the UK Climate Change bill, which is expected to receive Royal Asset around spring 2009, although the exact contribution of the different regions of the UK to both of these remains to be finalised. As part of the EU energy package the UK has a legally binding target to achieve a 15% share of renewables in the final energy demand by 2020. It has been estimated that meeting this target will necessitate approximately 35% of electricity to be generated from renewable sources. As one of the areas with huge potential for wind power, at the very least Northern Ireland should have a great opportunity to contribute to meeting this target.

Similarly WWF Northern Ireland believes that water security and sustainability are intrinsically linked. Water is a finite resource upon which there are many demands. In addition to being the source of water to

be made potable for industrial and domestic use, Northern Ireland's water bodies provide people with a focus and medium for many of their leisure and recreational activities, dilute their waste water, provide coolant for industry and drinking for livestock. They also provide a habitat for much of Northern Ireland's wildlife, many species of which are recognised as being of European or even global importance. It is therefore imperative that every abstraction decision taken by NIW is assessed for its full impact on the catchment from which it is being removed.

However, WWF Northern Ireland believes that actual diversity of supply is less crucial for water than energy. Abstraction processes should never remove more water than is required to sustain the biological and chemical condition of the water body and new regulations governing this process drafted in accordance with the Water Framework Directive (Directive 2000/60/EC) (WFD) are now in place. Current arrangements with Lough Neagh and Lough Erne allow large quantities of water to be abstracted with minimal impact as the water levels of both loughs are managed artificially for drainage purposes. This centralised arrangement also allows for considerable economies of scale that abstracting from several smaller water bodies would not. In addition there is likely to be a higher risk of over-abstraction damage from several smaller water bodies and this risk is likely to increase if summer low flows become a more regular occurrence as a result of climate change.

3.3 Respondents are asked to give their views on the degree to which sustainability issues should drive the Utility Regulator's first NI water price review.

WWF Northern Ireland believes there is a duty on the Utility Regulator to ensure that sustainability issues are at the fore of Northern Ireland's first price review. Article 9 of the WFD relating to recovery of costs for water services, requires Member states to ensure by 2010 that water-pricing policies provide adequate incentives for users to use water resources efficiently and thereby contribute to the environmental objectives of the Directive. This clause recognises that the components of sustainability; environmental, economical and social aspects, should be taken into consideration in this process.

Northern Ireland's per capita use of water is higher than that in the rest of the UK and although there is no predicted shortage of water in the short term, the impacts of climate change are likely to result in higher summer demand combined with lower flows. In the interests of ensuring the continuation of a healthy balanced water ecosystem in Northern Ireland, incentives to reduce use per capita should be a priority in the forthcoming price review and of increasing importance in future reviews.

In addition, increasingly in England water providers are discovering the advantages of addressing water quality issues at source rather than expending energy removing problems later and Ofwat has allowed/encouraged initiatives to address this through its price setting. WWF Northern Ireland urges the Regulator to consider a similar approach in Northern Ireland to encourage NIW to work with land owners on a catchment basis to improve the quality of water prior to abstraction. This could be done on a pilot project scale in the first instance.

As one of the largest electricity users in Northern Ireland and a significant user of building materials and other resources, Northern Ireland Water should set and achieve extremely high standards of sustainable procurement and management of resources.

3.4 Respondents are asked to consider whether a monetary value of CO_2 equivalent or shadow price of carbon ought to be included within guidance on use of business cases.

WWF Northern Ireland supports the concept of including a monetary value of CO2 and carbon generally/the shadow carbon price of carbon within guidance on the use of business cases. By not including amongst other things the clean up costs and the costs of the impacts of pollution, (the costs referred to as externalities) not only is the price of carbon artificially lowered but also the impacts of the use of carbon are excluded from the decision making process for carbon users. In line with the polluter pays principle WWF Northern Ireland would support attaching a cost to the use of carbon.

3.5 Respondents are asked to indicate their preference for inclusion of "carbon footprint" monitoring and target setting within the new regulatory contract at the first NIW price review.

WWF Northern Ireland would support the inclusion of carbon footprint monitoring and target setting (in relation to all emissions arising from NI Water's activities) within the new regulatory contract at the first price review particularly in the areas of high energy usage like pumping, purifying and waste water treatment. As one of the largest electricity users in Northern Ireland and a significant user of building materials and other resources, Northern Ireland Water should set and achieve extremely high standards of sustainable procurement and management of resources. It should set an example and demonstrate sustainability in all areas of its activities, including producing a substantial proportion of its electrical needs from its own resources (for example, by anaerobic digestion of sewage) and other renewable technology on its sites. In addition, the range of NIW activities over which carbon footprint monitoring should be applied should be extended across the range of NIW activities to minimise their cumulative impact. For example, the selection of the landfill site for hard screenings from waste water is currently dominated by the price of the landfill tax. Distance of that site from the waste water treatment works and the 'carbon cost' of the transportation of the waste should also be factored into the decision.

WWF Northern Ireland understands that at present, approximately 3% of NI Water's total electricity demand comes from green sources annually, but is seeking to increase this to 8%. While such an increase is welcome, undoubtedly NI Water could go further and set higher targets. Thames Water for example, generates approximately 13% of its electricity demand from green sources, much of which is generated from biogas, a by-product of the treatment of sewage sludge. Thames Water continues to explore new opportunities to maximise its generation capacity such as improving digester and heating system insulation to improve the production of sewage gas and reduce thermal losses and installation of new generation technology.

The exact nature of how NI Water's target will be met is very important, in order to ensure additionality in new renewable energy capacity. NI Water must actively pursue opportunities for increasing the amount of energy it produces from its own 'waste' streams and renewable sources resources while reducing its overall energy consumption. WWF Northern Ireland hopes that NI Water and other utilities regulated by NIAUR will be required to provide further details of how their targets for green energy will be achieved. This is especially relevant given the recent comments from DEFRA, OFGEM and the Carbon Trust in relation to the need for greater transparency with green tariffs. WWF understands OFGEM are working on revising their guidelines on how suppliers should market their green tariffs and in November 2007 proposed an accreditation system that will make clear which tariffs offer real environmental benefits.

3.6 Respondents are asked to consider the benefits of going beyond the "Economic Level of Leakage", possibly by the inclusion of the carbon shadow price in calculations.

WWF Northern Ireland believes that to develop sustainably there is a need to revisit existing decisions that have been made solely on the basis of economics and encompass social and environmental objectives in the reassessment. Removing water from an ecosystem always has an impact and if this water does not meet its destination, especially if energy has been expended on it to make it potable before it is lost, it is a waste that goes beyond monetary terms.

Article 9 of the WFD requires Member States to take account of the principle of cost recovery of the costs of water services, *including environmental and resource costs*, making it fully valid to consider carbon costs in the calculation of economic levels of leakage as well as factoring them into water charges *per se*.

Accordingly WWF Northern Ireland would like to see the inclusion of carbon shadow price in calculations of the economic level of leakage. However WWF Northern Ireland acknowledges it is important not to expose consumers to large price fluctuations so it would be necessary to phase in this approach possibly in balance with NIW increasing its energy from renewable sources.

3.7 Respondents are asked to consider the degree to which NIW should be incentivised to increase its uptake of renewable energy and reduce its non-CO_2 gas emissions and mechanisms by which this might be achieved.

WWF Northern Ireland would welcome clear signals from the Regulator to encourage more use of renewable energy sources by NIW, particularly for its high energy processes like water purification, pumping and waste water treatment.

Targets for energy use from renewables could be set over the next price setting period. In return, calculations incorporating shadow carbon costs should be reduced accordingly as the proportion of their energy derived from renewable source increased.

Chapter 4

4.1 Respondents are asked to rate the following existing instruments from 1-10 (1 being poor 10 being excellent) for the following characteristics:

A Profile (do enough people know about the work)

B Ability to protect customers

C Ability to influence consumers to be more energy / water efficient or change to a lower carbon fuel

Measure	Profile	Ability to protect customers	Ability to influence
The NIE SMART Programme	1	9	8
Gas Industry Promotion			
The Energy Efficiency Levy	2	5	2
Price Controls	5	8	7
Key Pad Metering	1	8	9
Energy Efficiency Advice Provision			
NIW Sustainability Report	2	2	1
NIW Environment Management System	2	2	3
NIW promotion of water efficiency	5	2	3

Chapter 5

5.1 Respondents are asked to comment on the balance of the Utility Regulator's duty to protect present and future customers.

Generally speaking NIAUR's duty to protect present and future customers appears to focus on the price and quality of service of the various utilities, which in the case of water and electricity, is interpreted as requiring at least some degree of promotion of effective competition, where appropriate.

For example, in relation to electricity, according to the NIAUR website its duty is

"*To protect the intersts (sic) of electricity consumers with regard to price and quality of service by promoting effective competition in the generation, transmission and supply of electricity* "

WWF Northern Ireland understands the importance of ensuring both a high quality and a reasonable price for electricity, gas and water and the need, where appropriate, to promote competition. However, WWF Northern Ireland believes there is an inadequate focus on sustainability, protecting the environment and protecting customers from environmental damage which can in turn affect them. As such, WWF Northern Ireland believes there are sound arguments for the NIAUR to be made subject to the specific sustainable development duty under section 25 (1) of the Northern Ireland (Miscellaneous Provisions) Act 2006. WWF Northern Ireland believes that if the NIAUR was subject to a statutory duty for sustainable development (SD) with a specific aim to decarbonise the production and supply of energy that would be welcome and would be readily compatible with a requirement to ensure customers have adequate access to energy.

WWF Northern Ireland believes that the commitment to energy efficiency could be strengthened, especially in light of the recent trend of increasing use of energy and the increase in the price of oil and gas in particular, which hightens the need for this commitment. In this context, the definition of 'long term' as outlined in section 5.11 which says the utility regulator shall "*secure a diverse and viable long term energy supply*" is very important, especially in the light of the findings of the BP Statistical Review of World Energy, June 2006, (page 6) that estimated the global reserves to production ratio for oil to be 40.6 years and that for gas to be 65.1 years. If, as these figures suggest, oil will run out before 2050, the definition of long term should then be at least 50 years in order to account for the necessary move away from oil to alternative and/or renewable energy sources. However, the spread of costs for future developments should be shared across future generation within reason, with some initial in the immediate future.

5.2 Respondents are asked to comment on the appropriate role of and nature of statutory guidance from Ministers to the Utility Regulator.

It is appropriate that the role and remit of the Regulator is approved by the Executive. However, maintaining the independence of the regulator is key and Ministers should not be involved in the day-to-day activities of the Regulator. A high degree of transparency and proper lines of accountability should be ensured but the Regulator should be strategic and long-term in thought, rather than directed by political priorities or short term or highly local considerations.

5.3 Respondents are asked to highlight actions that they consider might be appropriate or necessary, but that could not be taken under the Utility Regulator's existing powers.

WWF Northern Ireland notes that there are intrinsic difficulties for a company that is selling a product to get across to its consumers that they should use less of that product. WWF Northern Ireland believes that in order to get across this message successfully, there needs to be a greater emphasis from government through its implementation of the WFD and its Sustainable Development programme. It is understood that the Republic of Ireland is currently considering a major national campaign to raise public awareness of the importance of water and the finiteness of it as a resource, not just for drinking but for business and leisure use. The key responsibility of NIW should be to ensure that it can meet the demands of consumers when they seek to find ways to reduce their water usage or increase their water efficiency.

One means of tackling this problem is via the introduction of the Increasing Block Tariffs also referred to in Section 7.3 .

WWF Northern Ireland believes that the merits of the alternative feed-in tariff approach identified by the Carbon Trust, should be explored, while recognising that feed in tariffs may not fit well with the existing system of the Renewables Obligation (RO) and of trading Renewable Obligation Certificates (ROCs). Consequently a more strategic review of the various support mechanisms, in terms of how best Northern Ireland can move to a low carbon economy, may now be required.

As part of the 2007 consultation by the Department of Business, Enterprise and Regulatory Reform (DBERR) on the GB RO, DBERR released an Options Paper which concluded that

"the *RO (WITH banding) will only achieve around 15% renewable electricity by 2020*"

The Carbon Trust report, Policy Framework for Renewables July 2006, concluded that a feed-in-tariff type of renewables support policy may be much more effective than the RO (current or banded) in terms of both cost and speed and scale of renewable capacity delivery. The report found that the most cost-effective framework for bringing forward large scale investment in renewables was found to be a "Renewable Development Premium" or a stepped feed-in-tariff of the types which has proven extremely effective in Germany and elsewhere at bringing forward a rapid pace of renewable development. It now seems clear that the existing Renewables Obligations, as currently constructed, will fail to deliver the necessary levels of renewables to meet the UK's renewables and carbon emission reduction targets. Banding of the RO could offer one solution. However, WWF believes the Government has failed to make the case for a banded obligation as opposed to a feed-in tariff approach, identified by the Carbon Trust a more cost-effective approach to rapid deployment of renewables. We urge the Department to commission and publish research in to the relative merits of the two approaches.

The development of feed-in-tariffs in both Spain and Germany is regarded as a major factor in the success of the renewable energy industry, especially in Germany which increased its share of renewables in the electricity mix from 5.4% in 1999 to more than 14% in 2007. This approach has helped to make Germany a leader in renewable energy in Europe and globally and significantly, this option of feed-in-tariffs has also been adopted by the Republic of Ireland (RoI). In January 2008, the Republic of Ireland's Energy Minister, Eamon Ryan announced a new renewable energy grant scheme totalling €11 million channelled through Sustainable Energy Ireland (SEI) for the installation of biomass-fuelled and anaerobic digestion Combined Heat and Power Units (CHP), which included a feed-in-tariff or guaranteed price of €120 per MegaWatt Hour (MWh), for the production of electricity from biomass CHP and anaerobic digestion under the REFIT scheme. The Minister has also introduced a new feed-in-tariff under the REFIT scheme for wave energy of €220 per MWh.

The value of feed-in tariffs was also highlighted by the Stern Review (2006) which said:

"*Comparisons between deployment support through tradable quotas and feed-in tariff price support suggest that feed-in mechanisms achieve larger deployment at lower costs. Central to this is the assurance of long-term price guarantees*."

WWF Northern Ireland believes such a system of feed-in-tariffs could also greatly assist the development of renewable energy sources in Northern Ireland.

5.4 Respondents are asked to comment on whether the Utility Regulator should seek to be designated under section 25 (1) of the Northern Ireland (Miscellaneous Provisions) Act 2006.

Even though NIAUR already has some duties in relation to SD if the NIAUR was subject to the specific sustainable development duty under section 25 (1) of the Northern Ireland (Miscellaneous Provisions) Act 2006 this would be welcome and should hopefully ensure that the utilities become more sustainable.

As outlined in section 5.17 WWF would support the views of the SDC that there should be

"*a new primary duty for Ofgem to include the reduction of greenhouse gases. This would align Ofgem's goals with the goals of government energy and environment policy*."

WWF understands that BERR is currently reviewing OFGEM's remit.

Chapter 6

6.1 Respondents are asked to comment on the three main roles for the Utility Regulator identified in chapter 6 of this paper as:

- **gathering and publishing evidence,**
- **contributing to wider energy policy,**
- **regulating differently.**

WWF Northern Ireland supports these three main roles for the Regulator as proposed, especially if the regulator was subject to the specific sustainable development duty under section 25 (1) of the Northern Ireland (Miscellaneous Provisions) Act 2006 and had a new primary duty to include the reduction of greenhouse gases, as outlined in 5.4. above, as this is likely to achieve a better environmental outcome.

6.2 Respondents are asked to comment on data, which would be useful but, which is currently unavailable on a regular basis in Northern Ireland.

The percentage of electricity generated and supplied by each form of renewable energy.
The per capita water consumption, segregated into social class/ house size, region, rural vs urban.
Business water usage by type.
Business water usage by price per unit
Leakage by region.

6.3 Respondents are asked to suggest innovative methods of developing and promoting the gas industry as a means of reducing Northern Ireland's carbon foot print.

WWF Northern Ireland recognises the contribution that the switch to natural gas has made to a reduction in Northern Ireland's overall carbon footprint. However, as referred to in section 5.1. above, gas is also a finite fossil fuel and WWF Northern Ireland regard gas as an interim or bridging fuel, which will help ensure a reliable supply of both heat and electricity and even as a transport fuel, with lower CO_2 emissions than coal or oil sources, while Northern Ireland moves towards a low carbon economy.

While, initially, the relatively low price of gas was a major focus of the promotion of gas, which has also been marketed as a cleaner/greener fuel, after the recent series of price increases in gas, the price is now more likely to be perceived as one of the main deterrents to those considering changing to gas in areas where it is available, based upon a perceived fear of price volatility and general lack of competition. That said, not only is WWF Northern Ireland not in a position to suggest any innovative methods of developing and promoting the gas industry as a means of reducing Northern Ireland's footprint, but would suggest that it it is the various renewable energy sources, that are more in need of development and promotion as a means of reducing Northern Ireland's footprint than natural gas.

6.4 Respondents are asked how the solid fuel and oil industries could contribute to social and environmental sustainability? In addition what approach will best achieve this aim?

It is important to state that fossil fuels are by definition, intrinsically unsustainable and as such industries based upon the consumption and use of fossil fuels can not contribute to true social or environmental sustainability, it is more a matter of trying to reduce the negative impacts of these industries. However, accounting for the huge inefficiencies of the current energy system, including the grid, the overall environmental performance of the fossil fuel industry could be improved by

- introducing Greenhouse Gas (GHG) emissions performance standards along the lines of the standards introduced in California.
- reducing the amount of energy they consume and increasing the efficiency of their operations, most notably by the use of combined heat and power generation. WWF notes that the existing UK target for CHP generation (of approximately 10,000 MWe of installed Good Quality CHP capacity by 2010) is unlikely to be met and alternative policy mechanisms may be needed.
- decreasing the amount, in absolute and relative terms, of fossil fuel based energy they consume and increasing the amount of renewable energy they consume
- diversifying and investing in renewable technologies

6.5 Respondents are asked if the regulatory model used to develop the natural gas network could provide lessons for the promotion of efficient and coordinated

heat networks? Do respondents believe that better regulation could aid the development of the community heat industry?

In order to better use heat, the demand needs to be in close proximity to the need. This is likely to be more readily achieved with a distributed generation and supply system, along the lines of the district heating system that exists in Scandanavia. As such the very centralised nature of the gas supply network may not provide the best model for the development and expansion of a heat supply network and encouraging a more decentralised system which better facilitates small scale CHP plants would help create a much more efficient energy network.

The fact that there is currently no value placed upon heat is a factor in this debate. A form of Renewable Heat Obligation, along the lines of the obligation for electricity, may help promote a more efficient use of heat and is worth exploring as a policy mechanism.

It is noteworthy that the proposed development of a chicken litter power plant near Glenavy by Rose Energy will sell electricity only and not heat and this suggests that finding a market for such heat is a very important part of any such planning for small scale and/or community projects, especially combined heat and power projects

Chapter 7

7.1 The Utility Regulator considers that the following are important when assessing policy proposals. Respondents are asked to score each of the proposals in chapter 7 of this document from 1-10 on the basis of their potential in relation to the following measures:

1 Potential Certainty of Outcome

2 Potential Cost effectiveness

3 Certainty for investors

4 Potential to provide equity for consumers

5 Potential to encourage innovation

6 Good fit with other NI government departments

7 Good fit with competitive energy markets

The proposals are summarised as follows:

	1	2	3	4	5	6	7
a. Cross utility licence condition requiring licensees to have in place environmental policies.	5	3	5	2	4	6	6
b. Cross utility requirement to report annually of sustainability activities and initiatives.	7	7	6	7	8	7	6
c. Requirements on licence holders to provide customers with environmental information in relation to fuel mix in a uniform and easy to understand format, on all bills and promotional literature.	7	8	6	9	9	6	7
d. Strategic investigation into use of	7	9	7	9	9	6	8

"Smart Meters" as a mechanism for delivering better quality and timely information to customers.							
e. Work with energy licence holders to assess current tariff structures.	**6**	**9**	**6**	**8**	**9**	**6**	**7**
f. Continue to work with partners and stakeholders to ensure renewable generation can be equitably accommodated on the electricity network.	**7**	**7**	**9**	**8**	**7**	**9**	**9**
	1	**2**	**3**	**4**	**5**	**6**	**7**
g. Ensure price control processes take into consideration the effect of climate change on electricity and gas networks.	**6**	**7**	**7**	**6**	**8**	**8**	**8**
h. Carry out a full strategic review of energy efficiency delivery mechanisms	**5**	**9**	**8**	**8**	**8**	**9**	**9**
i. Develop a strategy in relation to gas promotion, which considers the potential benefits of common arrangements for the transmission and distribution of gas on the island of Ireland.							
j. Developing sustainability within the NIW price control	**8**	**8**	**7**	**9**	**8**	**6**	**7**
k. Improving our own practices and procedures.	**7**	**9**	**8**	**8**	**8**	**9**	**9**

7.2 Respondents are asked to identify what they consider to be the top three priorities from the above list of proposals and rank them in order of importance.

1 Carry out a full strategic review of energy efficiency delivery mechanisms. WWF Northern Ireland believes these efficiency delivery mechanisms to also be applied to levels of water consumption by NI Water in order to increase water conservation

2 Work with licence holders to assess current tariff structures. Again WWF Northern Ireland believes it is essential that the tariff structure for both water and energy be reviewed, preferably on the basis of the application of increasing block tariffs.

3 Continue to work with partners and stakeholders to ensure renewable generation can be equitably accommodated on the electricity network

7.3 Respondents are asked to list any further proposals which they think should be considered.

WWF Northern Ireland would like to see the introduction of water metering across Northern Ireland and welcomes the research carried out by the Regulator to inform this debate.

WWF Northern Ireland is also concerned at the current practice of high user tariffs for energy and water. As previously discussed there is an imperative through the WFD to encourage more efficient use of water and to reflect water usage through the charging system. High user tariffs discourage both of these by making it cheaper for users per unit for the more energy and water they use. This is not sustainable.

Rather than reducing the cost per unit of energy or water for higher consumers, WWF believes that more sustainable tariffs should be introduced that provide affordable energy and water for essential use but penalise excessive and wasteful use. This 'Increasing Block Tariff' (IBT), as referred to in section 5.3. could provide a certain quantity of energy or water at a low price with prices then increasing at higher levels of use. WWF UK found that for energy, reductions in demand of up to 8% could be achieved from the introduction of IBTs and as regards water, more than 90 studies of international experience and trials in

GB demonstrated that introducing metering and IBTs would lead to a sustained reduction in demand of at least 10% with reductions up to 30% in peak demands when water availability is at its lowest.

IBT schemes can be accompanied by measures to support vulnerable consumers that have high water demand or are at risk of fuel poverty.

Further information can be obtained from WWF UK's summary document *Water and Energy Tariffs for Sustainability* or from the more detailed report *Waste Not, Want Not? Water Tariffs for Sustainability* by Paul Herrington, September 2007 available on
http://www.wwf.org.uk/filelibrary/pdf/waste_not_summary07.pdf

WWF Northern Ireland understands that the terms of the current contracts allow NIE to increase the unit price paid by domestic customers on its Eco Energy tariff, which is supplied predominantly by wind power, in line with increases in the unit price paid by domestic customers on the Home Energy tariff, which is supplied by fossil fuels, as and when the price of fossil fuels and consequently fossil fuel generated electricity rises, even if the price of the electricity from that renewable source has not increased. This is likely to act as a disincentive for those currently contemplating signing up to the Eco Energy tariff. Moreover, rather than Eco Energy customers who have chosen to be supplied by renewables being allowed to enjoy the benefits of an absence of a rise in price of the energy source, this perverse situation allows NIE, in effect, to compel Eco Energy tariff customers to help subsidise the cost of electricity generated from fossil fuels. Overall, this bizarre situation does not encourage customers to sign up to the eco energy tariff, as they gain no advantage from doing so, and runs contrary to the promotion of renewable energy. WWF Northern Ireland suggests the regulator investigate the merits of this situation, as WWF believes that if the price per unit of electricity on the Eco Energy tariff was set and reflected the generation costs, not only would the costs be more stable and less volatile than fossil fuels but would in the long run work out cheaper.