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European Union Committee

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**The Commission's
Green Paper, "A
European Strategy for
Sustainable, Competitive
and Secure Energy"**

Report with Evidence

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(p) refers to a page of written evidence

FOREWORD—What this Report is about

The European Commission has set out its vision for a European Energy Policy in a new Green Paper, “A European Strategy for Sustainable, Competitive and Secure Energy.”

Recent supply crises and rapidly escalating fuel prices have focussed the minds of leaders across the European Union, as well as those of businesses and individual energy consumers. This Green Paper is an important legacy of the end of the United Kingdom’s Presidency of the EU—a major conclusion of the Hampton Court Summit was the need to develop a strong common policy.

Energy policy transcends a range of different policy areas, including competition, transport, environment and energy itself. In this Report, we consider whether the Commission has correctly identified the priorities for energy policy in the EU. The three key objectives identified are Sustainability, Competitiveness and Security of Supply. In order to achieve these objectives, the Green Paper outlines six priority areas for action containing over 20 concrete suggestions for possible new action. We consider whether these are the most important priorities for energy policy; whether they can be achieved fully, equally and simultaneously; or whether a hierarchy of objectives is necessary.

Our second key consideration is to evaluate what is best done at EU and at Member State levels. We believe that the case for moving towards a single European energy policy needs further justification, set against the achievement of the main policy objectives. The Green Paper provides little by way of insight into the Commission’s thinking in this area. We therefore recommend that the Commission seek to develop a business case which clearly articulates why a change in approach, if any, is required on an item by item basis.

The design and implementation of new policy need to recognise that markets (rather than the State) are best placed to deliver objectives in an efficient and effective manner. The degree of EC/government intervention needs to be carefully considered. The Green Paper identifies a number of areas for specific intervention without necessarily providing supporting justifications.

Policy needs to be sensitive to national and regional differences and to avoid setting specific targets. Delivering a stable, long term framework to encourage innovation and capital investment is critical. Political intervention by the Commission or Member States should be cautious, infrequent and long-lasting.

The Commission's Green Paper, “A European Strategy for Sustainable, Competitive and Secure Energy”

CHAPTER 1: BACKGROUND

Global and European energy trends¹

1. In the three decades from the early 1970s up until 2003, world consumption of total primary energy has increased by 75 per cent from around 6,000 million tonnes of oil equivalent (“Mtoe”) per annum to over 10,000 Mtoe per annum. The rate of growth in energy consumption in specific regions, such as China and Asia, has been particularly high. There has been a global trend shifting away from oil (decreasing from 45 per cent to 34 per cent of total energy) to natural gas (16 per cent to over 21 per cent) and nuclear (one per cent to seven per cent) during this time. The global use of coal has remained relatively constant, in percentage terms, at around 25 per cent. On a global scale, renewables such as hydro-electric power, geothermal energy, solar and wind, etc. are still making only a minimal contribution to energy consumption, at less than three per cent of total energy supply.
2. Over the same period, the consumption of total primary energy by Europe has increased from around 1,500 Mtoe (approximately 25 per cent of global consumption) to around 2,000 Mtoe (approximately 18 per cent of global consumption).
3. In the UK, total energy consumption has fallen in real terms since 1970, due in part to the reduction in the manufacturing base. The discovery of economic North Sea oil and gas in the late 1970s allowed the UK to become a net exporter of energy for most of the 1980s and 1990s. During this period, the UK's ability to utilise indigenous fossil fuels (coal and North Sea oil and gas), in combination with nuclear power for electricity generation in particular, has resulted in an ability to generate sufficient electricity to meet rising demand, and an ability to balance the priorities of energy security, emissions reduction and the maintenance of efficient markets. Recently however, a number of factors have arisen which make it difficult for the UK to maintain this *status quo*, including:
 - dwindling domestic gas reserves and the UK's limited gas storage capacity, resulting in increased reliance on imported gas;
 - planned retirements of our existing nuclear capacity;
 - downgrading expectations for the potential contribution of renewables to our generation mix;
 - elevated environmental concerns; and

¹ Figures from the International Energy Agency (“IEA”).

- volatility of the global energy markets.

Many of these factors are not unique to the UK and are relevant to the energy policy debate across Europe.

Climate change

4. The increasing body of scientific evidence for measurable human influence on changes to the natural climate has become progressively difficult to dismiss. With global levels of atmospheric carbon dioxide and other greenhouse gases rising, a number of national and international government bodies have taken action to regulate or otherwise provide incentives for greenhouse gas emission reduction by industry. In Europe the linked energy and climate change policy agenda has led to the development of progressive emissions reduction targets, which are seen as challenging, and the introduction of the European Union Emissions Trading Scheme (“EU-ETS”).

Energy markets

5. While the UK has moved over recent years to a fully-liberalised energy market, consistent with the relevant EU Directives, the extent of liberalisation elsewhere in continental Europe is significantly lower, with national champions in a number of countries holding supply, generation, transmission and distribution assets within their corporate portfolio. One of the key economic principles behind the drive to liberalise is that liquid markets are best placed to set efficiently the price of commodities, such as gas, by taking account of supply and demand at any point in time. In practice, a wide-range of factors influence the prices set by markets, including physical supply constraints, geo-political issues and commercial relationships between counterparties.

The Interconnector

6. Until the commissioning of the Interconnector between Bacton (UK) and Zeebrugge (Belgium) in 1998, the UK was effectively a “gas island”. Gas demand was satisfied mainly from domestic production with some imports from Norway. The new pipeline created a physical linkage between the UK gas market and the European gas market, which has facilitated arbitrage between the UK and continental Europe.
7. The Interconnector can operate in both directions, meaning it can either export natural gas from the UK to continental Europe (“Forward mode”), or it can import natural gas into the UK (“Reverse mode”). Since the UK and Belgium gas transmission systems operate at similar pressures, compressors are required to pump the gas from one system to the other. The capacity from Bacton to Zeebrugge is 20 bcm (billion cubic metres)/year while the capacity from Zeebrugge to Bacton was increased from 8.5 bcm/year to 16.5 bcm/year in 2005 (the differential flows in Forward and Reverse modes are a factor of the compression equipment and the capacity of the Interconnector’s network of gas pipes). Two further expansions of the reverse capacity are planned; capacity should reach 23.5bcm/year by the end of 2006 and 25.5bcm/year by the end of 2007. Historically, the Interconnector has operated mainly in Forward mode, however recently this trend has been reversed. Capacity within the Interconnector is been sold under long term

contract to around 15 shippers, although some secondary trading of capacity takes place.

8. A new project, The Balgzand-Bacton pipeline (“BBL”), is due to start deliveries from Balgzand in the Netherlands to Bacton at the end of 2006, reaching its full capacity of 16 Bcm/year after four months. Once the BBL is completed, there will be physical links between Europe’s most liquid gas markets: the National Balancing Point (“NBP”), Title Transfer Facility (“TTF”) and the Zeebrugge Hub.

What happened last winter?

9. On 13th March 2006, UK spot gas prices tripled to record levels after a Gas Balancing Alert² (“GBA”) was issued by National Grid. The GBA warned that as supplies were so tight, industrial users might have to have their gas supplies interrupted. Within-day gas (for delivery on that day) at the NBP peaked at £2.55 per therm (\$44.50 per million British thermal units or Btu), with day-ahead gas (for delivery on the following day) touching £2/therm.
10. The GBA was issued because a late-winter cold snap boosted gas demand at precisely the time when supply was severely constrained. Rough, the UK’s largest gas storage facility was closed following a fire in February, limiting the system’s ability to respond to such a shortage.
11. The cold snap was experienced all over Northern Europe and continental suppliers were required to satisfy increased domestic demand at the end of the storage withdrawal season and apparently did not take advantage of the arbitrage opportunities which arose. The Interconnector did not operate at full Reverse capacity, despite the differential between the NBP price and continental prices.

Liquefied Natural Gas (LNG)

12. In recent years, as a result of higher natural gas prices and a growing demand for cleaner fuels, interest in new liquefied natural gas (“LNG”) has grown. Since the mid 1990s, the costs of every stage of the LNG chain—gas production, liquefaction, shipping, and re-gasification—have dropped substantially, enabling LNG to become a global fuel. LNG is also a method of creating a physical market for gas reserves in counties far from the predominant gas markets themselves.
13. There are two distinct regional markets for LNG: the Atlantic Basin and the Pacific Basin. Thus, the construction of re-gasification facilities in the UK means that the country will gain access to a wide range of suppliers including Algeria, Nigeria, Egypt & Qatar, but also means that the UK will have to compete with the US and other European nations for these supplies.
14. A number of re-gasification projects are under development in the UK. An LNG import terminal at the Isle of Grain which is owned by National Grid began operations in 2005 with capacity of 4.4bcm/yr. The second phase of this development, which should be completed by 2008/2009, will have capacity of 9bcm/yr. The South Hook LNG terminal at Milford Haven is due to come online in 2007, with an initial capacity of 10.5bcm/yr. Also

² The purpose of Gas Balancing Alerts (GBA) is to indicate a potential requirement for a demand response (i.e. a reduction in energy consumption), reflecting forecast supply and demand.

situated at Milford Haven is the Dragon LNG terminal which should start receiving cargos by the end of 2007 with an initial capacity of 6bcm/yr.

Russia as an energy supplier

15. In 2004, Russia exported around 110 Billion cubic metres of gas to the EU (representing 22 per cent of EU requirements) making it Europe's most important gas supplier. As indigenous European gas reserves decline, supplies from Russia will inevitably grow in importance. Russian gas exports to Europe (except deliveries to Finland and the portion of Turkish exports delivered via the Blue Stream pipeline) transit through three countries: Ukraine, Belarus and Moldova. Ukraine holds the pivotal geographical position with more than 80 per cent of Russian gas exports to Europe delivered via that country in 2004. Until January 2006, there had been no interruptions to Russian supply for 40 years. However between 1st January and 4th 2006, a price dispute between the Ukraine and Russia resulted in decreased supplies to Europe which cast doubts over Russia's reputation as a reliable supplier.
16. Construction has begun on the North European Gas Pipeline ("NEGP") which is a 1,200km pipeline along the Baltic seabed from Russia to Germany. With no transit countries along its route, the NEGP would give Russia a direct link with its main west European markets and is scheduled for completion in 2010.

Energy market regulation

17. The Office of the Gas and Electricity Markets ("Ofgem") is the economic regulator for Britain's gas and electricity industries. Protecting consumers is Ofgem's first priority achieved by:
 - Promoting effective competition, wherever appropriate, and
 - Regulating effectively the monopoly companies which run the gas pipes and the electricity wires.
18. Ofgem is by no means unique in Europe in its regulation of the markets, although it could be argued that it is a fore-runner amongst regulators, given the advanced state of the UK's market liberalisation.

Alternative fuels

19. Recent years in Europe have seen an increase in the contributions made by "alternative" or "renewable" sources of energy (albeit the overall contribution of these sources remains small in comparison with for example, fossil fuel sources). These sources include hydroelectricity, biomass, wind, solar, tidal, wave, micro-generation and geothermal sources. National policies and/or specific geographical advantages have led to varying contributions to total energy production from renewable sources across different Europe countries. For example Norway sources almost 100 per cent of its total domestic electricity production from hydroelectricity, whereas other countries have a much smaller contribution from this resource. In addition, technologies to utilise energy from these resources show varying potentials for future development, and are subject to significant research, development and demonstration risk.

CHAPTER 2: THE GREEN PAPER

Introduction

20. The European Commission (“the Commission”) published a Green Paper on European energy policy, “A European Strategy for Sustainable, Competitive and Secure Energy” (the “Green Paper” or the “Paper”) on 8 March 2006.
21. Commission President Barroso commented “The energy challenges of the 21st century require a common EU response. The EU is an essential element in delivering sustainable, competitive and secure energy for European citizens. A common approach, articulated with a common voice, will enable Europe to lead the search for energy solutions”. Energy Commissioner Piebalgs added “The completion of the internal market, the fight against climate change, and security of supply, are common energy challenges that call for common solutions. It is time for a new European energy policy”.
22. In this Report, we consider whether the Commission has correctly identified the priorities for energy policy in the EU. We also consider whether the areas identified for action would be most appropriately dealt with at EU or at Member State level. We have taken evidence as part of our investigation from UK-based witnesses, representing a number of the key stakeholders in the energy policy debate. Accordingly, our findings do not necessarily reflect the interests of other Member States, of which readers should be mindful when considering this Report and its conclusions.

The Green Paper

Overview

23. The Green Paper sets out the Commission’s views on the key considerations to be addressed in order to develop a new, common energy strategy for Europe. The Paper was prepared in response to calls from European Heads of State and Government in 2005 for a common energy strategy with an integrated approach, reflecting concerns arising with respect to recent energy market and other related global developments³.
24. The Paper states that these issues require a common European response, as opposed to developing an approach based solely on twenty five individual (Member State) energy policies. The Commission’s Explanatory Memorandum, which accompanied the Green Paper lists the reasons why a common approach to energy strategy is needed:
 - To equip the EU to play a full role in global markets;
 - To improve sustainability in the EU and globally;
 - To improve internal market functioning;
 - To improve stability in the EU and neighbouring markets; and
 - To reflect the strategic role of energy in achieving other political objectives.

³ These developments are generally well documented and include concerns relating to energy security, emission reduction and market efficiency—a number of specific examples are listed in the Green Paper.

Policy objectives

25. The Green Paper proposes that Europe's common energy strategy should have three main objectives of Sustainability, Competitiveness and Security of Supply:
- (a) "Sustainability: (i) developing competitive renewable sources of energy and other low carbon energy sources and carriers, particularly alternative transport fuels, (ii) curbing energy demand within Europe, and (iii) leading global efforts to halt climate change and improve local air quality".
 - (b) "Competitiveness: (i) ensuring that energy market opening brings benefits to consumers and to the economy as a whole, while stimulating investment in clean energy production and energy efficiency, (ii) mitigating the impact of higher international energy prices on the EU economy and its citizens and (iii) keeping Europe at the cutting edge of energy technologies".
 - (c) "Security of Supply: tackling the EU's rising dependence on imported energy through (i) an integrated approach—reducing demand, diversifying the EU's energy mix with greater use of competitive indigenous and renewable energy, (ii) creating the framework which will stimulate adequate investments to meet growing demand, (iii) better equipping the EU to cope with emergencies, (iv) improving the conditions for European companies seeking access to global resources, and (v) making sure that all citizens and business have access to energy".
26. The Green Paper states that urgent action is necessary, given the time taken to bring innovation on stream in the energy sector, and recognises that a long-term commitment will be required. The Paper also states that a clear and flexible framework will need to be defined and subjected to periodic review. While this framework is not described in detail, reference is made to a Strategic EU Energy Review which will be completed and updated on a regular basis, to include coverage of the issues identified in the Green Paper.

Priority areas for action

27. In order to achieve the main objectives of Sustainability, Competitiveness and Security of Supply, the Green Paper outlines six priority areas for action, each of which includes a range of specific proposals, numbering over 20 in total. A brief summary of the priority areas and proposals is set out below:
- (1) Completing the internal European electricity and gas markets—A European energy grid code, a priority European interconnection plan, a European Energy Regulator and other new initiatives to ensure a level, competitive playing field.
 - (2) Ensuring the internal energy market guarantees security of supply—Establishment of a European Energy Supply Observatory to monitor European wide supply and demand patterns and a revision of existing Community legislation on oil and gas stocks to promote the ability to mitigate potential supply disruptions.
 - (3) Providing a European framework for national decisions on energy mix—While the choice of individual Member States on national energy mix is, and will remain a question for Member States in accordance with the

principle of subsidiarity, it may be appropriate to establish a European-wide energy mix benchmark and to stimulate the debate on the use of different energy sources.

- (4) Tackling climate change—An Action Plan on energy efficiency to identify the measures necessary to save 20 per cent of the energy that would otherwise be consumed across the EU by 2020, plus a Renewable Energy Road Map for proposing targets and objectives for renewables for 2020 and beyond.
- (5) Encouraging new energy technology innovation—A Strategic Energy Technology Plan to ensure Europe leads in the areas of energy efficient and low carbon technologies.
- (6) Developing a coherent external energy policy—The identification of infrastructure priorities, a road map for the creation of a pan-European Energy Community, a renewed approach towards Europe's energy partners (particularly Russia) and a new Community mechanism to enable an efficient response to emergency external energy supply situations, enabling the EU to speak with a single voice in the international arena.

Next steps

28. The Green Paper concludes with a short list of questions for consideration, flowing from the proposals contained within each priority area for action. Public consultation on the Green Paper is open until 24 September 2006. On the basis of this consultation, and the conclusions of the European Council and Parliament, the Commission has indicated it will propose a series of concrete measures. This report constitutes our contribution to this consultation.
29. Our conclusions are set out in Chapter 8.
30. We make this report to the House for debate.

CHAPTER 3: A COMMON APPROACH TO EUROPEAN ENERGY POLICY?

Introduction

31. This Chapter of the Report looks at the nature of energy policy decision making in Europe and the Commission's reasons for conducting a review, considers the main policy objectives identified in the Green Paper and examines whether or not a common approach may be required to deliver these objectives.

Energy policy in Europe

32. Decisions relating to energy policy in Europe are primarily within the remit of individual Member State governments, with the European Commission's powers limited to two specific areas: (1) Creation of the European single-market, and (2) Matters relating to nuclear safety and security under the EURATOM Treaty. This position is in line with the principle of subsidiarity established by the Treaty of Maastricht, which states that matters ought to be handled by the authority closest to the citizen. According to this principle, the EU may only act (i.e. make laws) where Member State governments agree that action by individual countries is insufficient and that action can be better achieved at Community level.
33. Consequently, moving towards a common approach to European energy policy, with individual Member State governments relinquishing existing powers to the Community on energy-related matters, can and should only be pursued if Member States agree that a more co-ordinated approach is necessary. In his written statement to Parliament following the Energy Council on 8 June, Malcolm Wicks, the Energy Minister noted that "some member states emphasised that energy remained a national competence and that Energy Ministers should be informed and involved in agreeing Commission activity in advance."⁴
34. The extent of the transfer of powers towards Europe is clearly a critical decision point and in practice a sensitive balance is likely to be required between those matters for which the Commission should have responsibility and those where Member State governments retain sole authority. This report seeks to examine this balance in the context of the recommendations contained within the Green Paper.

Why conduct a policy review?

Evidence supporting the need to review European energy policy

35. Evidence provided by witnesses indicated broad agreement that the Commission review of European energy policy is an important process, despite the proximity of this review in time to other similar reviews carried out in recent years, both by the Commission and Member States, including the United Kingdom.

⁴ HC 15 June 2006 Col 71WS

36. Witnesses referenced a wide range of specific issues in support of their views, citing the challenges around competition, volatility of gas prices, security of supply and climate change, both from a European and Member State perspective.
37. For example, the Energy Intensive Users Group reflected on the challenges of:
- Very slow progress towards market liberalisation.
 - Increasing concerns in respect of security of supply, especially over gas imports.
 - Continually rising emissions of carbon dioxide due to: unrealistic expectations over fuel prices and the ability of renewable energy to compete without high and continuing subsidies; the ability to constrain consumption without compromising economic growth; and a schizophrenic attitude to the role of nuclear power.
38. It was noted by a number of witnesses that the Commission review necessarily has a global context, given the nature of the central issues e.g. economic growth in China and India et.al., with consequent effects on the world's climate from increasing carbon dioxide and other emissions. Centrica commented on the need to increase the dialogue significantly, both with key energy producers such as Russia and the Gulf States but also with the biggest consumer countries, in order to face the challenges of “enormous demand increase”. Accordingly, delivery of the main objectives is ultimately somewhat dependent on factors outside of the EU's (or indeed individual Member States') control.
39. In providing written and oral evidence, witnesses chose to focus the majority of their comments on issues relating to the operation of the gas supply market across Europe, perhaps reflecting the difficulties recently experienced in the UK in Winter 2005/06, when gas failed to flow through the Belgian-UK Interconnector at expected levels, despite prices in the UK soaring ahead of prices in continental Europe (see Chapter 5 for further details).
40. While all of the evidence provided has been invaluable in properly evaluating the merits of the Green Paper, it is important to recognise that the remit of the energy policy debate is much broader than fuel supply alone (gas or otherwise), and covers demand-side management (including energy efficiency initiatives) as well as supply-side management in a power generation context, plus other energy intensive sectors such as transport (motor cars and aviation).

Why is the review being carried out now?

41. In the main, witnesses who provided oral evidence concurred that much of the body of evidence supporting the need for the review has been well known for a number of years, supporting our view that there is no substantive reason why the process could not have been initiated at a much earlier stage. “Ofgem” commented that the reason for undertaking the review now (in terms of pressure on prices, difficulty of supply and the political and geographical problems with Ukraine) is almost self-evident, but that it might have been done “more thoroughly and more generally earlier”. (Q 180)

42. Looking forward, witnesses were in unanimous agreement that despite the merits of this line of argument, the review and its outcome are now critically important.

Are the policies best taken forward at an EU level or by Member States?

43. As set out in Chapter 1, the Green Paper identifies three main objectives for energy policy and six priority areas for action, a number of which would reduce the level of responsibility of Member States and increase Community responsibilities if enacted. In theoretical terms, such a move towards a more co-ordinated approach to energy policy in Europe could be properly justified if there were perceived or actual constraints in achieving the stated objectives at a national level i.e. increased co-operation between Member States was necessary to successfully mitigate the risks arising and deliver against the objectives.
44. Not all witnesses shared this perspective, although there was general acceptance that there were areas where increased co-operation across Europe would be helpful. For example, the Nuclear Industry Association argued that “the energy needs and policies in the Member States vary markedly and therefore a single energy policy is unlikely to be fit for purpose. Some element of coordination would however be beneficial for security of supply and mitigating against climate change”. In addition, the Energy Minister reinforced the importance of the principle of subsidiarity, that is, what things are best left to the Member State.
45. In this context, the optimal balance between the Community and Member State governments on decision-making is likely to vary depending on the specific objective in question and the risks which may impact on its delivery (reflecting in part the extent of divergence between local circumstances across the Member States). Due to the inherent complexity of the three main policy objectives (which is considered further below), it will inevitably be challenging to determine this optimal balance—with the implications of failing to do so likely to result in adverse consequences over time.
46. The Green Paper provides little by way of insight into the Commission’s thinking in this important area. In particular, there is no substantive evidence or rationale to support the transfer of powers towards Europe inherent within the priority areas for actions and the underlying proposals, other than an implicit view that the status quo is not acceptable.
47. While we do not necessarily disagree in principle with this view on the status quo, we recommend that the Commission seeks to develop a business case which clearly articulates where it believes that a more co-ordinated approach is required, on an item by item basis. This business case should detail what benefits would arise as a consequence of the implementation of its recommendations, and specifically why such benefits could not be achieved through the actions of individual Member States alone.
48. In considering the merits or otherwise of the recommendations in the Green Paper, it is important to distinguish between matters which relate solely to individual Member States and matters which are relevant in a Europe-wide context, with only the latter being important to this debate. While there is not necessarily a clear division between these two categories, it is helpful to bear the distinction in mind when considering the available evidence.

Policy objectives

Are the main policy objectives identified by the European Commission the right objectives?

49. All of the witnesses agreed that the Commission's three main objectives (Sustainability, Competitiveness and Security of Supply) were the right objectives to identify. An additional objective around minimising fuel poverty for vulnerable groups was highlighted by the Energy Minister, (Q 144) although this is implicitly referenced in part in the definition of the Commission's Security of Supply objective ("...making sure that all citizens and business have access to energy...").
50. It was noted that the Commission's objectives are broadly consistent with the UK Government's goals, as reflected in the current UK Energy Policy Review, supporting the line that Member States face a common set of energy issues. The Department of Trade and Industry noted that "the Green Paper correctly identifies the overarching objectives of balancing sustainable development, competitiveness and security of supply. These map, almost directly, onto the Government's objectives of Reliable, Affordable and Sustainable Energy for Europe".

Inherent tensions exist between the three main objectives

51. The principle, broadly stated objectives are each necessarily a summary of several, more detailed objectives, reflecting the desires of different stakeholders in the debate (including the Commission, Member State governments, industry, environmental groups, citizens, et. al.). For example, the concept of secure energy supply covers outcomes relating to the on-demand availability of both electricity and transport fuels, as well as health, safety and security issues associated with the energy supply chain.
52. Inevitably, key stakeholder interests are varied, and sometimes competing, which in part leads to inherent tensions between the main objectives e.g. sustainability is a priority for environmental groups, whereas secure and competitively priced energy is normally considered as most important by corporate energy users. In addition, tensions also arise due to the nature of the objectives e.g. investment in low carbon technology to diversify fuel sources for power generation is usually more costly than building gas-fired plant.
53. Witnesses illustrated the inherent tensions between the objectives in their evidence. Centrica said that there was "undoubtedly a tension" citing an example that "green power is more expensive...than dirty power today". (Q 5) The Energy Intensive Users Group gave a further example: "if we want a certain degree of security of supply as consumers we are going to have to pay for it". (Q 82) Equally, the objectives sometimes work in synchrony. To illustrate, the Energy Minister gave an example of a potential compatibility of objectives: "renewable energy would guarantee some pretty secure supply in Britain". (Q 148)
54. In response to these tensions, some witnesses indicated a desire to prioritise between the objectives, but noted this was unlikely to be practical due to the complex inter-relationships between the delivery of the respective outcomes. E.ON spoke of a desire, in an "ideal world" to rank the objectives in order to understand which are more important to politicians. (Q 38) Other evidence,

for example from Centrica and the Department of Trade and Industry, stated that equal priority for the three main objectives was desirable. The Energy Intensive Users Group agreed, commenting that an energy policy is “unlikely to be sustainable in itself if one or other...objectives dominates to the exclusion of others”. (Q 81) In the view of the Association of Electricity Producers “the Green Paper understandably puts the focus on security of supply, but it is equally important that the other two pillars are given due consideration”.

55. **In our view, it is not necessarily clear whether all three objectives (and the related outcomes) can be fully delivered, at the same time, in practice. It is by no means certain that the capital investment needed to diversify across different fuel and power generation sources to ensure security of electricity supply and reduced levels of carbon emissions could be delivered without significantly increasing the cost of energy and affecting Europe’s competitiveness.**
56. **Consequently, it is critical that the inherent tensions which exist within and between the objectives are clearly identified by the Commission in their business case, as extant risks which must be successfully overcome. In principle, only where a greater degree of co-ordination between Member States is required to overcome these risks (and thereby deliver the objectives in an efficient manner) would it be appropriate to support the Commission’s proposals for increased powers.**
57. **It is also our view that some form of compromise between the objectives will be inevitable, particularly when acknowledging the global perspective. The key for the Commission in taking forward their proposals will be to identify where and how much.**

What do the objectives actually mean in practice?

58. The majority of witnesses concurred that the Commission’s main objectives are articulated at a high-level only and accordingly lack the necessary clarity to drive decision-making, either in a policy or commercial context. In contrast, the Energy Minister said that the objectives were “clear”. (Q 144)
59. It was noted that it is likely that there will be differences in the way that each Member State understands and interprets the objectives, reflecting national and/or regional geo-political and energy market realities (e.g. the extent of liberalisation, the existing fuel-mix, public opinion etc.). In addition, the approach adopted to mitigation of the extant risks will also likely differ across the Member States for similar reasons. As an example, the issues related to security of supply in the UK are distinct (if not unique), partly due to the UK’s geographical location and its rapidly depleting source of indigenous gas from the North Sea, increasing reliance on imports from Europe. By contrast, France and Germany are comparatively less exposed to security of supply risks on imported gas, the former due to the predominance of nuclear power in its energy mix and the latter due to its closer-proximity to Russian gas supply and the extent of liberalisation of its energy market (where long-term supply arrangements are typical).
60. The objectives as stated are a simple articulation of a complex and comprehensive set of desired outcomes, which have a high degree of inter-relationship. Consequently, if there is any lack of clarity in what the

objectives actually mean (and the outcomes they are intended to represent), the response across Europe will almost certainly be inconsistent between Member States, at best impairing delivery of the objectives and at worst leading to adverse, unintended consequences.

61. The Energy Intensive Users Group spoke of a lack of definition and a requirement for precision in relation to the terms “sustainability policy” and “security of supply”: “The words that look fine here are so imprecise in certain cases that something which could fulfil the letter of this might end up being entirely unacceptable in certain parts of the energy industry and quite possibly to consumers as well”. (Q 127)
62. **In our view, more work needs to be carried out by the Commission to define more fully the desired outcomes for each objective. These outcomes should be clear and comprehensive statements of each of the desired effects resulting from successful delivery of the objectives (and in contrast, an articulation of the outcomes which are to be avoided). The Commission should also review all of the potential risks (including the inherent tensions that exist in the system) which could occur and prevent achievement of one or more of the objectives, and equally, identify the opportunities which could aid delivery. The Commission will also need to design a robust basis for measuring progress over time, in order to ensure that any package of measures that is implemented ultimately delivers against the overall objectives.**
63. While circumstances inevitably change over time, and this affects perceptions as to what are currently the most important objectives or priorities, policy makers at all levels must recognise that stability through a long-term framework is critical to provide incentives for the necessary capital investment. Without such stability, it is likely that the levels of investment required to deliver the objectives will not be forthcoming.

CHAPTER 4: SUSTAINABILITY

Introduction

64. This Chapter of the Report examines the meaning of the sustainability objective, considers the factors that are relevant to the sustainability debate and reviews some of the recommendations made by the Commission in this area.

Definition

What does “sustainability” mean?

65. In the context of the review of energy policy, the Green Paper defines the objective of sustainability as “(i) developing competitive renewable sources of energy and other low carbon energy sources and carriers, particularly alternative transport fuels, (ii) curbing energy demand within Europe, and (iii) leading global efforts to halt climate change and improve local air quality”. As this definition makes clear, the objective is set to address a wide range of factors relevant to the environment debate, including supply-and-demand-management, development of low carbon technologies and maintaining competitive markets.
66. A range of evidence was provided by witnesses indicating that this is an all-embracing yet complex objective, and while agreeing with its overall direction, noted that it lacks sufficient clarity to drive decision making, either in a policy or commercial context. References were made to sustainable policy, energy efficiency, new technology and the climate change impact. Often in evidence, for example that given by Centrica, E.ON and British Nuclear Fuels, “sustainability” was inferred to be synonymous with “mitigation of climate change”.
67. The Energy Minister told us that “For once, when politicians and ministers say that something is the biggest issue facing the planet, they do not exaggerate. I think they are scientifically accurate when they talk about climate change and, therefore, sustainability is absolutely critical.” (Q 144)
68. A key theme raised by the majority of witnesses around sustainability was the need for a long-term policy framework in order to better match the capital investment time-frame, which can be up to 40–50 years in the power generation sector. In support of this view, E.ON suggested that political intervention in terms of changing the policy framework should be cautious, infrequent and long-lasting in effect.

Relevant factors in the sustainability debate

Global demand for energy is increasing

69. Global demand for energy is significantly increasing, particularly with respect to growth in developing nations like China and India, and this provides a critical back-drop to the Commission review. De-linking GDP growth from growth in energy usage is widely accepted as a key priority, through demand-side management measures such as energy efficiency, to support the delivery of policy objectives.

70. As a consequence of forecast demand growth, policy will not be sustainable into the long-term if it is set purely with a European perspective alone, and thus needs to be drawn with a broader view. Whilst the Association of Electricity Producers commented that “the Green Paper should place more emphasis on the global dimension of climate change”, the International Association of Gas & Oil Producers commended “the EU’s efforts to keep alive the worldwide debate on climate”. Part of the challenge here lies in the different attitudes to the key issues elsewhere in the world. For example, China plan to expand significantly their number of fossil fuel power plants and the United States has not ratified the Kyoto Treaty⁵. In order to reconcile these tensions and be truly sustainable, policy will need to be flexible and able to accommodate changing externalities, without diluting its long-term direction.

Measures to improve energy efficiency

71. For the reasons set out above, energy efficiency and other demand-side management initiatives are, in our view, a critical part of the energy policy debate, as supply-side measures alone are unlikely to be successful in achieving the objectives. Despite the Green Paper including a detailed section on its proposals around energy efficiency (including the development of an Action Plan on Energy Efficiency), there was only a limited amount of evidence provided by witnesses to help understand what needs to be done to drive change in this area, with very few comments extended beyond a passing mention.
72. Sir John Mogg of Ofgem told us that “what many governments and the Commission have done on energy efficiency is disappointing. It seems that what is always called the ‘win, win, win’ seems never to result in a win; it is always qualified and not actually achieving something...”. (Q 200)
73. Broadly, however, there was support for energy efficiency, though some industry groups did not support the suggestion that EU-wide targets for energy saving should be introduced.
74. **In our view, this position is symptomatic of the general level of focus and effort directed towards demand-side management and energy efficiency initiatives in practise and the Commission should consider whether responses from other Member States reflect a similar lack of engagement.**

Pricing carbon through the European Union Emissions Trading Scheme

75. Integrating the cost of carbon into energy prices through the European Union Emissions Trading Scheme (“EU ETS”) received unanimous support from witnesses, despite the recent volatility in carbon prices surrounding the announcement of national emission levels. There was also a broad consensus on the range of proposed changes required to improve the scheme going forward, including:
- Increasing the term of the scheme to at least 10–25 years to better match the capital investment time horizon. The International Association of Oil and Gas Producers, Centrica, E.ON and the Energy Intensive Users Group all gave evidence confirming views within this range; and
 - Extending the scheme to cover other sectors, such as aviation.

⁵ To give the treaty its full name, the Kyoto Protocol to the United Nations Framework Convention on Climate Change is an amendment to the international treaty on climate change, assigning mandatory targets for the reduction of greenhouse gas emissions to signatory nations.

76. In addition to this, Mr Ulrich from Centrica argued for the auctioning of carbon allowances, rather than allocation on a free-issue basis. (Q 24)
77. Nevertheless the EU ETS is currently seen by witnesses as a mechanism which is highly-susceptible to political intervention, running contrary to the desire to increase certainty around major capital investment decisions. The Association of Electricity Producers argued that “It is important that the EU clarifies, as soon as possible, the long-term framework well beyond 2012 so that electricity generators have greater certainty in relation to major investment decisions.” (p 12, para 7) The Energy Intensive Users Group warned that “We cannot expect people to invest in low carbon generation, whether it is nuclear, carbon capture, renewables or even energy efficiency, if they have not got some degree of certainty about that, and we do not have that at the moment”. (Q 83)
78. An appropriate balance is required here and witnesses recognised that uncertainty in part is inevitable and necessary in a corporate risk-taking/profit-making context.
79. From a global perspective, the significant risk to (and conversely opportunity for) the success of the EU ETS as a tool in the delivery of sustainability is persuading others elsewhere to adopt a similar approach. In the absence of such support, Europe may suffer competitively in a global context as compared to nations which do not internalise the price of carbon into their cost base, particularly as carbon prices should theoretically be expected to increase over time, as European policy pursues a de-carbonising trajectory.
80. The Energy Intensive Users Group viewed it as “pretty much inevitable that if we are going to go down a continuously decarbonising trajectory for European economies that that must lead, other factors being equal, to a rising cost for carbon over time...One does wonder whether carbon taxation, even though it may be less efficient for trading in certain respects, might have some advantages there.” (Q 90)
81. The Green Paper itself says little on the EU ETS other than supporting it to create a flexible and cost-efficient framework for more climate friendly energy production. The Paper also indicates that the EU ETS provides the nucleus for a gradually expanding global carbon market, thereby giving European business a head-start. **We would support this view.**
82. **In our view, the EU ETS is an area where the Commission has a key role to play, responding to the early experience and promoting its merits on a global basis. Areas for consideration should include broadening the scope of the scheme to cover other sectors, significantly increasing the term of the scheme, reviewing the rigour and integrity of the headline targets for carbon reduction, and considering the basis on which allowances are allocated, particularly with respect to using an open auction process.**

Technological advancement is critical

83. The delivery of the sustainability objective will ultimately be critically dependent on the continued development of new technologies, both in the low carbon generation of power (e.g. carbon capture and storage, renewable sources, nuclear fusion etc.) and other areas, including energy efficiency initiatives and transportation. BP stated that: “it is desirable that any EU (or indeed national) Energy Policy should be based upon a fiscal and regulatory

framework in which Research and Development into new energy technologies is encouraged". E.ON added: "We welcome measures to increase the funding of research, development and demonstration in the energy sector...A higher proportion of the EU's available financial resources should be devoted to the development and demonstration of low carbon technologies, supplementing but not replacing national programmes and sources of funding."

84. It was felt that the internalisation of the cost of carbon through the EU ETS should help drive innovation, although experience to date is not sufficient to predict whether the long-term market price of carbon will be adequate to make these new technologies commercially economic in comparison to fossil fuels.
85. While technology development should be market-driven, one witness (E.ON) suggested that there was an opportunity for Europe to co-operate more through a European initiative or EU/USA initiative, as subsequently illustrated by the recent announcement on the sharing of nuclear knowledge between the UK and France. Dr. Golby further told us that in his view "the market, given the right framework, will bring forward the technologies." (Q 62)
86. Meanwhile Sir Donald Miller, the former Chairman of Scottish Power, argued in his submission that "The proper place for EU and Government development expenditure on energy systems is in R and D programmes until such time as they can demonstrate, if they can, that they have something significant to offer in terms of effectiveness and cost."
87. On the deployment of new technologies, a limited amount of evidence was provided by witnesses, although reference was made to the difficulty in obtaining the appropriate local planning and other consents, which is clearly a matter for individual Member States at present.
88. One witness raised the importance of focusing on technological improvement in the fossil fuels industry, as these will inevitably be needed a long way into the future, irrespective of more sustainable development: the International Association of Gas & Oil Producers predicted that "A key challenge will be to develop improved technologies to find, produce and use fossil fuels in ways that minimise negative impact on the environment".
89. There was agreement from the majority of witnesses that the setting specific targets at a European level for the proportion of each technology in the fuel mix (along with setting targets generally) was unlikely to be helpful in practice as local circumstances vary widely.
90. British Nuclear Fuels were a notable exception to this view, arguing in their submission that "Whilst we support an EU-wide approach to delivering diversity, this should be based on removing barriers to entry for energy technologies, and/or on identifying a minimum proportion of the mix to come from (unspecified) secure and low-carbon technologies, as is proposed in the Green Paper. We would not support an approach based on defining a particular mix of specified technologies, either at EU or national level."
91. **Given the importance of new technologies in delivering overall energy policy objectives, developing policy which is sufficiently flexible to allow the inclusion of key, low carbon technologies (for example carbon capture and storage or marine technologies), as and when**

they reach a commercial scale, is critical to delivering sustainability. On the setting of Europe-wide targets for the energy mix, in our view, Member States need flexibility to determine how best to meet the objectives at a national level, and ultimately the markets should be left to decide which technologies to research, develop and deploy and to what extent. In this context, it should be for individual Member States to decide whether national targets are necessary or helpful as part of the policy framework in that country.

CHAPTER 5: COMPETITIVENESS

Introduction

92. This Chapter of the Report examines the meaning of the competitiveness objective, considers the factors that are relevant to the competition debate and reviews some of the recommendations made by the Commission in this area.

Definition

What does “competitiveness” mean?

93. In the context of the review of energy policy, the Green Paper defines the objective of competitiveness as “(i) ensuring that energy market opening brings benefits to consumers and to the economy as a whole, while stimulating investment in clean energy production and energy efficiency, (ii) mitigating the impact of higher international energy prices on the EU economy and its citizens and (iii) keeping Europe at the cutting edge of energy technologies”. As this definition makes clear, the objective is set to address a wide range of factors relevant to the competition debate, including completing the liberalisation process, managing volatility in energy prices and driving technology development.
94. A range of evidence was provided by witnesses indicating that this is a comprehensive and complex objective, although perhaps less so than the sustainability objective. While agreeing with its overall direction, witnesses noted that it lacks sufficient clarity to drive decision making, either in a policy or commercial context. References were made in particular to the slow pace of liberalisation in continental Europe and the impact of recent high/volatile energy prices in the UK.
95. It is relevant to recognise that the competitiveness objective necessarily operates on a number of different levels—for example, within individual Member States, across Europe as a whole, and globally—and the Commission’s definition (as set out above) reflects aspects of each of these levels. Consequently, achievement of the competition objective is at least in part dependent upon global factors which are outside of Europe’s direct control. In contrast, the ability of Member State governments and the Commission to directly influence the shape of the competitive landscape is by definition primarily limited to actions which can be undertaken within Europe’s borders, for example, completion of market liberalisation or establishment of the EU ETS. The interface between Europe and the rest of the world—and the EU’s ability to influence other governments to act in a way that is, at worst, not inconsistent with delivery of the main policy objectives—is clearly a critical part of the debate, and one which will in practice have a significant effect on the success or otherwise of meeting energy policy objectives.
96. The Commission has proposed the development of a common external energy policy to enable Europe to speak with a single voice in the international arena on issues such as energy prices, import dependency, global energy demand and global warming. **While we support efforts in this area, a much better understanding is required of how the**

perspectives taken by Member States, Europe and the rest of the world on competition issues inter-relate and consequently identify the specific risks that need to be managed.

97. In this context, it is interesting to note that the majority of the evidence provided to us by witnesses focused on competition effects within the EU, with only brief references to external, global factors. There could be many reasons for this, including the global perspective not being seen as an imminent issue compared to matters more immediately affecting Europe, but equally it may reflect the extent of the perceived challenge associated with managing such global risks.

Market-based approach

98. A key theme raised by all of the witnesses was whole-hearted support for a market-led approach to the delivery of energy policy objectives, with government responsible for setting the long-term policy framework and ensuring effective regulation. This is consistent with the evidence and comments made on sustainability, as set out in Chapter 3.
99. Dr Golby's view was that "the future of European energy policy is at a crossroads with one path leading to market-led solutions and another to increased state intervention and national protectionism, so this is an important point in time. At E.ON we strongly support the market-led approach and within a competitive market environment companies like E.ON will deliver the investment required to achieve the broad policy objective set out in the Green Paper." (Q 35)

Liberalisation

Extent of energy market liberalisation in Europe

100. While the UK has moved over recent years to a fully-liberalised energy market, consistent with the relevant EU Directives (and enjoyed some of the lowest energy prices in Europe as a consequence), the extent of liberalisation elsewhere in continental Europe is significantly lower, with national champions in a number of countries holding supply, generation, transmission and distribution assets within their corporate portfolio.
101. Several witnesses clearly stated (with differing degrees of emphasis) that this partially-liberalised position has resulted in a lack of both competition and transparency within the energy market, hindering the ability of the UK (at least) to achieve its policy objectives. Most witnesses indicated that the existing EU Directives would be effective if fully implemented, although one witness suggested that the degree of effectiveness or otherwise was not necessarily clear. According to the Energy Intensive Users Group, full liberalisation across Europe could be at least ten years away, based on progress to date. (Q 76)
102. **Given that the other twenty four Member States are each starting from a different position, with varying levels of appetite for the process, continued pressure by the Commission on delivering full liberalisation across Europe must be a priority if policy objectives are to be delivered.**

103. Unbundling of supply and generation assets from transmission and distribution assets, along with addressing protectionism in the energy mergers & acquisitions market, were two key areas noted for particular attention. Ofgem's submission argued that "[The Green Paper] does not discuss in depth the need to effectively unbundle (i.e. separate) network companies and activities from those companies in the potentially competitive parts of the market. Unbundling (preferably by ownership), in our view, is central to the achievement of a competitive single energy market as it is key to the delivery of non-discriminatory access to networks, efficient investment and transparent markets." **We endorse this view and recommend that the Commission continue to focus its efforts on separating supply and generation assets from transmission and distribution assets.**
104. In the view of The National Grid, "many of the current problems with the European energy markets would be solved if network activities were properly unbundled, in accordance with the Directives, from competitive elements of the gas and electricity markets."
105. We note that during the conduct of our inquiry, the Commission launched "dawn-raids" on several European Utility companies as part of their programme of action to ensure compliance with the Directives. **We are reassured by the evident commitment by the Commission to deal stringently with companies and Member States which do not abide by existing requirements.**

Impact of partial liberalisation

106. The lack of full liberalisation across Europe appears to have had a significant effect on UK security of supply and competitiveness, particularly during Winter 2005/06, when gas did not flow through the Interconnector from Belgium to the UK at the expected level, despite UK prices spiking to above 180p per therm. Similar concerns were expressed with respect to Winter 2006/07, in advance of new gas pipeline and Liquefied Natural gas ("LNG") infrastructure coming on stream from 2007.
107. While there was no clear view as to what specifically led to this situation developing, a number of witnesses suggested that much of continental Europe wanted to protect national gas supplies and reserves against a potential local cold-snap, rather than take profits on supplying the demand from the UK market. Malcolm Wicks, the Energy Minister, said: "...there is inevitably a tussle going on between the proponents of market liberalisation, such as us here in Great Britain, and some countries who are looking over their shoulder worried about energy security."(Q 156) The Energy Minister went on to say that, in light of the recent developments involving Ukraine, EU Member States may be of the opinion that holding onto existing practices and more duopolistic supply situations would be beneficial. (Q 161) This is clearly an example of a potential conflict between the objectives of security of supply and greater competitiveness.
108. The uncertainty and volatility around energy prices created by these and other issues is causing "off-shoring" of UK business and jobs, according to the Energy Intensive Users Group, as businesses move capacity away from the UK (either temporarily or permanently) to more stable locations in continental Europe and further a field.

109. **The evidence provided by witnesses leads us to conclude that the UK and/or the Commission do not appear to have effective high-level contingency plans to deal with issues which arise in the interim as a result of partial liberalisation in Europe (as set out above). Given the uncertainty around the potential timetable for full liberalisation, which may be a number of years away, this is a significant cause for concern with respect to the delivery of all three of the EC's main objectives.**
110. In the meantime, some might see the sharp increases in energy prices in the UK as casting doubts over the universal benefits of liberalisation. Dr Robertson from the EUIG told us that "...we have seen a doubling in gas prices in most of Europe where gas has been linked to oil. We have seen a trebling of gas prices in the UK where the market is liberalised. So the UK is not really a very good advertisement to the rest of Europe for the liberalisation process." (Q 76)
111. **While we understand that there are a wide-range of factors which influence gas prices across Europe, the Commission should consider the impact of this observation as to how others may view the UK's experience of liberalisation on the effectiveness of its programme of activity to ensure full compliance with the existing Directives.**

Can markets alone deliver the main policy objectives?

112. There were differing views as to whether markets alone could deliver the main policy objectives, even if a long-term policy framework was in place. For example, some saw the delivery of security of supply (including adequate strategic gas storage) as inconsistent with market principles, given by definition, excess capacity is required. Sir Donald Miller wrote that "It is doubtful that any revised market framework offering greater competition between suppliers will by itself have a significant impact on the security of our electricity supplies". The Energy Minister said: "I do not think market mechanisms alone are capable of delivering objectives either within one nation state, such as the UK, or across the European Union or, dare I say, across the world". (Q 162)
113. Other witnesses were clear that the markets would deliver secure energy, driven by the impact of risks associated with interruption to supply on their businesses. BP were of the view that "energy markets are no different in kind from other markets. Provided the regulatory and fiscal climate allows, properly functioning energy markets will, in the absence of catastrophic disruptions of supply, provide consumers with adequate security".
114. **In our view, the markets are best placed to determine how to policy objectives efficiently and effectively. The role of Member State governments and the Commission should be limited to establishing a clear, long-term policy framework within which market participants can take commercial decisions.**

Energy prices

Use of long-term supply contracts

115. Witnesses noted that energy users in Europe typically source gas via long-term contracts, rather than using short-term arrangements, as is the case in the UK where there is an active spot-market for gas. These long-term gas contracts are often priced against an oil index. Given recent high UK gas

prices, European businesses have benefited from cheaper long-term gas contracts linked to oil prices. One witness suggested that comparable (oil-indexed) contracts were not available to UK gas customers, although our limited enquiries indicate that this may not be the case.

116. Based on the evidence provided, in our view, the rationale for contracting and pricing in Europe reflects the partial pattern of liberalisation and the lack of a transparent and liquid market for gas supply. This has led to gas pricing in continental Europe being linked to oil where there are a number of benchmark prices.
117. In the UK, liberalisation has resulted in a liquid, traded market for gas and users have chosen to source supplies via short-term arrangements priced against the market. This behaviour reflects the economic principle that markets should efficiently price the cost of a commodity, in this case, gas.
118. The choices made by UK businesses, post-liberalisation, to source gas using short- rather than long-term arrangements is accordingly more likely to reflect commercial preferences rather than any structural inequity. Indeed, it is our understanding that this approach has historically delivered significant benefit to UK businesses in periods when gas market prices were low. In this context, Steve Smith of Ofgem commented on the overall lack of transparency: "...partly to do with the North Sea, but more to do with Europe", leading to large industrial customers being "lulled into a false sense of security" when deciding on their approach to gas supply. (Q 187)

Link between oil and gas prices

119. The lack of liberalisation in continental Europe, long-term contracting basis for gas supply and the consequent link between oil and gas prices may be causing gas prices to be higher than they would otherwise be in a truly competitive, European market place. **In our view, liquid markets are better able to deliver economic prices for commodities, reflecting the balance between supply and demand at any point in time, as has been seen in the UK post-liberalisation. In the same way, markets can also take account of the incremental costs associated with internalising the price of carbon, thereby supporting delivery of the sustainability and secure energy objectives.**
120. The majority of witnesses indicated an expectation that UK oil and gas prices were likely to remain at existing levels for the foreseeable future, perhaps in our view partly reflecting their expectations for the slow completion of the liberalisation process.

Regulation

121. Evidence provided by witnesses was divided on the subject of whether Europe needed a single energy regulator, as proposed by the Commission. Some witnesses stated that it is not likely to be possible to have a single European energy market without a single European energy regulator. However, the majority of witnesses (including E.ON, Centrica, National Grid and the DTI) saw a single regulator as unnecessary red-tape and favoured investment in the existing, national regulatory regime to ensure independence from Member State governments and application of best practices, quoting the UK's Ofgem as a successful example.

122. The decision as to whether a single energy regulator is required should be a key consideration within the Commission's business case for moving towards a more co-ordinated approach to European energy policy. **In our view, there is little direct evidence at this time to support the need for a single energy regulator and we recommend the Commission instead considers steps to ensure that existing national energy regulators are truly independent, have the necessary range of powers and operate in a way which is consistent with best practice. Looking forward, greater co-ordination between regulators across Europe may be needed to deliver a truly seamless European energy policy, in particular to avoid the risk of regulatory arbitrage.**

CHAPTER 6: SECURITY OF SUPPLY

Introduction

123. This Chapter of the Report examines the meaning of the security of supply objective, considers the factors that are relevant to the secure energy debate and reviews some of the recommendations made by the Commission in this area.

Definition

What does “security of supply” mean?

124. In the context of the review of energy policy, the Green Paper defines the objective of security of supply as “tackling the EU’s rising dependence on imported energy through (i) an integrated approach—reducing demand, diversifying the EU’s energy mix with greater use of competitive indigenous and renewable energy, (ii) creating the framework which will stimulate adequate investments to meet growing demand, (iii) better equipping the EU to cope with emergencies, (iv) improving the conditions for European companies seeking access to global resources, and (v) making sure that all citizens and business have access to energy”. As this definition makes clear, the objective is set to address a wide range of factors relevant to the secure energy debate.
125. The evidence provided by witnesses on security of supply focused primarily on gas supply (including LNG), rather than other fuel sources (such as coal, uranium, renewable sources or biofuels), possibly reflecting the difficulties experienced in the UK in Winter 2005/06 and Russia’s recent positioning with Ukraine and others on gas supply—the Energy Minister described the latter as having “...sent a shiver down the energy spine of Europe...” (Q 144)
126. In the main, the evidence provided suggested that this objective is fundamentally easier to understand than the sustainability or competitiveness objectives, but it is nevertheless a complex area in its own right, and delivery of secure energy will be closely linked to delivery of the other two objectives.

Diversity of technology and supply

127. It was noted that the UK’s position on gas supply has changed from a net export to net import position, as North Sea gas reserves decline and existing nuclear and coal plant retire. Without affirmative action, the proportion of gas-fuelled power generation capacity in the UK’s energy mix is likely to increase, accelerating the demand for imported gas—Europe as a whole faces very similar issues. While there are significant new investments in gas pipelines (e.g. Langeled) and LNG terminals in train which will improve the UK’s import capacity in the future, these will not be on line in time for the forthcoming 2006/07 Winter, which remains a concern.
128. It was generally accepted that diversity in fuel supply, through the introduction of a range of different power generation technologies, is key to not only ensuring energy security but also reducing carbon emissions. The OGP’s submission argued that “one of the cornerstones of security of supply is energy diversification in its widest sense: by type, source, transportation

route, technology, contract category, producer and supplier.” Shell UK further argued that “Diversification of energy supply is the proper response to risk and uncertainty. Diversification provides resilience.”

129. In this context, the fact that the majority of the evidence provided on energy security understandably focused on the supply of gas alone, should not be interpreted as meaning that the issues relating to other fuel sources are not important as part of the overall energy mix.

Russia

Russia as a major supplier of gas to Europe

130. Russia is a major supplier of gas to Europe and the second largest gas producer in the world, after Saudi Arabia. Some commentators have suggested in the light of recent events that Russia is using energy (including gas supply) as a political tool, heightening concerns over security of supply e.g. interrupting the gas supply to Ukraine, seeking to develop alternative markets in the Far East, Gazprom’s interest in European energy assets etc.
131. However in a recent debate on energy prices in the House, Lord Owen took issue with what he saw as a “sort of hysteria we are starting to develop about Russia” and argued that any idea that “Russia is trying to do us all down by increasing its pipelines” was “ludicrous” as it was very much in the interests of EU Member States to have multiple pipelines from Russia available.⁶
132. A number of our witnesses noted that a significant amount of capital investment is needed in Russia’s exploration, production and supply infrastructure in order to fulfil the needs of the European market. Currently, there is no clarity as to how such investment will be secured—in particular, it is not clear how inward investment into Russia will be treated and whether foreign investors will have adequate security over their investments and associated returns.
133. In the course of our previous inquiry, “Gas: Liberalised Markets and Security of Supply”⁷, Mr Pfaff, Vice President of Ruhrgas, told the Committee that even were there to be a severe gas shortage, governments would not restrict supply to neighbouring States to ensure domestic supply as a priority. In his view long term contracts would dictate that if “there is only 80 per cent available in comparison to what we ask for, then we split the available volumes in proportion to what we have asked our supplier to deliver”. (Q 167) The experiences of Winter 2005/6 cast some doubt over this assessment.
134. The importance of the ratification of the Energy Charter Treaty by Russia was highlighted by a number of witnesses. Although Russia signed the treaty in 1998, they have yet to formally ratify it. The Energy Minister stated that in the Government’s opinion this was “very important”. (Q 157) Centrica’s submission argued that “the EU should pursue ratification of the Energy Charter Treaty by Russia and continue with initiatives to promote the adoption of EU internal market principles by neighbouring states, such as the

⁶ HL 25 May 2006, col 934

⁷ “Gas: Liberalised Markets and Security of Supply”, 17th Report (2003–4), HL 105—available at <http://www.publications.parliament.uk/pa/ld200304/ldselect/lducom/105/105.pdf>

South East European Energy Community Treaty signed under the UK Presidency”.

Negotiating with Russia

135. The Green Paper proposes a new initiative to develop a common external energy policy to allow Europe to speak with a single voice when dealing with Russia. While this proposal received support, it was noted that gas supply arrangements are negotiated on a commercial basis between energy market counterparties, not by governments. However, there was a broad consensus among witnesses that establishing a Europe-wide context for these specific negotiations would be helpful. Increasing demand for energy from developing nations like China and India underline the importance of the EU taking a collaborative stance in this regard.
136. Although, understandably, negotiations with Russia were given prominence in the evidence, witnesses commented that the focus of European-level negotiation would also need to extend beyond Russia to other nations. The DTI noted that “there are significant benefits to be gained from developing a more coherent external energy policy at the Community level. The EU already has a constructive dialogue with Russia and OPEC at the EU level and this should be extended to dialogue with other major supplier and producer countries”.

Liquefied Natural Gas

LNG and Europe’s future energy mix

137. There was a broad consensus from witnesses that LNG is likely to play an important role in ensuring security of supply through diversification of supply sources (including countries like Qatar and Algeria), particularly in the UK, although estimates of penetration of the fuel mix by 2010 varied from E.ON’s “high single digits or maybe just into double digits” (Q 54) to Centrica’s “as high as 20 per cent”. (Q 12)
138. In part, this variation in views is likely to reflect the global commodity nature of LNG. Unlike the transport of gas by pipeline, the supply destination for LNG is not fixed and LNG tankers will always have the flexibility to serve the markets which are willing to pay the highest price (complimented by the fact that transport costs are not directly linked to distance travelled), although this is constrained by the current shortage of LNG tankers.
139. **In our view, LNG in itself is not a single solution to the UK’s security of supply concerns, although it may play a significant role in future. The extent of benefit to be gained from diversifying gas supplies to include LNG will depend on the comparative pricing between the UK and other markets, which would ultimately be expected to dictate the destination for LNG supply.** However, while the UK is geographically at the end of the gas supply pipe, it was noted that LNG does present an opportunity for the UK to establish itself as the “staging post” for Europe on LNG import/export.

CHAPTER 7: PRIORITY AREAS FOR ACTION

Introduction

140. This Chapter of the Report sets out a summary of the Commission's priority areas for action and our response, taking account of the evidence collected during our investigation.

Completing the internal European electricity and gas markets

Summary of Commission proposals

141. The Commission proposes a European energy grid code, a priority European interconnection plan, a European Energy Regulator and other new initiatives to ensure a level, competitive playing field.

Our response

142. Evidence provided by witnesses was overwhelmingly in support of the completion of the liberalisation process across Europe, and we agree that this should be an urgent priority for the Commission—progress to date indicates that this is an area where the Commission needs to use its authority to enforce the existing Community Directives. In the interim, the current pattern of partial-liberalisation is clearly disadvantaging Member States who have implemented the relevant Directives, specifically the UK. **In our view, bringing to bear the power of an open and competitive market place through completion of the liberalisation process is imperative. The challenges Europe faces in delivering against its energy policy objectives will be fundamentally more difficult without the benefits of truly efficient markets, particularly with respect to stimulating capital investment and thereby enhancing security of supply.**
143. **In principle, we support expanding the degree of inter-connection between Member States across Europe, through completion of the physical electricity and gas networks, although caution the Commission to be wary of the associated challenge in implementing common rules, standards and bases for contracting between counterparties. The Commission's role in this area should include completing the unbundling process through the separation of supply and generation assets from transmission and distribution assets.**
144. **We do not support the creation of a single European energy regulator—in our view, individual Member States should focus on ensuring existing national energy regulators are truly independent, have the necessary range of powers and operate in a way which is consistent with established best practice.**

Ensuring the internal energy market guarantees security of supply

Summary of Commission proposals

145. The Commission proposes the establishment of a European Energy Supply Observatory to monitor European wide supply and demand patterns and a

revision of existing Community legislation on oil and gas stocks to promote the ability to mitigate potential supply disruptions.

Our response

146. **While we support improving the transparency of energy infrastructure capacity across Europe, we believe that the completion of the liberalisation process will go a long way towards resolving the issues which currently exist (including, for example, the problems experienced by the UK in Winter 2005/06). In this context, despite neutral or positive comments from witnesses in evidence, we do not believe that the case has been proven for the development of a European Energy Supply Observatory. Further, we do not agree with the need for a revision of Community legislation on gas stocks, which should be a matter reserved for individual Member States, as a consequence of local and regional differences between markets.**

Providing a European framework for national decisions on energy mix

Summary of Commission proposals

147. The Green Paper suggests that while the choice of individual Member States on national energy mix is, and will remain a question of subsidiarity, it may be appropriate to establish a European-wide energy mix benchmark and to stimulate the debate on the use of different energy sources.

Our response

148. **We agree that diversifying across a broad range of energy sources is critical to meeting the Commission's main policy objectives, and in particular enhancing both security of supply and sustainability. However, we do not believe that setting a European-wide energy mix benchmark is appropriate, as local circumstances vary widely. In our view, markets are best placed to determine the specific technologies and related proportions within the overall mix and stability through a long-term policy framework is critical to facilitating such investment, thereby providing incentives for the research, development and deployment of new technologies.**

Tackling climate change

Summary of Commission proposals

149. The Green Paper calls for an Action Plan on energy efficiency to identify the measures necessary to save 20 per cent of the energy that would otherwise be consumed across the EU by 2020, plus a Renewable Energy Road Map for proposing targets and objectives for renewables for 2020 and beyond.

Our response

150. **We endorse the Commission's proposals in this area—action to reduce the demand for energy and increase the proportion of renewables in the energy mix are both vitally important goals. However, we do not believe that setting targets is appropriate, as local circumstances vary widely—as with decisions around the energy mix,**

markets are best placed to determine how to achieve policy objectives in an efficient manner.

151. **We also encourage the Commission to respond as a matter of priority to the early experience around the EU ETS, with reference to broadening the scope of the scheme to cover other sectors, significantly increasing the term of the scheme, reviewing the rigour and integrity of the headline targets for carbon reduction, and considering the basis on which allowances are allocated, particularly with respect to using an open auction process. Despite the apparent short-comings of the scheme as it stands, the evidence provided to us in our investigation had a clear consensus—the EU ETS has the ability to make a real difference in Europe—and there is also a genuine opportunity for Europe to take the lead in the creation of a global carbon market.**

Encouraging new energy technology innovation

Summary of Commission proposals

152. The Commission proposes a Strategic Energy Technology Plan to ensure Europe leads in the areas of energy efficient and low carbon technologies.

Our response

153. **We endorse the Commission’s proposals in this area. We note that the EU ETS has a key role to play in integrating the cost of carbon into energy prices—consequently the success of the scheme will ultimately be key in delivering new energy technology innovation, making low-carbon sources of energy competitive as compared to fossil fuel technologies.**

Developing a coherent external energy policy

Summary of Commission proposals

154. The Green Paper calls for the identification of infrastructure priorities, a road map for the creation of a pan-European Energy Community, a renewed approach towards Europe’s energy partners (particularly Russia) and a new Community mechanism to enable an efficient response to emergency external energy supply situations, enabling Europe to speak with a single voice in the international arena.

Our response

155. **We endorse the Commission’s proposals on developing a coherent external energy policy. Such a framework, if properly defined, will allow participants in energy markets across Europe to negotiate with third parties in a manner consistent with the delivery of the main policy objectives.**

CHAPTER 8: CONCLUSIONS AND RECOMMENDATIONS

Introduction

156. This Chapter of the Report sets out the key conclusions and recommendations arising from our inquiry. It also summarises the detailed recommendations, as listed elsewhere in the Report.

A common approach to European energy policy?

157. We recommend that the Commission more clearly articulates where it believes that a more co-ordinated approach is required, on an item by item basis. The Commission should detail which benefits would arise as a consequence of the implementation of its recommendations, and specifically why such benefits could not be achieved through the actions of individual Member States alone.
158. In this context, evidence taken from witnesses suggests that increased co-operation between Member States in certain areas may help mitigate risks and thus achieve objectives, particularly around climate change and security of supply.
159. While we have set out our high-level views on the Green Paper's priority areas for action in Chapter 7, it is not possible to definitively conclude at this stage on the merits or otherwise of these actions, until further work has been undertaken by the Commission, as set out below.

Taking the Green Paper forward

160. We agree that there is an urgent need to review and revise energy policy, reflecting the scale of the challenge and the time-taken to effect change as a consequence of the capital intensive nature of energy industries. The design and implementation of new policy needs to recognise that markets (rather than the State) are best placed to deliver objectives in an efficient and effective manner. Accordingly, the degree of EC/government intervention is a critical decision point and needs to be carefully managed.
161. While the Green Paper supports a market-led approach, it then identifies a whole range of areas for specific intervention, without necessarily providing supporting justifications. We feel that there is a real risk that these specific interventions may have polarised views and diverted attention away from the key underlying principles. This is clearly illustrated by the fact that witnesses usually agreed with the main policy objectives in principle, but then disagreed with many of the measures set out in the priority areas for action.
162. Delivering a stable, long-term framework to encourage innovation and capital investment is absolutely critical. Political intervention by the Commission or Member States should be cautious, infrequent and long-lasting. Policy needs to be sensitive to national and regional differences and avoid setting specific targets.

Implementation

163. The definition and clarity of the main policy objectives, including the understanding and interpretation at a Member State level, needs to be reviewed and revisited. The evidence taken in this review clearly underlines

the risk of proceeding without objectives which drive and support consistent decision making across Europe.

164. Energy policy transcends a range of different policy areas, including competition, transport, environment and energy itself. A number of witnesses suggested a more co-ordinated approach was needed from the UK government, including the establishment of a “Department of Energy”, similar to the model used in the USA. In this regard, we support increased collaboration on energy related matters, within Member States and at a European level.
165. Given the complexity and importance of the associated issues, delivering effective European Policy on energy will require a significant degree of political will from all quarters. Compromise will be inevitable—the key is to identify where and how much. In our view, failure by the Commission or by Member States to set effective policy poses the risk of seriously compromising the welfare and security of this and future generations.

Other detailed recommendations

166. For ease of reference, summarised below are our more detailed recommendations, as listed elsewhere in the Report.
167. Chapter 3: A common approach to European Energy Policy?
- We recommend that the Commission seek to develop a business case which clearly articulates where it believes that a more centralised approach is required, on an item by item basis.
 - In our view, it is not necessarily clear whether all three objectives can be delivered in practice, particularly in a global context. The inherent tensions need to be specifically acknowledged and managed in a proactive fashion if delivery of the objectives in an efficient manner is to be a realistic proposition. Some form of compromise will be inevitable—the key will be to identify where and how much.
 - In our view, much more work is needed to properly define unambiguous outcomes for each objective, and fully explore and understand the key drivers of success, including a basis for measuring progress over time.
168. Chapter 4: Sustainability
- In our view, this position is symptomatic of the level of focus on energy efficiency and the Commission should consider whether responses from other Member States reflect a similar antipathy.
 - In our view, the EU ETS is an area where the Commission has a key role to play, responding to the early comments and promoting its merits on a global basis.
 - In our view, developing an energy policy which is sufficiently flexible to allow the inclusion of key, low carbon technologies, as and when they reach commercial scale, is critical to delivering sustainability.
169. Chapter 5: Competitiveness
- The evidence provided by witnesses leads us to conclude that the UK and/or the Commission do not appear to have effective high-level contingency plans to deal with issues which arise in the interim as a result of partial liberalisation in Europe. Given the uncertainty around

the potential timetable for full liberalisation, which may be a number of years away, this is a significant cause for concern with respect to the delivery of all three of the EC's main objectives.

- In our view, breaking the price-linkage between gas and oil is likely to result in gas prices finding their own, lower level through competition, which would then help to off-set the incremental costs associated with internalising the price of carbon.

170. Chapter 6: Security of Supply

- In our view, the fact that the majority of the evidence provided on energy security focused on the supply of gas alone, should be interpreted in a much broader context.
- In our view, LNG is not a single solution for security of supply and may even work against the UK if gas prices elsewhere are higher.

171. Chapter 7: Priority Areas for Action

- In our view, bringing to bear the power of an open and competitive market place through completion of the liberalisation process is imperative. The challenges Europe faces in delivering against its energy policy objectives will be fundamentally more difficult without the benefits of truly efficient markets, particularly with respect to stimulating capital investment and thereby enhancing security of supply.
- In principle, we support expanding the degree of inter-connection between Member States across Europe, through completion of the physical electricity and gas networks, although caution the Commission to be wary of the associated challenge in implementing common rules, standards and bases for contracting between counterparties. The Commission's role in this area should include completing the unbundling process through the separation of supply and generation assets from transmission and distribution assets.
- We do not support the creation of a single European energy regulator—in our view, individual Member States should focus on ensuring existing national energy regulators are truly independent, have the necessary range of powers and operate in a way which is consistent with established best practice.
- While we support improving the transparency of energy infrastructure capacity across Europe, we believe that the completion of the liberalisation process will go a long way towards resolving the issues which currently exist (including, for example, the problems experienced by the UK in Winter 2005/06). In this context, despite neutral or positive comments from witnesses in evidence, we do not believe that the case has been proven for the development of a European Energy Supply Observatory. Further, we do not agree with the need for a revision of Community legislation on gas stocks, which should be a matter reserved for individual Member States, as a consequence of local and regional differences between markets.
- We agree that diversifying across a broad range of energy sources is critical to meeting the Commission's main policy objectives, and in particular enhancing both security of supply and sustainability. However, we do not believe that setting a European-wide energy mix benchmark is

appropriate, as local circumstances vary widely. In our view, markets are best placed to determine the specific technologies and related proportions within the overall mix and stability through a long-term policy framework is critical to facilitating such investment, thereby providing incentives for the research, development and deployment of new technologies.

- We endorse the Green Paper's call for an Action Plan on energy efficiency—action to reduce the demand for energy and increase the proportion of renewables in the energy mix are both vitally important goals. However, we do not believe that setting targets is appropriate, as local circumstances vary widely—as with decisions around the energy mix, markets are best placed to determine how to achieve policy objectives in an efficient manner.
- We also encourage the Commission to respond as a matter of priority to the early experience around the EU ETS, with reference to broadening the scope of the scheme to cover other sectors, significantly increasing the term of the scheme, reviewing the rigour and integrity of the headline targets for carbon reduction, and considering the basis on which allowances are allocated, particularly with respect to using an open auction process. Despite the apparent short-comings of the scheme as it stands, the evidence provided to us in our investigation had a clear consensus—the EU ETS has the ability to make a real difference in Europe—and there is also a genuine opportunity for Europe to take the lead in the creation of a global carbon market.
- We endorse the Commission's proposals for a Strategic Energy Technology Plan. We note that the EU ETS has a key role to play in integrating the cost of carbon into energy prices—consequently the success of the scheme will ultimately be key in delivering new energy technology innovation, making low-carbon sources of energy competitive as compared to fossil fuel technologies.
- We endorse the Commission's proposals on developing a coherent external energy policy. Such a framework, if properly defined, will allow participants in energy markets across Europe to negotiate with third parties in a manner consistent with the delivery of the main policy objectives.

APPENDIX 1: MEMBERSHIP OF SUB-COMMITTEE B

The Members of the Sub-Committee which conducted this inquiry were:

Baroness Eccles of Moulton
Lord Fearn
Lord Fyfe of Fairfield
Lord Geddes
Lord Haskel
Lord Roper
Lord St John of Bletso
Lord Swinfen
Lord Walpole
Lord Woolmer of Leeds (Chairman)

Declarations of Interests:

A full list of Members' interests can be found in the Register of Lords Interests:

<http://www.publications.parliament.uk/pa/ld/ldreg.htm>

Members declared no interests relevant to this inquiry.

APPENDIX 2: CALL FOR EVIDENCE

1. The Internal Market Sub-Committee (Sub-Committee B) of the House of Lords Select Committee on the European Union is undertaking an inquiry into issues raised by the European Commission's Green Paper: "A European Strategy for Sustainable, Competitive and Secure Energy."

2. The Green Paper says that an approach based solely on 25 individual energy policies is not enough, that Europe must act urgently and that a new European market is needed. The Paper puts forward suggested options "that could form the basis for a new comprehensive European energy policy" and identifies "six key areas where action is necessary." These are:

- Competitiveness and the internal energy market—Is there agreement on the fundamental importance of a genuine single market to support a Common European strategy for energy?
- Diversification of the energy mix—What should the EU do to ensure that Europe, taken as a whole, promotes the climate-friendly diversification of energy supplies?
- Solidarity—Which measures need to be taken at Community level to prevent energy supply crises developing, and to manage them if they do occur?
- Sustainable development—How can a common European energy strategy best address climate change, balancing the objectives of environmental protection, competitiveness and security of supply?
- Innovation and technology—What action should be taken at both Community and national level to ensure that Europe remains a world leader in energy technologies?
- External policy—Should there be a common external policy on energy, to enable the EU to speak with a common voice?

3. The Green Paper expands on these issues and makes a number of proposals for future actions.

4. Sub-Committee B's inquiry will focus on **three questions**:

- (a) Does the Green Paper correctly identify the key issues for future energy policy in the European Union?
- (b) Does it appropriately identify those issues where, in future, the EU acting as a whole should be responsible for policy development and action?
- (c) Does it appropriately identify those issues where, in future, Member States should be responsible for policy development and action?

APPENDIX 3: CORRESPONDENCE WITH THE MINISTER

Letter from Mr Malcolm Wicks MP, Minister for Energy, Department of Trade and Industry to the Lord Grenfell, Chairman of the Select Committee on the European Union

EM 7070/06, COM (2006)105: UK RESPONSE TO EUROPEAN COMMISSION GREEN PAPER: A EUROPEAN STRATEGY FOR SUSTAINABLE, COMPETITIVE AND SECURE ENERGY

Following my appearance before your committee on 5 June 2006, I have pleasure in attaching copies of the UK's interim response to the European Commission on its Energy Green Paper ("A European Strategy for Sustainable, Competitive and Secure Energy"). The response comprises a covering letter, a 6-page summary and a 30-page response (30 page response not included herewith). As noted in the covering letter to DG TREN of 23 June, the UK will provide a supplemental response in September after the Energy Review has reported, but before the end of the Commission's consultation process.

Copies of the UK's interim response have already been sent to Jimmy Hood MP and to the individual members of the House Commons European Scrutiny Committee following my participation in the European Standing Committee C debate of 27 June.

I am also copying this letter to the Clerk of your Committee, Les Saunders (Cabinet Office European Secretariat) and Alison Bailey (DTI Scrutiny Coordinator).

4 July 2006

UK response to the Commission Green Paper: A European Strategy for Sustainable, Competitive and Secure Energy

SUMMARY AND PRIORITY ACTIONS

The UK welcomes the Green Paper which provides a good framework for developing a European approach to energy policy. As the conclusions of the Spring European Council 2006 recognised it is an important step building on the agenda set by Heads of State and Government at Hampton Court.

This paper sets out the UK's initial thinking on some of the proposals in the Green Paper. The ongoing UK Energy Review precludes a complete response at this stage, but the UK expects to be able to submit such a response before the end of the Commission's consultation period.

The UK shares the Commission's analysis that a coordinated European response to global energy policy challenges is necessary which can contribute to economic growth, ensure security of supply and protect the global environment. In particular the UK would identify 3 key challenges on which the EU must cooperate:

- the need to complete the single market for energy
- the need to ensure diverse and reliable supplies in the face of Member States' increasing dependence on external energy sources
- the need to ensure that our energy policy is compatible with, and reinforces, our climate change objectives

Strategic EU Energy Review

The UK strongly endorses the proposal to establish a framework for regularly reviewing the EU's energy policy and identifying an action plan for endorsement by the European Council. To be most effective the Strategic Energy Review must identify specific proposals for action at the appropriate level, focussing on the key challenges described above. In particular, the Strategic Energy Review should provide information to the market about market developments and review the state of the EU's external energy dialogues. The UK supports the Commission's intention to bring forward the first Strategic Review for the December European Council to enable preparatory discussions to take place.

Action to complete the internal gas and electricity markets

The UK agrees with the Commission that rapid completion of the internal market is a priority. Concrete proposals that should be considered should be identified in the first Strategic Review.

- **Development of a European Grid:** The UK agrees that barriers to cross-border trade need to be removed through a common approach on regulatory issues that affect cross-border trade and investment although it is not necessary to develop a European Grid Code as the term is generally understood. Nor is it necessary to establish new institutions such as a European regulator or European Centre for Energy Networks. Rather the focus should be on enhancing cooperation and information exchange between national regulators and TSOs, promoting transparency of markets and ensuring the independence of national regulators, with sufficient powers for them to be able take into account cross-border issues.
- **Improved interconnection/Creating the framework to stimulate new investment:** The first step must be to ensure effective use of existing capacity through congestion management procedures and scrutiny of grandfather rights. New investment in interconnection should be led by the market; action should therefore focus on establishing a clear and consistent regulatory framework that facilitates cross-border investment. Specific action should include broadening the remit of national regulators (see above), clarifying the regulatory treatment of long term contracts and streamlining planning procedures.
- **More effective unbundling:** The UK agrees that effective unbundling is a priority to achieve a genuinely competitive market. Experience of legal unbundling suggests further action is necessary. If independent network operation cannot be ensured under the existing framework the UK would support ownership unbundling.
- **Boosting competitiveness through better coordination between regulators, competition authorities and the Commission:** The UK strongly supports steps to improve cooperation between relevant authorities in order to underpin establishing and developing an efficient and effective internal market. Strict application of competition rules and enforcement of EU legislation are both necessary. Existing initiatives such as regional cooperation launched by ERGEG and the European Competition Network should be built upon.

Ensure the internal market guarantees security of supply: solidarity between Member States

- Review of EC legislation on oil and gas stocks/Improved transparency on energy stocks: The UK supports the IEA lead on oil emergencies in view of the oil market's global nature and successful response to Hurricane Katrina. Efforts on improving transparency of oil stocks should focus on the quality and relevance of the existing data provided rather than increasing the frequency of publication. The UK is reviewing gas security of supply in the context of the UK Energy Review.
- Establish a European energy supply observatory, enhancing transparency: Information about and analysis of the EU energy market is essential for proper market functioning, but new institutions are not necessary to achieve it.
- Improved network security through increased cooperation: Enhancing cooperation between TSOs would enable sharing of best practice in emergency planning. Existing coordination mechanisms at Government level, such as the IEA on oil and the EU's Gas Coordination Group (Directive 2004/67/EC) provide appropriate fora for providing any added value at that level.
- Greater physical security of infrastructure: the UK does not consider work on critical infrastructure protection, with a view to establishing common standards, adds value to EU energy infrastructure protection. Infrastructure should be protected on a risk-assessed basis; common standards are very unlikely to deliver an appropriate answer in all cases. What is proposed duplicates existing responsibilities and measures or is otherwise unnecessary.

The UK firmly believes that the make-up of a nation's energy mix is a matter of subsidiarity. In the UK, the market, within an overall policy framework set by the Government, determines the fuel mix. The UK, however, does support the development of an overall strategic objective based on an EU wide energy mix benchmarking assessment. The UK envisages that this exercise would evaluate the EU mix composition in terms of sustainable energy use, competitiveness and security of supply and would form a strong evidence base for the development of future objectives proposed in the annual Strategic EU Energy Review to be agreed by the Council and Parliament.

Dealing with the challenges of climate change in a manner compatible with Lisbon objectives

The UK agrees with the emphasis on ensuring EU policy on energy and climate change are compatible and reinforce each other. Clean energy technologies, renewables and energy efficiency have a key role to play in reducing carbon emissions. In this context, the EU Emissions Trading Scheme is the most effective market based instrument for both delivering climate friendly energy production and improving security of supply. We should try to extend this to third countries. Agreement on the long-term shape of the scheme will provide the certainty needed for investment decisions and promoting low-carbon technologies.

- Prioritising energy efficiency: The UK agrees this is the most effective way of addressing our energy security, environmental and competition objectives. The Energy Efficiency Action Plan should be ambitious and

realistic, and incorporate a long-term focus going beyond Kyoto commitments. The focus should be on creating a framework for action by Member States, which recognises the different circumstances they face and provides the flexibility for tailored action. This approach should be applied to the range of specific actions proposed by the Commission.

- Adopting a road-map for renewable energy sources: The UK supports this proposal which should help maintain EU leadership in renewable energy. The road-map should be centred on the establishment of a strong market framework and policy measures to provide the incentives necessary to deliver our clean energy goals. Consideration of specific proposals on targets, new legislation on heating and cooling, bio-energy and bringing renewables energy sources closer to markets will need to be judged against whether they support the overall objective and whether they could be effectively implemented.

Strategic energy technology plan

The UK supports the proposal to establish such a plan to facilitate prioritisation and effective support mechanisms. Reviewing financing mechanisms for a more strategic approach, particularly with a view to mobilising the EIB to promote near market R&D is required. The UK believes that clean energy technologies and energy efficient technologies should form the cornerstone of the proposed Technology Plan.

A common external energy policy

The UK strongly supports developing a clearly defined external energy policy which is pursued consistently at every level and promotes a more collective dialogue with our major suppliers, current and potential transit countries, and major energy consumer nations. This needs to be developed in a transparent and open manner to ensure it commands the support of all involved. Existing partnerships, dialogues etc need to be reviewed.

The UK agrees that energy should be integrated into other policies with an external dimension. Much greater focus ought to be placed on climate change, energy efficiency, global market access, investment trends and security of energy supplies in relations with global partners. The EU should consider widening the geographic scope of the EU ETS and making concrete use of trade policy tools to support the European Energy Policy.

- Identify priorities for the construction of new infrastructure necessary for the security of EU energy supplies: The UK supports increasing transparency and the availability of accurate intelligence and analysis on all aspects of demand and supply, including potential priorities for the development of new or upgrading of existing infrastructure. An approach based on the increased availability of reliable information to enable market operators to make fully informed decisions will stimulate competitive investment. The EU should not be prescriptive about the interconnections that should be built.
- a pan-European Energy Community: the UK strongly supports the extension of the Energy Community Treaty to Turkey, Ukraine and Moldova. A similar approach should be adopted, through Euromed arrangements, to extend the principles to Euromed partners.

- a new energy partnership with Russia: the UK is prepared to consider a new initiative with Russia, within the framework of the PCA successor arrangements, only if it is based on fair and reciprocal access to market infrastructure including third party access, Russian ratification of the Energy Charter Treaty and Transit Protocol.
- reacting effectively to external crisis situations: the UK considers that our efforts might be better directed at bringing together foreign policy and energy experts, under existing mechanisms to fulfil the necessary horizon-scanning and emergency co-operation functions.
- deepening energy partnerships with producers, transit countries and other international actors: the UK supports active engagement with key players particularly in the Caspian, Central Asia and Mediterranean states. The dialogues should have clear and focused objectives, be transparent and have the active involvement and support of Member States. Initial priorities should be to facilitate the transport of Caspian oil and gas, and co-operation with Algeria, which is capable of producing tangible results
- international agreement on energy efficiency: a co-ordinated global agreement on energy efficiency could have merit, depending on what it might actually contain and how it would interact with, or build on, the existing range of international initiatives to promote energy efficiency.

23 June 2006

APPENDIX 4: LIST OF WITNESSES

The following witnesses gave evidence. Those marked * gave oral evidence.

- * Association of Electricity Producers
- British Nuclear Fuels PLC
- BP
- * Centrica
- * Department of Trade and Industry
- * Energy Intensive Users Group
- * E.ON UK
- * Gas and Electricity Markets Authority
- International Association of Oil & Gas Producers
- International Energy Agency
- Sir Donald Miller F.Eng. FRSE
- National Grid
- Nuclear Industry Association
- * Office of Gas and Electricity Markets (Ofgem)
- RWE npower
- Shell U.K. Limited

APPENDIX 5: RECENT REPORTS

Recent Reports from the Select Committee

Session 2005–06

The Services Directive Revisited (38th Report, HL Paper 215)

EU Legislation—Public Awareness of the Scrutiny Role of the House of Lords (32nd Report, HL Paper 179)

Ensuring Effective Regulation in the EU: Follow-up Report (31st Report, HL Paper 157)

Annual Report 2005 (25th Report, HL Paper 123)

The Work of the European Ombudsman (22nd Report, HL Paper 117)

Scrutiny of Subsidiarity: Follow up Report (15th Report, HL Paper 66)

Evidence from the Minister for Europe—the European Council and the UK Presidency (10th Report, HL Paper 34)

Ensuring Effective Regulation in the EU (9th Report, HL Paper 33)

Evidence by Commissioner Franco Frattini, Commissioner for Justice, Freedom and Security on Justice and Home Affairs Matters (1st Report, HL Paper 5)

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