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Keynote speech

**« Fundamentals for the Short-Term:
Missing Pieces in Europe's Energy Jigsaw »**

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Good Afternoon.

I am very pleased that we are meeting here today, one year on from Bologna. One of the best things about our annual conferences is that we can review what has changed in the past year.

And it gives me great pleasure to say that we have seen positive development, with big steps forward in two areas.

First, I believe there is a growing awareness in Europe of the major strategic challenges before us. The first major step forward is a better understanding of the situation.

It was high time. Some of the assessments we were hearing were questionable. Europe as a whole was wrong about some of the key issues. We had thought that fossil fuel prices would continue to rise. But the price of coal has fallen. We assumed the cost of renewable energy sources would come down quickly. Today, they are subsidised in Europe to the tune of more than 50 billion euros a year. Europe believed it was setting the example in environmental protection. Yet coal-fired generation, which emits the most CO₂, is making a strong comeback.

We all know where this has left us; EURELECTRIC has in fact spent a good deal of time explaining it recently. Market prices will not ensure investment in any technology unless solid guarantees are in place. In the meantime, the energy industry is finding itself in a situation with extremely low wholesale prices and very high retail prices.

What I believe people now understand is that there is only one way for Europe to compete with the United States in a global economy: it has to decarbonise its electricity at a reasonable cost and use more electricity to fuel its economy. To achieve this, Europe must be less dependent on external sources. The current geopolitical crisis is a reminder of this.

The other good news is that some recent decisions show that we are beginning to take steps in the right direction.

The much-needed reform of the ETS is under way. And the first issue – that of back-loading – has been settled. A project involving setting up a reserve as part of a structural overhaul is on the table: it is needed to restore balance in a market that has been totally destabilised. Some long-term objectives have been unveiled, and they will be key to jumpstarting investment. Much remains to be done, and we are not running ahead of schedule: our main problem now is one of momentum. Things need to move fairly quickly to ensure that we, industrial investors, have a stable framework.

Work is also under way to reform State aid. This is essential since, to keep retail prices in check, governments must look at the taxes that are driving energy bills up, chief among them the taxes that finance subsidies. The DG Competition has made considerable headway over the past year, setting in motion an important reform of State aid. Our expectations were high in this area, as EURELECTRIC told Competition Commissioner Joaquim Almunia. The guidelines approved in the spring clearly identify the root of the

problem: the absence of control over the amount of energy injected into power systems without regard for demand. We probably could have gone farther, but this was at least a move toward a more rational situation. Renewable support mechanisms will have to get quantities under control, and subsidies with them. This is crucial for household purchasing power, the competitiveness of our companies and our public accounts.

In a word, the challenge is to create, within a reasonable time, an electricity mix that reflects an efficient European energy strategy.

This mix will have to be balanced around three components. The first is dispatchable low-carbon generation, especially nuclear. I will come back to this. Renewable sources will be integrated gradually, keeping quantities and costs under control. There will also be room for fossil generation, which will still have a role to play as long as it is innovative and environmentally efficient.

Since we are meeting in the United Kingdom this year, I should mention that this is precisely the objective of the British government's reform agenda: decarbonise electricity at a reasonable cost. Thanks to its new policy, the country is unlikely to get locked into a mix dominated exclusively by fossil fuels, which is a real threat today. By investing rapidly in electricity generation, the UK will be innovating and leading the way toward competitive decarbonisation.

As you know, the Group of which I am chairman invests in all technologies. Today it is spending about as much on renewable energies as new nuclear – a bit more on renewables actually. But nuclear power has specific requirements. While it is still possible to invest in renewables, without an adequate framework investments in new nuclear will not be feasible.

And nuclear power will be all-important in the next phase. It is a competitive, carbon-free technology that creates virtually no external dependence. Uranium reserves are abundant and well distributed. Nuclear fuel costs are also very low in relation to the price of the electricity generated: fossil fuels account for about 99% of the energy gap in France today, and uranium for just over 1%. The European Commission confirmed this assessment in its recent Communication.

What does the British reform aim to do? Create a stable framework for industrial firms that want to invest heavily in low-carbon, capital-intensive technologies. The EDF Group will be doing just this with the Hinkley Point project. I am certain it will be a major milestone.

To conclude on this point, we can and must move quickly toward competitive decarbonisation in Europe. The most important thing is that we stay on course and focus on five key priorities: the competitiveness of business, household purchasing power, jobs, sustainable development and security of supply. If we can do this, then energy, and especially electricity, can reclaim its longstanding role as the key driver of our growth.

With all of this in mind, I'd like to talk about the study Accenture presented. I believe its authors will agree that its goal is not to analyse the effects of the highest priority measures: these measures target the carbon market and renewable energies, and they should thus help us move in the direction I just outlined. What is interesting is how the study highlights realistic ways to deliver better service to our customers without adding to their bills. I should point out that some of the ideas suggested correspond to EDF's strategic choices.

Of special interest to me were the discussions of energy efficiency and smart grids. I support investments that can help reduce energy consumption if they are economically efficient. This is why I do not believe in approaches with general objectives: but I do believe in approaches that target sectors. We need to invest in sectors where the energy savings potential is considerable and easy to tap: examples are buildings in general, especially in the tertiary sector, and existing homes, particularly older ones.

Developing services that help reduce energy bills is a strategic priority for the EDF Group. I am convinced that investments in these types of services will be part of the business model of the future in our industry. If we are successful in Europe, then the door will be open to wider expansion. These services are even more useful in that they create local jobs. Citizens and local authorities are involved, and they are obviously who we need to be interacting with in priority. We may be international companies, but our local roots are vital.

In addition to energy efficiency, the Accenture study talks about what information technologies are contributing.

There is no doubt that smart power systems offer real opportunities for innovation. We should not ask the impossible of them: they cannot absorb the excess generation capacity resulting from rapid renewable energy growth in some regions and countries. But they can help us integrate renewable generation into our grids without too much disruption and at minimal cost. Here again, this is a business of the future for power sector companies. I would mention that the EDF Group aims to become the leading operator and coordinator of distributed and decentralised energy.

Smart systems will also help us manage the demand resulting from the growing number of electric devices, and to optimise battery charging as electric transport booms. Lastly, they will allow us to make grids more efficient and upgrade them, thus limiting the need to invest in new infrastructure.

In sum, smart systems are a driver of a very important change: the gradual evolution of our business models. Traditionally geared to selling energy as a commodity, our companies' models will focus more and more on the value added in energy services.

Accenture's report also gives insight into the debate about the demand response potential. Much hope is being placed in this potential. Some avenues are more promising than others, and I can see at least two where progress can be made.

First, our extensive experience in France makes me hopeful about contracts with large electro-intensive industrial firms. This is an area where efficient business models can be deployed. The contracts EDF has

entered into can reduce consumption by as much as 1,500 MW during peak demand periods. The same logic applies to large tertiary buildings.

Second, dynamic pricing will play a greater role. This was already possible before smart meters were around. France has notably developed the storage of electricity in the form of hot water on a large scale. EDF offers this service to around 10 million residential customers. It benefits both customers, who pay less for electricity, and generators, which can use their plants more efficiently and defer certain investments. I have noted that many countries are discovering the benefits of this type of service as renewables gain momentum.

Smart meters will further enhance this potential. Customers will be able to play an active role in managing their power consumption, and therefore their energy costs. "Smart", that is, cost-reflective, tariffs will be a decisive factor as well since they will open ways to keep energy bills down.

I could mention other aspects of the study as well, for instance the sensible proposals about finding the right locations for renewable generation: it is obviously not worth investing in sites where there is no sun or wind. Another is the discussion about the importance of storage, which will require a great deal of research and development.

But I will conclude by talking about the very spirit in which the study was done. It reflects what is really at stake: customer satisfaction. Even if we do not end up saving all the billions the study points to, we have before us options to keep power bills in check while delivering the same, if not more services.

Customers are at the core of our strategy. We have to meet their expectations while also acting responsibly, taking into account the views of all stakeholders in the energy industry. This must be our guiding star as we sail into what will in many ways be a new era.