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Energy for a Changing World: The New European Energy Policy

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Ladies and gentlemen.

The world today is facing a massive energy and environmental challenge, a challenge that is particularly acute for Europe.

Let me first consider energy security. According to the International Energy Agency, on a business-as-usual scenario, world energy demand is set to increase by more than 50% by 2030. Demand for oil alone is expected to grow by 41% during this period. This level of sustained growth is unprecedented. The risk that this brings to the world's economy is obvious. Oil and gas reserves are increasingly concentrated in the hands of a few countries that control them carefully through a national monopoly company. As the IEA states: "the ability and willingness of major oil and gas producers to step up investment in order to meet rising global demand are particularly uncertain....rising oil and gas demand, if unchecked, would accentuate the consuming countries' vulnerability to a severe supply disruption and resulting price shock". It is becoming increasingly clear that without real and effective action, we will simply end up consuming more energy, polluting the atmosphere more, and accelerating climate change.

The potential effects of this on Europe must be cause for concern - our dependence on imported oil and gas is growing. Today we import about 50% of our energy. By 2030, if we do not act, it will be 65%, with much of the increase being made up of oil and gas from a handful of suppliers that - like OPEC - can have a major influence in deciding the price that we pay. The potential effects of this on our economy are serious - if oil prices increased to 100\$ per barrel by 2030, the EU's annual energy import bill would increase by some 170 billion Euros, €350 more for every EU citizen. Almost none of this would bring additional jobs and wealth to Europe.

And this continual increase in energy consumption is not just a threat to the global economy. Climate change is serious and it is happening today. The scientific evidence is now practically unanimous and is overwhelming. On present trends, the world's output of CO_2 - which accounts for 75% of all greenhouse gases, will increase by 55% by 2030. The EU's emissions are set to increase by 5% during this period. If we let this happen the results on or environment, on our economy, and our way of life will be tremendous; not only for developing countries but also Europe. The evidence is clear:

- the ice caps and glaciers are already melting, and this is just the beginning. This is set to accelerate, causing rising sea levels; some predict as much as 6 metres. In any event, a 1 meter rise is already serious for Europe, yet alone numerous cities around the world. The consequences in terms of potential refugees is serious.
- increases in temperatures will have very serious effects in many areas, on the standard
 of living, on water availability and on agriculture. And these increases will be higher in
 some areas than others. The potential effects in Southern Europe and particularly Africa
 must be of concern to us all. The failure of the rains in the Great Rift Valley last years
 gave us a foretaste of the possible future.

If we allow this to happen, we will leave a legacy to our children and grandchildren that they can, at that stage, do nothing about. CO_2 that we emit today stays in the atmosphere for 100 years. Few yet seem to realise it, but in reality climate change is real, it will affect us as individuals, and it will damage the lives of our children and grandchildren. We have caused it, but now have to prevent it. Acting now is a moral and economic obligation, not an option.

Furthermore, the present direction of Europe's energy policy will fail to contribute to Europe's competitiveness. The EU's labour costs are higher than those of many of our emerging competitors and this will not change; but we cannot let our overall cost of capital increase. So

we need a knowledge based economy, the foundation of the Lisbon initiative. The EU today is world leader in many energy technologies, but we are now being out-spent in research in new, low carbon technologies. This is a missed opportunity.

In addition, the Internal Electricity and Gas Market - a vital element in ensuring competitive energy prices for Europe's businesses and citizens, is not yet performing as it needs to. This not only threatens Europe's competitiveness, it prevents the emissions trading mechanism from working effectively and threatens our security of supply. Without effective competition the proper investment signals do not develop - vital at a time when existing European infrastructure and electricity plants are reaching the end of their useful life and investment for generation alone of €900 billion is needed in the EU over the next 25 years.

Today, the EU does not have a common energy policy fit to deal with these challenges. It has, for example, a series of diverse measures on liberalisation, renewable energy and energy efficiency. But these cannot be described as a coherent set of inter-linked policies, working seamlessly at Community and Member State level, putting the EU on track to meet these challenges. Once again, without such a vision and a coherent European framework, we will end up using more energy, importing more energy, emitting more CO_2 and we run every risk of having fragmented national electricity and gas markets dominated by a single or handful of incumbents.

In many respects, this is surprising, because energy is at the very origins of the creation of the EU. The original Messina Declaration, of 1955 stated that "To these ends, the ministers have agreed on the following objectives: ...putting more abundant energy at a cheaper price at the disposal of the European economies..." The first EC Treaties dealt with coal and then nuclear the key energies of the time. Yet the present EU Treaty has no specific provisions on energy at all similar to those for agriculture, fisheries and transport.

The need for a new European Energy Policy is self-evident. These are challenges that no Member State can deal with alone. Indeed, in many respects they are challenges that Europe cannot deal with alone - climate change and exploding energy demand are global problems, requiring a global response.

This has been recognised by the EU's Heads of State and Parliament, asking the Commission to put forward exactly such a European Energy Policy, which the Commission has tabled on January 10th. This proposes the most wide-ranging reform of Europe's energy policy ever attempted, fundamentally changing the direction in which we are heading. The energy package put forward by the Commission contains a core strategic energy objective contained in the Strategic Energy Review and is accompanies by a concrete Action Plan to achieve it, based on 7main documents:

- the Internal Market Review and final conclusions of the Sectoral Competition Enquiry;
- the Action Plan on Energy Efficiency, already adopted by the Commission last September;
- the Long Term Renewables Road Map and Renewable electricity and Biofuels Reports;
- The Communication preparing a Strategic Energy Research Initiative;
- The Priority Interconnection Plan;
- The Communication on Sustainable Fossil Fuels;
- The Illustrative Nuclear Programme

The point of departure of this new European Energy Policy, contained in the Strategic Energy Review is therefore a key vision or objective; a benchmark on which to measure progress in redirecting our energy economy to one that will achieve the objectives of sustainability, competitiveness and security of supply. This core objective proposes that we redirect our energy policy to enable the EU to achieve a 20% **reduction of the greenhouse gas emissions that it produces by 2020** compared to 1990 levels.

This unilateral 20% target needs to be seen in the context of the need for international action on climate change. When such a commitment will exist, the EU will need to do more, with an increased target of 30% reduction by 2030 and 60-80% by 2050. But we cannot do this alone.

We need however, in our own interest, to take the steps to achieve the 20% target today. Such a core objective is by no means just about climate change, it is also about Europe's security of energy supply. Even without global warming, we should be making such a step. Achieving the 20% objective can limit the EU's growing exposure to increased volatility and prices for oil and gas, bring about a more competitive EU energy market, and stimulate technology and jobs.

With CO_2 emissions from energy making up 75% of EU greenhouse gas emissions, the contribution of energy to meeting this core objective is enormous. It is a huge challenge: in energy specific terms, meeting this overall greenhouse gas target will require the EU to reduce the amount of CO_2 from its energy use by at least 20%, and probably more, in 13 short years. It means therefore progressively transforming Europe into a highly energy efficient and low CO_2 energy economy. It is means nothing less than the EU taking global leadership in catalysing a **new industrial revolution**, accelerating the change to low carbon growth and dramatically increasing the amount of local, low emission energy is produced and used.

Europe's energy policy must also contribute to our competitiveness. Therefore, it has to guarantee a move to more effective and competitive electricity and gas markets within its borders, it has to put the EU at the forefront of the emerging multi-billion Euro market for low carbon and energy efficient energy technologies and it has to move towards a low CO2 in the most intelligent and cost-effective way possible.

The Commission therefore proposes not just a new strategic target to shift the direction of Europe's energy policy. It has equally tabled a concrete, coherent Action Plan: 7 inter-linked measures that will put us on course to achieve it.

The first of these concerns the Internal Energy Market.

Without an Internal Energy Market that is truly characterised by intense European-wide competition, none of the EU's core energy objectives will be achieved. Prices will be higher than necessary, the emissions trading mechanism will fail to work properly, and incumbents will have the ability and incentive to limit investment in new infrastructure, inter-connection capacity and generation, increasing the risk of black-outs and unnecessary price surges.

The Internal Energy Market Communication and the final Report on the Competition Sectoral Enquiry demonstrate that the present rules and measures have not yet achieved our objectives. The lack of progress is leading Member States to impose generalised caps on electricity and gas prices, preventing the Internal Energy Market from functioning, suppressing price signals that new capacity is needed, and making it harder for new entrants to compete. This situation cannot continue. The Commission considers that a coherent series of measures now need to be taken.

The first of these measures concerns unbundling. Without effective separation of networks from competitive activities there is an inherent risk not only of discrimination, but possibly more importantly, of a disincentive on vertically integrated companies from investing adequately in their networks, since the more they increase network capacity, the greater the competition that exists on their "home market" and the lower the market price.

The Commission believes that there are two options that might be considered to redress this: a full Independent System Operator (where the vertically integrated company remains owner of the network assets and receives a regulated return on them, but is not responsible for their operation, maintenance or development) or ownership unbundling. Of this two, the Commission considers that ownership unbundling is the preferable option; it resolves these issues clearly and cleanly, reduces the need for expensive and intrusive regulation and is the only mechanism that can really eliminate the disincentive on new investment caused by vertical integration.

Secondly, the Commission proposes an improvement in the effectiveness of energy regulation.

There are today major differences between Member States regarding the powers and effectiveness of national energy regulators. This therefore needs to be harmonized on the basis of the highest, not the lowest, common denominator in the EU and regulators must be given not only the task of promoting the effective development of their national market, but also that of promoting the development of the Internal Energy Market.

In addition, despite the creation of the European Regulators' Group for Electricity and Gas (ERGEG) and the electricity and gas regulations, insufficient progress has been made in harmonising the technical standards necessary for cross-border trade to function. A step change is necessary. Whilst one approach could be to continue to gradually evolve the current

approach, the Commission does not believe that this should be followed – we need progress today. The Commission therefore considers that formal decision-making powers should be given to a new body set up at Community level, with the power to adopt binding decisions on technical issues and mechanisms relating to cross border trade. An alternative possible, but less ambitious approach, would be to significantly strengthen the existing ERGEG body, developing a European Network of Regulators with the task to structure binding decisions for regulators and relevant market players, such as network operators, power exchanges or generators, on technical issues and mechanisms relating to cross border issues. It would need the appropriate involvement of the Commission, where necessary, to ensure that due account was taken of the Community interest.

It is worth noting, however, that these changes would not seek to create a "European Regulator", national regulators would remain individually responsible for the core regulatory tasks of tariff setting and grid codes.

In addition to these two key measures, the Commission also suggests new measures on:

- Transparency new measures setting minimum requirements to be respected by all EU companies, similar to that already adopted for telecommunications
- Infrastructure Identifying the most significant missing infrastructure and ensuring pan-European political support to make progress, appointing European co-ordinators to pursue the most problematic priority projects, agreeing a maximum of 5 years within which planning and approval procedures must be completed for projects "of European interest" and establishing a new Community mechanism and structure for Transmission System Operators, responsible for co-ordinated network planning.
- a new Energy Customers' Charter with the goals of tackling fuel poverty, improving the level of information available to citizens and protecting customers from unfair selling practices.
- Network security As you can see from the slide behind me, recent failures in network security have to be prevented in the future, they affect us all and are unacceptable. The new Community Transmission System Operators mechanism should also be tasked with proposing common minimum security standards. These would become binding following approval by energy regulators, and finally
- Putting these proposals into practice requires difficult decisions to be taken. But this has
 to happen if we to are guarantee the development of a European Energy Market that
 really meets the needs and concerns of Europe's citizens as energy consumers and in
 terms of competitiveness, jobs and growth. On the basis of a full cost-benefit analysis,
 the Commission will table formal legislative proposals the third liberalisation package
 on these issues during 2007.

The second key area of the new European Energy Policy concerns solidarity between Member States and security of supply for oil, gas and electricity. The Commission proposes a series of measures to promote diversity of energy source, supplier, transport route and transport method, as well as effective mechanisms to ensure solidarity between Member States in the event of an energy crisis. This is particularly important given that a number of Member States are highly or completely reliant on a single gas supplier. In particular, the Commission will monitor implementation of the Gas Security Directive^[1] recently transposed by Member States and assess its effectiveness and examine ways to strengthen existing crisis solidarity mechanisms. In addition, in 2007, it will consider how the EU's contribution to the IEA's strategic oil stocks mechanism could be improved. Regarding strategic gas stocks, it is clear that they would help security of gas supply and address short term supply disruptions, such as accidents to gas pipelines. However, this would imply major new investment in new storage and pipeline capacity, to be used only in the event of emergency. An exhaustive cost-benefit analysis is needed before EU consumers are asked to pay these costs.

The third area for concrete action proposed by the Commission concerns an ambitious programme of energy efficiency measures at Community, national, local and international level

Of all the proposals put forward in the new European Energy Policy, efficiency has the potential to make the most decisive contribution to the EU's sustainability, competitiveness and security of supply.

On 19th October 2006 the Commission adopted the Energy Efficiency Action Plan^[2], containing priorities and a long list of specific measures to achieve a 20% improvement in energy efficiency by 2020. This would mean the EU using approximately 13% less energy in 2020than today, saving €100 bn and around 780 millions tonnes of CO₂ each year.

This is truly ambitious, and we should not underestimate the difficulty in achieving it. Doing so will require real commitment at all levels of European society. The challenge will be now to take this forward, and it is my intention that during the remainder of this Commission we will roll out a major programme of new legislation covering transport, labelling, buildings, taxation and, finally a new international agreement on energy efficiency. This could bring the OECD and key developing countries (such as China, India and Brazil) together to banproducts failing to meet minimum standards and agree common approaches to saving energy. The Commission intends to table the basis for a proposal in the first half of 2007 which could then be and taken forward during a major international conference during the German G8 Presidency. We should adopt the aim of signing it during the Beijing Olympic Games. The potential energy saving and CO_2 reduction is enormous - improved energy efficiency alone could cut, according to the IEA, around 20% of current global CO_2 emissions.

I would now like to discuss the fourth concrete area where the Commission proposes concrete action: renewable energy.

It is a simple fact that if we do not shift in our energy mix in a major way towards renewable energy over the next 13 years and beyond, we will have no chance whatsoever of hitting the key energy goal of reducing greenhouse gas emissions by 20%.

So a major increase is renewable energy is a precondition for meeting our core energy objective. But we should be doing this even if climate change was not happening. Together with energy efficiency renewable energy is practically the only way that we can limit our increasing dependence on imported hydrocarbons. The IEA's recent World Energy Outlook paints a very clear picture: given rapidly increasing demand, by the end of this decade the spare production capacity needed to meet subsequent increased demand will be very concentrated indeed. Consider again the consequences of the following conclusion of the IEA: "the ability and willingness of major oil and gas producers to step up investment in order to meet rising global demand are particularly uncertain".

To meet these challenges the Commission proposes that a commitment is made to **increase the level of renewable energy in the EU's overall** mix **to 20% by 2020**. Targets beyond 2020 would be assessed later in the light of technological progress.

This is tremendously ambitious. Despite agreeing an EU objective of ensuring that 12% of our energy mix is renewable by 2010, we are unlikely to exceed 10%. There has been real progress, particularly in wind and biofuels, but this has been concentrated in a few countries, such as Germany and Denmark. So the Commission is proposing nothing less than a new industrial revolution in energy policy, increasing the present level of non-hydro renewables – such as wind, solar, pv, biomass, and biofuels - by more than 6 times present levels in about 12 years.

It is truly ambitious, but also possible, with major increases in wind and the development of a major off-shore European supergrid, more biomass for heating, biofuels will need to become a real and every day part of the lives of European citizens, more solar and pv and new technologies such as wave.

However, to make it a reality, it requires three things.

Firstly, real commitment by Member States, not just promises. Experience with previous Directives shows that European renewables objectives are only really effective when they are combined with national, legally binding targets. These are necessary to ensure that all Member States play their fair part, guaranteeing a level playing field, promoting economies of scale and, above all, providing the transparency and predictability necessary to promote investment in production and research. Indicative targets, however attractive, will not produce the results we need.

Secondly, we need to get the cost of renewable energy down. Today, generally speaking it is more expensive than "traditional" energy sources, even taking into account a carbon price of 20 € or more. This is however an opportunity for Europe as much as it is a challenge. The global market for renewable and low carbon energy technologies is expanding exponentially and the European Union is already the global leader in many of these areas. Anyone who has really looked at the science behind climate change can only conclude that this is only the beginning of

growth in this worldwide market. In wind energy, for example, EU companies have 60% of the world market. The EU already has a renewable industry accounting for a turnover of \in 10 billion and employs 200,000 people^[3]. Europe's determination to lead the global fight against climate change creates an opportunity for us to drive the global research agenda. I will return to this shortly.

Thirdly, given the level of ambition of these targets, Member States need to be given the flexibility of developing the type of renewable energy best suited to their own particular circumstances. Each Member State should have a legally binding national renewable energy target, but within this, they should be free to determine the precise mix between renewable electricity, biomass for heating and cooling, and biofuels. They will need to establish National Renewables Action Plans, verified by the Commission, determining the choice between these three renewable sectors and identifying the measures they will take to achieve them. However, a minimum and common biofuel target of 10% of the fuel mix by 2020 is necessary for all Member States. Without this, an EU-wide biofuels industry will not develop, because of the need for burden-sharing and the necessity to create a real Internal Market for biofuels.

A new Umbrella Directive will be put forward by the Commission in 2007 to make this a reality. Until this is adopted, the current rules and targets will remain in place.

I would now like to return to research, the next key part of the European Energy Policy Plan. It is a regrettable fact that Europe is not the clear leader in research into the next generation of low carbon and renewable technologies. There is clear evidence that despite a doubling of funds in the 7th framework programme for energy over the 6th, the US, Japan and China are moving ahead more quickly. Europe is missing an opportunity; it needs to profit from its commitment to deal with climate change - pricing carbon through the emissions trading mechanism - and to use this as a springboard to develop an innovation driven energy sector, leading the world and creating enormous export and job creation opportunities for Europe. In 2007 the Commission will therefore table a European Strategic Energy Technology Plan.

This will set clear objectives and targets for Europe's energy research and technology, such as developing second generation biofuels to become fully competitive alternatives to hydrocarbons, getting large scale offshore wind competitive within the short term and paving the way towards a European offshore supergrid, getting photovoltaic electricity competitive to harness solar energy, making quicker progress in fourth generation fission nuclear reactors and future fusion technology and developing better sustainable coal and gas technologies, particularly carbon capture and storage. These are just examples, in 2007 we shall propose a concrete programme to better coordinate existing resources, to use them in a more targeted and focussed manner and, where necessary, invest more. The European Spring Council of 2008 will need to conclude on this.

A related issue concerns the next area where the Commission believes progress needs to be made: moving towards a low CO2 fossil future. China is building a new coal power plant every week. Russia, India and many other regions of the world are also stepping-up generation from coal. The IEA expects twice as much electricity to be produced from coal by 2030. That would release around 5bn tonnes of CO2, representing 40% of the expected increase in global energy-related CO2 emissions

Put quite simply, without clean coal and capture and storage, the post pessimistic scenarios regarding global warming put forward by scientists – an increase of 5°C above current levels – look practically certain to occur. This would be truly disastrous.

For Europe as well, without these technologies from 2020 onwards, we will not be able to meet our greenhouse gas emissions objectives. In our own interest therefore, we need to take world leadership in this area, to bring our own long term emissions under control and to be at the forefront of what will most certainly become a multi-billion Euro global market in the future. In addition to clean coal and sequestration being key elements of the Strategic Technology Initiative, the EU needs to provide a clear vision for the introduction of CO₂ capture and storage, to establish a favourable regulatory framework for its development, and to take international action.

In 2007, therefore, the Commission will start work to design a mechanism to (i) stimulate the construction and operation by 2015 of up to 12 large-scale fossil fuels demonstration plants in the EU and (ii) provide a clear perspective when coal- and gas-fired plants will need to install $\rm CO_2$ capture and storage. On the basis of existing information, the Commission believes that, in principle, by 2020 all new coal-fired plants will need to be fitted with $\rm CO_2$ capture and storage and existing plants should then progressively follow the same approach.

I would now like to turn **to the role of nuclear** in the European Energy Policy. First, some facts. At present nuclear electricity makes up 30% of EU electricity. It raises important issues regarding waste and decommissioning, but is the largest EU low-carbon energy source today. Nuclear electricity is also one of the cheapest sources of low carbon energy presently produced in the EU. It has relatively stable costs, uranium reserves are sufficient for many decades and they are widely distributed around the globe.

It is for each Member State to decide whether or not to rely on nuclear electricity. However, in the event that the level of nuclear energy reduces in the EU, it is essential that this reduction is phased in with the introduction of other low-carbon energy; otherwise the objective of cutting Greenhouse gas emissions will be doubly difficult to meet. In short, the EU needs an objective debate on this issue; there are no longer – aside from energy efficiency – any easy energy choices and the challenge we face is enormous.

At EU level, the role should be to develop further the most advanced framework for nuclear energy in those Member States that choose nuclear power. This should include nuclear waste management and decommissioning. The EU should also continue their efforts to ensure that such high standards are observed internationally. In order to make progress the Commission proposes to establish an EU High Level Group on Nuclear Safety and Security with the mandate of progressively developing common understanding and, eventually, additional European rules, on nuclear security and safety.

Finally, I would like to consider the need for a **common External EU Energy Policy**. It is illusory to think that Member States can deal with today's energy challenges on their own. Indeed, the EU can not deal with them in isolation. Global warming is a global challenge and improved security of oil and gas supply will only result from real international action to limit growth in demand and improved cooperation and transparency between producers and consumers. The EU can set the pace on these issues, but it needs to bring the US, China, India, Japan and its other partners onboard. We can only do this if Europe speaks with one voice. Equally to protect its interests in its own neighbourhood, we need to act as one.

The European Council has already endorsed a long-term framework to achieve these objectives at the Lahti Summit and the December European Council and has agreed to establish a network of energy security correspondents which will offer a practical demonstration of how the EU can respond in times of pressure. The challenge is now to put this into practice. The priorities to be pursued during the next three years are:

The EU has to be a key driver in the design of international agreements, including the future of the Energy Charter Treaty, the post-Kyoto climate regime, the extension of emissions trading to global partners and the development and deployment of clean and renewable energy technologies.

We need to develop a pan-European energy market, providing transparency, predictability, mutual confidence, security and prosperity to the EU and its neighbours. This includes (i) deepening the Energy Community Treaty between the EU and countries of South-East Europe; gradually incorporating other neighbouring countries. The recent admission of Moldova, Norway, Turkey and Ukraine as observers can be seen as a first step; and (ii) pursuing similar objectives through the 'Euromed energy cooperation'.

We need to further enhance relations with our main energy suppliers, particularly Russia through the negotiation of a new Partnership and Cooperation Agreement; Norway through the Joint EC-Norway Energy Cooperation Group, and Algeria, through a new strategic energy partnership. Similarly, we need to deepen the EU-OPEC dialogue through joint projects and further develop energy relations with the Gulf Cooperation Council.

In addition, we need to dramatically improve our energy relations with countries of the Caspian and Black Sea regions, developing a real energy partnership and taking the concrete measures necessary to make independent gas supplies from this region to the EU a reality. In this respect, the proposal to appoint a European Co-coordinator for the Nabucco gas pipeline from the Caspian basin to Hungary is important.

We will also need to continue to develop closer energy relations with other major consumers, notably the US and China. Thos will need to address climate change, technological cooperation, the implementation of carbon sequestration projects, and the clean development of biofuels to name but a few. As a first step, as I have already mentioned, the Commission proposes to formally table an international agreement on energy efficiency during the first part of 2007. This

needs to be pursued with real determination and we should aim to conclude it during the Beijing Olympic Games.

Finally, I would like to mention Africa and many other developing countries; again an opportunity and a challenge. Many of these areas are emerging energy producers and Europe risks getting left behind as a partner in sustainably developing these resources. As a fist step a comprehensive Africa-Europe Energy partnership should be developed, launched through a joint event at the highest level in 2007.

In addition, the energy developments that will take place in Europe over the next two decades represent real opportunities for improving the lives of the world's poorest. Like Europe, many of these countries are dependent on energy imports. The recent oil price rises have effectively cancelled the effect of development aid in some countries. Africa in particular offers a unique opportunity to use renewable energy technology in a competitive manner. It can by-pass the need for transmission grids and "leap-frog" to a new generation of clean, local low carbon energy sources and technologies – as already seen for mobile telecommunications. This is a real "win-win" opportunity, increasing the penetration of clean renewable energy and bringing electrification to some of the world's poorest citizens. A special effort will be needed in Sub-Saharan Africa, where rates of access to electricity are the lowest in the world. This will be a development priority for the EU.

Taken together, these 7 areas represent the Action Plan, the concrete basis for a new European Energy Policy. It is truly ambitious. It is a vision of Europe with a thriving and sustainable energy economy, that has grasped the opportunities behind the threats of climate change and globalisation, gained world leadership in clean, efficient and low-emission energy technologies and become a motor for prosperity and a key contributor to growth and jobs. It is the beginning of a new industrial revolution in energy. To achieve this vision we need to act jointly and urgently,

- making a truly competitive and European Internal Energy Market a reality in just a few years,
- developing really effective energy solidarity mechanisms benefiting all Member States,
- recognising that energy efficiency is not just a policy instrument but a daily opportunity and challenge for every EU citizen, business and government office;
- revolutionising our energy mix by multiplying by six times the amount of non-hydro renewable energy we use in just 14 tears;
- investing more and better in low carbon and renewable technologies, putting the EU at the forefront of this global industry.
- having a real debate on the role of nuclear; and
- speaking with one voice on the international stage, catalysing real change.

Ladies and gentlemen,

As I stated many times during this presentation, this is not just a challenge, it is an opportunity, and I am convinced that for those who seize it, the rewards will be great. Let us do so.

Thank you.