

EUROPEAN PARLIAMENT



COMMITTEE ON INDUSTRY, RESEARCH AND ENERGY

PUBLIC HEARING

on

**"Green Paper on a European Strategy for Sustainable, Competitive
and Secure Energy"**

Chaired by Mr Giles Chichester

Chairman of the
Committee on Industry, Research and Energy

Mrs Eluned Morgan

Rapporteur

* * * * *

1. Speeches

* * * * *

*European Parliament,
Room 3 C 50*

Brussels, 12 September 2006, 14.30 - 18.00

PANEL 1.

What needs to change to encourage one trillion Euro of investment in Europe's single market in energy?

Dr. Johannes Teyssen

Chairman of the Board of Management of E.ON Energie AG

Statement for the ITRE Hearing

„What needs to be done to encourage one trillion Euro of investment in Europe’s single market in energy? “

Brussels, September 12, 2006

Dear Mr. Chairman, distinguished Members of the European Parliament:

- Thank you very much for inviting me to address the ITRECommittee today. Your attention given to the topic shows that energy policy is finally a key political issue in Europe as it is in all other major global economies that compete hard for primary energy resources and the necessary capital for investments in this industry.
- I would like to take this opportunity today to plead yet once again for the completion of a fully integrated and truly market-driven European energy market for power and gas. We at E.ON are convinced that the EU’s continuing efforts to create such a market will bring benefit to the customers and – of course – provide the encouragement to invest one trillion Euro of pre-dominantly private capital in our continent.
- The liberalized market-design was born nine years ago and had the European Community as its godparents. We may not have achieved all you set out to do over this time, namely create the world’s largest fully-integrated power and gas market, but we have come a long way,

and are on the right path. Despite all rumors to the contrary, market progress and international integration are clearly visible.

- But I also have the impression that the liberalized market today is in danger and needs your full support more than ever before. Trust in the market has diminished; national re-regulation and protectionism are genuine threats. Regulators' competences are expanding, and are no longer limited to the grids as natural monopolies. The applied regulatory concepts of some nations are sometimes contradictory to the free functioning of the energy market and are often at odds with each other. Energy retail prices, for example, are still regulated in many jurisdictions and market entry through M&A activities is blocked in some Member States.
- We all now have to make a clear choice: Do we accept the creation of an open energy market including price volatility, uncertainty, more risks and –of course - more chances for all stake-holders. Or do we step back to old nationalistic monopoly times, to cross-subsidize some segments, to national protectionism, to demarcated regions, to state-planned investments and to questionable national champions that do not really compete, but are only the basis of a national industrial policy. By following the last approach we will have wasted ten years. In my view, the choice is clear and simple: trust the market and let it develop across Europe. When there are inefficiencies in the market-design, they have to be overcome. Although we do not share all findings of the sector inquiry, we do not question that there is still substantial room for improvement.

- The following points are, however, essential and deserve a closer look.

Let's call them a short wish-list:

- In a number of Member States the conditions for investment have deteriorated: We still have golden shares, constitutional blockages, ideological no-go areas (e.g. prohibition of new nuclear power capacities in Germany), excessive legal burdens, regulated tariffs kept at an artificially low level or just political concerns. . .
- These prohibitions hinder the creation of a real single market and artificially and inefficiently steer investments.

2. Avoid a politically-driven regulation of energy prices

- Distortions created by regulated retail prices are a real threat to investment and true competition by new entries.
- One of the misconceptions that should be discarded is the notion that rising prices are contradictory to a liberalized market. But it is obviously not the only direction prices can go if new investments come on line.
- When prices are set by market forces, they give the correct and necessary investment signals. Any interference or regulation of market prices can disrupt the investment cycle.
- In the last case, you not only create obstacles to entry for investments, but dampen the price signals needed for domestic investment and these, in turn, lead to a situation where even more state-intervention is necessary – capacity payments and the like.

- At the same time, you can have a situation where state-intervention brings forth a massive amount of investments, except they are the wrong kind. Here, I am talking about the system of support for renewables or you could also refer to the malfunctions of early market-design concepts like the NETA in the UK.

3. Create a harmonized support scheme for renewables in Europe

- I want to be clear: we fully support renewables and we do not oppose the necessary support for emerging technologies but such support must also be market-based and as efficient as possible.
- E.ON supports the expansion of renewable energies and will be investing around 3 bn. Euros in this area over the next few years. The problem lies with the market-distorting effects of 25 different support schemes in the EU.
- Investments in renewables should be based on where they can be most efficiently employed – where the sun shines and the wind blows -, not where the highest support is given. A European harmonization of renewables support is urgently necessary to remove distortions to competition and eliminate inefficiencies. Otherwise, I fear that the integration of renewables in the market will fail.

4. Create a sustainable post-Kyoto strategy

- The current arrangement for CO₂-trading is a short-term-system and could be an obstacle to long-term investment.
- In our business, investments are planned for and made for periods up

to 3 0-40 years, and the current 4-year cycles of the EU ETS are simply too short. We need an early signal for the post-2012 period that should then be the basis for an extended period of 10 – 20 years to come.

5. Push for a fully integrated competitive market cross Europe

- Call for the harmonization of rules (i.e. transit, TPA, trading), push for the further integration of national power and gas grids (i.e. new interconnections) and better and more effective use of existing ones and create the conditions for true re-tail competition in all nations (no state-defined prices, no special regimes for national customers).
- Support a step-by-step approach to the European platform via consolidated regional markets like the Nordic market.

Ladies and Gentlemen,

- We are presently investing or close to start in new generation capacities in Germany, UK, Sweden, the Netherlands, Italy, Hungary and the Slovak Republic. They amount to 8000 MW and investments of 6 bn Euro. By the way, the needed investment sum given: 1 trillion Euro is, according to the IEA, only for generation in the EU 25.
- With respect to the grid, here the maxim must be that the regulators must allow the grid companies enough revenue to make the necessary investments in the grid. Particularly in the interconnectors and the internal grid to connect the interconnectors.

Address,

- The liberalized integrated energy market will bring forth the necessary investments, provided it is allowed to function. Or to put it in the terms of the Committee's question for today's hearing: A single and competitive market in energy will provide the € 1 trillion of investment for Europe - predominantly by private investors such as E.ON.
- If you let the market develop, the money will go very efficiently to where the market needs it.
- In the end a market-based and truly integrated European energy market will also secure the fairest price for consumers, sufficient returns for investors, and the best overall development for Europe.
- Now is not the time to cast doubt on the liberalized energy market. Trust it and let's do it.

Thank you.

Mr Arvid Grundekjøn

Chairman of the Board, Statkraft AS

Speech at Green Paper hearing in European Parliament, 12 September 2006

Mr. Chairman, Members of European Parliament, Ladies and Gentlemen,

We welcome this opportunity to share some of our perspectives on the green paper, and some of our experiences in investing in new capacity in the European market. Statkraft endorses the vision of a coherent European energy policy. The foundation for our remarks is a fundamental belief in the ability of open energy markets to deliver key policy objectives of sustainability, competitiveness and security of supply, given an appropriate level of regulation.

The vision of Statkraft is to be a European leader in environment-friendly energy. In addition to expanding our position as one of the largest producers of renewable energy in Europe, we are investing in gas power, the fossil fuel with the lowest emissions. With three gas fired power plants under construction in Germany and Norway, we are to our knowledge currently the largest investor in new gas fired power in Northern Europe. In total, these projects will bring some 1600 MW online next year. Statkraft is also an active trader of electricity, certificates and gas across most borders in Europe, contributing to liquidity in the European energy markets.

The question in this session is how to encourage sufficient investments in Europe's energy market. Let me focus on two main topics: the need for a stable regulatory framework and equal conditions to all market participants. My first statement is that stability and market based mechanisms support investments:

As in other industries, investments in new environment-friendly capacity are a question of commercial attractiveness and risk profile. Power plants usually have a life span of more than 25 years, emphasising the long term nature of this sector. In order to reduce climate gas emissions, there is a need to direct current generation and investments in new generation towards fuels with low emissions.

For renewable energy we see a multitude of support schemes within and across countries.

Following large government programmes on wind development in some countries, we have also seen a rather large discrepancy between where we find the best wind resources, and where attractive support schemes have promoted substantial wind power development. We believe that a stronger harmonisation of support schemes could stimulate investments in the most cost-efficient renewable power, and thus provide more renewable power per Euro spent.

As the currently most important renewable energy source, hydropower plays a considerable role in several countries' energy mix. However, there is still considerable hydro power potential in Europe, which can be developed in order to provide flexible and CO₂ free electricity. Throughout the past 100 years, the power industry has developed advanced methods to maximise the resources, while minimising the environmental impact. This will also support European security of supply.

Since the introduction of the EU ETS, power prices have increased substantially, partly due to the price of the emission certificates. As a power generator we at Statkraft are used to managing the market risk of volatile power prices, not least when making major investment decisions. The carbon market is dependent on political decisions both at national and Community level. We would like to underline that a five year horizon, as we see in the second phase of the ETS, is in itself too short to safeguard large investments in plants with a long life span. In addition to a long term view, we need clarity regarding allocation plans, mechanisms for new capacity, and the allocation principles for different technologies across Member States.

Securing a stable and predictable framework for investments is also a key prerequisite to ensure security of supply. We therefore need long term stability and commitment to the Emission Trading Scheme if it is to bring about substantial new capacity with low emissions of climate gases. Consequently, we strongly support the further development of the EU ETS, and agree with the Commission that this system has the potential for a gradually expanding global carbon market.

My second statement is that securing equal conditions for all market participants will promote

new investments:

Creating an “equal level playing field” has been an important policy objective for a long time, as shown in the electricity and gas market liberalisation directives currently under implementation. We state that the goal has yet to be reached. A liquid and well functioning wholesale market is essential for successful competition and also for new investments and I would like to point out some key areas where we see an urgent need for further action.

Let me start with the need to publish transparent data on production and emissions. Immediate publication of crucial data to all market participants is vital for cost effectiveness and competition. To many, it is a new concept that maintenance programmes in a power station or emission statistics in a country is market sensitive information. I want to stress that wholesale trading will only have a future if it is based on non-discriminatory information. Establishing common rules for market participants in this respect is therefore an important task.

Second, access to transmission of electricity and gas on equal terms is crucial for new generation capacity to come on stream. Having to negotiate the cost of access to the grid can in itself have an aversive effect on investors in new capacity. Possible conflicts of interest between the regulated business of a grid operator and the operation of a power generator in competitive markets can be avoided through the definite unbundling of these business activities. We therefore urge the European Parliament to support the efforts of the Commission and the Member States to secure the rapid and full implementation of the second package throughout the internal market. The EU Commission has the necessary mandates to proceed and succeed. In the Nordic electricity market we have good experiences with non-discriminatory point tariffs. Tariffs are published and transparent and all consumers and generators have access to the market, regardless of who they buy from and how far the electricity is transported. Thus, distance is not of concern in the choice of supplier. As transmission is a natural monopoly business, independent and strong regulators are essential. We believe there is room for more and closer cooperation between national regulators and transmission system operators (TSO)..

Third, existing cross border transmission capacity must be available and accessible to all players

on equal conditions. We are convinced that generation capacities are optimised with regard to costs and emissions through trade within and between markets, thereby also promoting security of supply. Increased investments in cross border capacity are considered necessary for increased trade and a better utilisation of power plants in the whole internal market. In some instances, investment in new cross border capacity may not be regarded as profitable to one TSO alone. Closer cooperation between regulators and TSOs, which I just talked about, is therefore also needed in order to stimulate and secure the necessary and timely investments in new infrastructure.

Further, sites for new power plants need to be available for companies wanting to invest in new capacity. In some areas this is mainly a question of streamlining the permission processes. In other areas the most attractive sites are close to already existing power plants. We believe the issues of site availability and planning processes need to be addressed further, particularly at local and government level.

Last, the development of the gas market must not lag behind the electricity market. Access to the gas grid and storage systems increases the availability of gas, which is important for new generation capacity to be developed. Long periods for application of capacity and cumbersome procedures in several grid zones make quick movements in the market difficult. Further, the lack of transparency of capacity utilisation of existing pipelines makes it virtually impossible for others than the owner and operator to identify the real bottlenecks and find alternatives, stifling not only market liquidity but also new investments.

Let me briefly sum up:

We definitely see a role for a European energy policy in supporting the substantial amount of energy investments needed in the years ahead.

Our main message is that there is a need to further improve the investment climate for new environment-friendly energy in Europe, by establishing and enforcing a predictable and stable regulatory framework. Non-discriminatory access to infrastructure is essential in this context.

Securing well functioning wholesale markets in power and gas will increase competition, limit the

environmental impact of energy production, and strengthen the security of supply for Europe.

Again, I thank you for this opportunity and look forward to your questions and comments later.

Public Hearing on Green Paper on a European Strategy for Sustainable, Competitive and Secure Energy

Graham Smith
Managing Director
PGS Europe – BOC

European Parliament
12 September 2006



How to encourage one trillion Euro energy investment in Europe

I suggest the necessary conditions are:

- A healthy customer base
- A truly competitive market operating across the whole of the EU
- Access to unbundled and unconstrained electricity and gas networks
- A fair, clear and stable approach to climate change measures
- The EU to speak with one voice on all matters in its external dialogue including security of supply

What is required for healthy customer base?

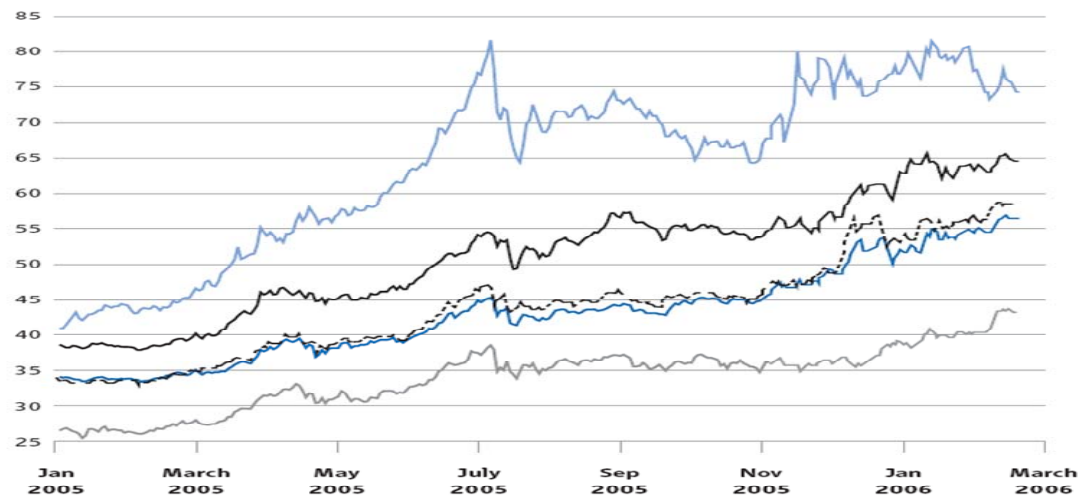
- Customers are looking for consistency and stability of price
- Lower prices than now
- One large UK BOC chemical customer ceased production for 3 months last winter due to unaffordable natural gas prices
- About 40 major consumers of liquid nitrogen have stopped production in the UK due increased electricity prices over the last 3 years

A consistent and stable price across the whole of the EU?

Comparison of Wholesale Prices in European Power Markets

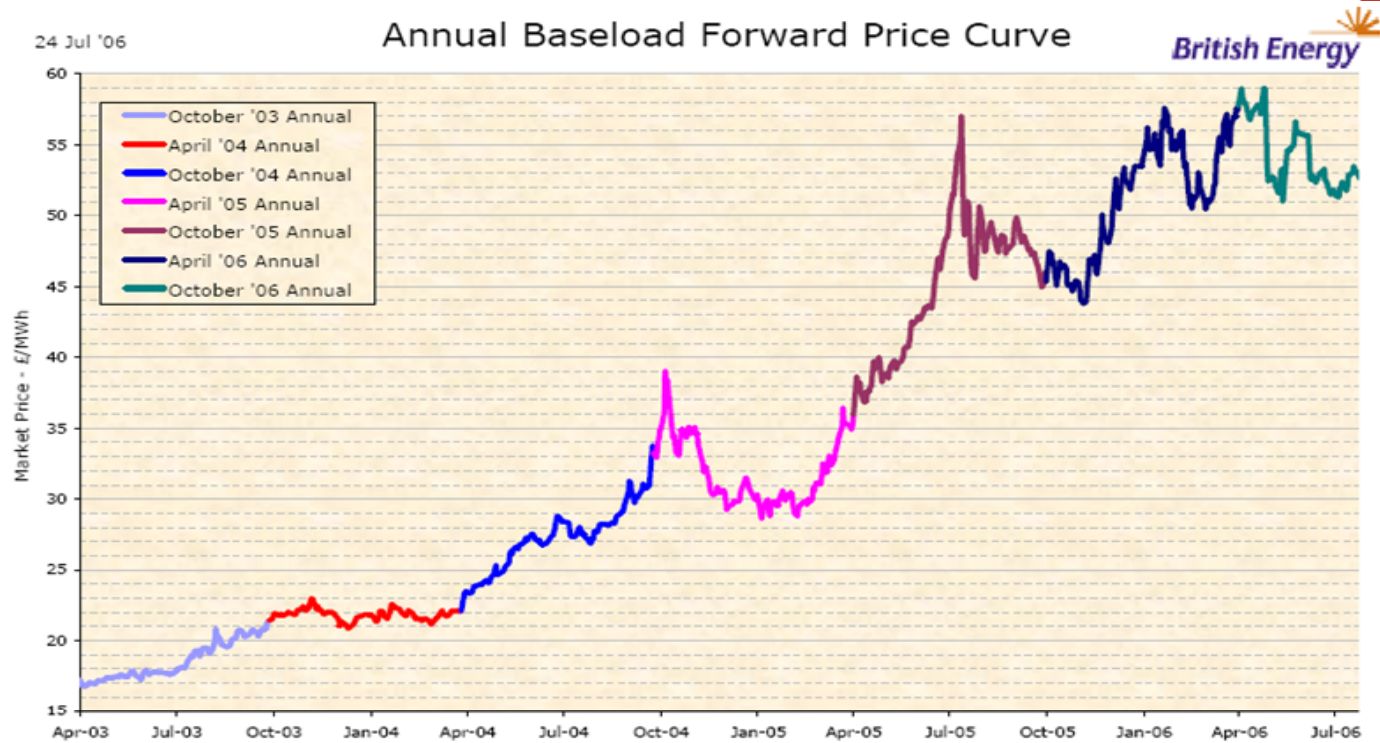
Absolute development of 2006 base load forward prices

€/MWh

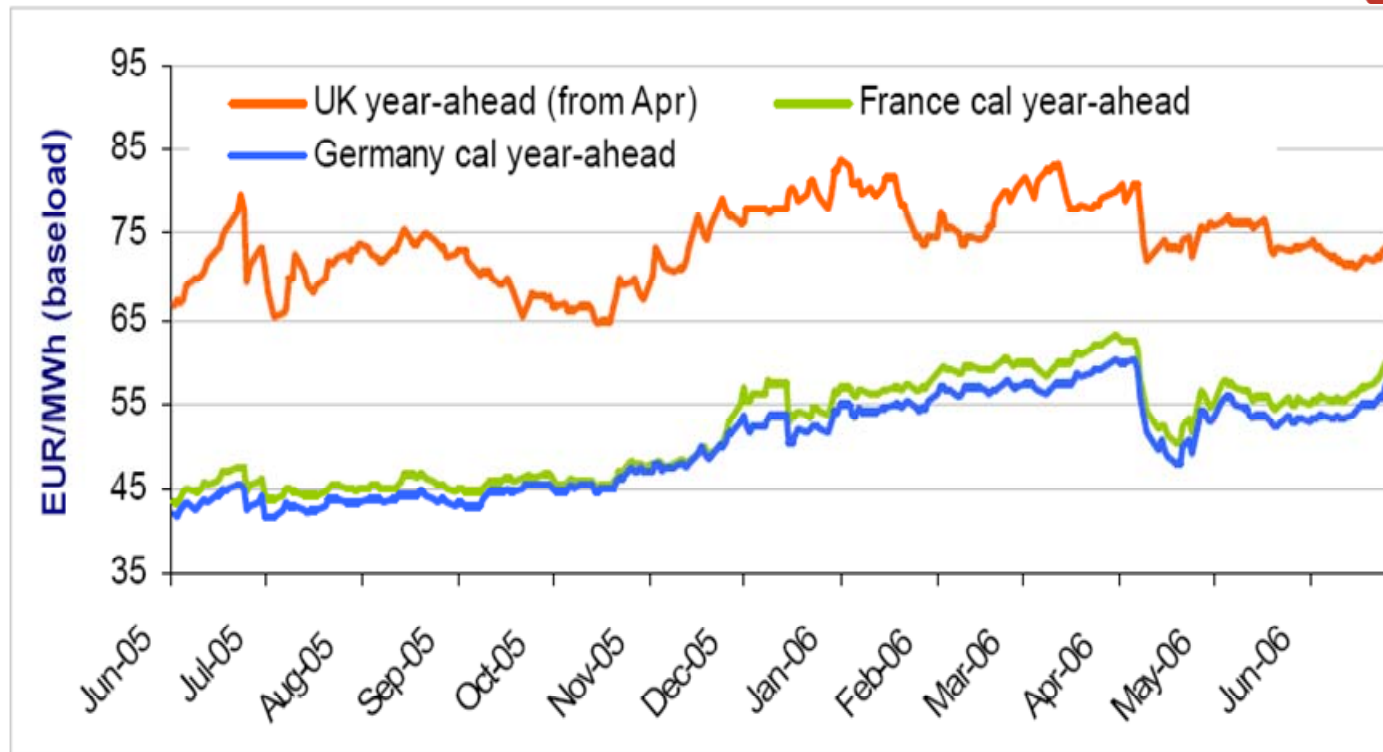


— UK
— Netherlands
- - - France
— Germany
— Nordpool (Scandinavia)

UK has seen large electricity price rises in the last 3 years



A truly competitive market operating across the whole of the EU?



What's to be done to achieve competitive EU Energy Markets?

- The second electricity and gas directives need to be fully implemented to create competition and allow industrial consumers the choice to source energy at competitive prices
- The development of liquid markets and unconstrained networks is important to give gas and electricity suppliers assurance will have access to the market through the life of their projects.
- I agree with the Commission that a liberalised and competitive market is conducive to security of supply and is essential for providing timely investment signals to industry participants.

Access to unbundled and unconstrained electricity and gas networks

The EU Commission sector inquiry found:

- Gas:
 - access to cross-border pipelines limited by preferential treatment of pre-liberalisation contracts
 - “grandfathered rights” of incumbents allowed them to reserve capacity on bottlenecks
- Electricity:
 - Long-term reservations of capacity on inter-connectors and inadequate allocation rules are barriers to market integration

I support:

- “ownership unbundling” of network assets
- congestion fees being used to help pay to reinforce cross-border capacities

PANEL 2.

What is Missing from the Energy Green Paper?

***European Parliament
Committee on Industry, Research and Energy
Public Hearing
on
« Green Paper on a European Strategy for Sustainable,
Competitive and Secure Energy »***

**Pierre RADANNE
12 September 2006.**

Le Livre Vert dans son contexte historique

Un texte de transition

- **Un politique pensée à partir du contre-choc pétrolier de 1986**
- **Une inversion complète de contexte énergétique**
- **Des défis à long terme très structurants**
 - Sur 1 et 2 générations, ce qui est inédit.
- **Une vision pour le siècle à élaborer et faire partager.**

Une dérégulation inspirée par le Contre-choc pétrolier de 1986

- **Le refus des Etats de faire de l'énergie une politique européenne**
 - Alimenté par des réponses nationales différentes aux chocs pétroliers des années 70 ; Malgré les mêmes intérêts à long terme,
 - Des synergies évidentes notamment concernant les énergies de réseau,
 - Dès lors, une construction énergétique européenne qui s'appuie sur des groupes privés.
- **Les aspects positifs des transformations récentes**

Leur autre motivation profonde : Faire bénéficier après 86 le secteur privé des bas coûts de l'énergie dans un secteur à consommation assurée et en croissance régulière.

 - La séparation des activités : production, grand transport et distribution ;
 - La convergence des modes d'organisation nationaux ;
 - Une mise en concurrence qui permet une révision régulière des objectifs et des contrats.
- **Une « dérégulation » pleine d'ambiguïtés**
 - Une privatisation et plutôt la construction d'une régulation nouvelle au plan européen,
 - Mais des effets en contradiction avec les objectifs
 - Hausse des prix ; Un marché de prix spots pour un bien non stockable est incontrôlable ;
 - Instabilité des entreprises et de l'actionnariat ;
 - Baisse des investissements ;
 - En fait, elle a légitimé au désengagement financier des Etats ;
 - Une ouverture des marchés au particulier soit théorique soit coûteuse.

Malheureusement, pas d'évaluation des résultats d'orientations conçues il y a 20 ans.

3

Oscillation entre phases d'intervention de l'Etat et transfert au marché

- **En temps de difficulté : Appel à l'Etat**

Perception de la grave dépendance extérieure :

- Après les destructions de la 2nde guerre mondiale,
- En réponse à la hausse des prix après les chocs pétroliers,
- Si besoin de nouvelles filières pour assurer l'approvisionnement.

- **En période d'approvisionnement facile : Transfert au marché**

*L'énergie est perçue comme une activité comme une autre,
donc de la responsabilité du privé quand :*

- Pluralité de technologies avec des gains de rendement,
- Baisse des coûts,
- Surcapacité de production.

***Un changement complet de contexte
reconnu dans le Livre Vert***

- 1. – L'affirmation du pouvoir en amont du secteur énergétique**
 - Plus que 5 producteurs majeurs de pétrole et de gaz en 2030 : Arabie Saoudite, Irak, Russie, Venezuela, Canada.
 - Une dépendance européenne très inquiétante de zones d'approvisionnement énergétique instables.
- 2. La perspective à une génération d'inéluctables tensions sur l'approvisionnement – physique, économique et politique.**
 - Peak Oil pour 2020, si on agit vite.
- 3. L'obligation de réduire les émissions de CO₂.**
- 4. Un besoin d'investissements considérables à engager dans les 20 prochaines années,**
 - On parle de 1000 milliards d'€.
- 5. Le secteur des transports est le maillon faible**
 - De flexible, il va devenir le plus contraint (pétrole, pollution, effet de serre)₅

Prendre la mesure de la mutation de civilisation

- **Le retour dans un monde fini**
 - Ressources en hydrocarbures,
 - Possibilités d'émission de gaz à effet de serre.
- **La règle d'or de ce siècle : Optimiser l'usage des ressources.**
- **L'invention à Kyoto des outils de l'économie dans un monde fini**
 - Pilotage par le plafonnement des quantités en fonction du long terme,
 - Des mécanismes d'échange sous contrainte ce qui fixe une valeur économique à ce qui doit être limité ;
 - Un intéressement financier à la performance.

Le rêve de Montesquieu : « Rémunérer la vertu ».

Mais alors :

- **Une libéralisation engagée maintenant à contre-cycle**
- **Le dispositif institutionnel n'est pas stabilisé**

Intérêt général,...le retour

- **Le besoin d'une politique**
 - Un secteur de l'énergie à nouveau dominé par l'amont, les producteurs, notamment la Russie, ayant politiquement repris le contrôle des ressources ;
- **Le développement durable, un élargissement des visions anciennes du service public**
 - Rechercher l'intérêt général à l'échelle du monde,
 - Inclure l'intérêt du consommateur,
 - Prendre en compte la finitude des ressources et l'environnement,
 - Réintroduire une vision du temps long,
 - Assurer l'équité d'accès à l'énergie par des mécanismes de péréquation.
- **Renforcer d'urgence le cadre de régulation :**
 - Une production ouverte à la concurrence avec un important secteur privé ;
 - Des réseaux de grand transport électricité et gaz de statut public européen ;
 - Une distribution avec une implication publique forte des collectivités territoriales ;
 - Un régulateur européen ;
 - L'effort de recherche mis en commun au niveau européen ;
 - La nécessité d'une planification des investissements énergétique sur le long terme dans le cadre d'une division par 4 des émissions de CO₂ d'ici le milieu du siècle ;
 - Une capacité de négociation commune des approvisionnements extérieurs ;
 - Accroître des stocks stratégiques notamment de gaz ;
 - La politique européenne décisive pour la mutation à venir des transports.

7

L'appréciation économique de la crise actuelle

- **L'hémorragie actuelle que subit l'Europe**
 - 740 Mtep de pétrole et de gaz importés ;
 - Cela fait à 70 \$ le baril : plus de 250 milliards d'€ par an !
- **Le coût important d'un système instable**
 - **Tendance imprévisible des prix qui inhibe** les capacités de réponse,
 - Cela pousse à la reconstitution de **cartels** et la recherche de positions dominantes,
 - Des comportements **spéculatifs** avivés,
 - Des **prix non sincères** :
 - *sans solidarité sociale,*
 - *sans intégration des coûts sur l'environnement*
 - *sans anticipation de l'épuisement des ressources.*
- **Le bénéfice économique d'une politique forte**

Si on prend comme base de raisonnement un **poids** de l'énergie **stable** dans le PIB,

 - Alors la **dépense** énergétique peut croître **proportionnellement** à la richesse,
 - Or avec la dématérialisation de l'économie, la consommation d'énergie croît **moins vite** que la richesse ;
 - La facture comprend deux facteurs : un volume et un prix,
 - *Pour faire face à la hausse inévitable des prix et des technologies,*
 - *Il faut **agir sur les volumes** par des progrès d'efficacité énergétique.*
 - Diviser par 4 les émissions, une **chance** pour l'économie !
 - Donc mobiliser les **banques**.

Les insuffisances du Livre Vert

- **Accord sur les 6 domaines prioritaires du Livre Vert**
- **Les avancées nécessaires vers l'économie d'un monde fini**
 - Un niveau d'exigence élevé sur l'efficacité énergétique des produits de consommation utilisés dans l'Union ;
 - Etablir au plan européen un mécanisme unifié de certificats d'économies d'énergie qui permette de gratifier l'efficacité énergétique ;
 - Instaurer une obligation de part d'énergie issue des énergies renouvelables.
- **Une coordination réelle des politiques régionales, nationales et européennes**
 - Harmonisation des objectifs et des systèmes d'aide publics.
- **Une profonde transformation du secteur des transports**

Autour de 4 axes :

 - Des progrès de comportements,
 - Des véhicules plus modestes : des vitesses maximales physiquement atteignables ajustées sur les limitations de vitesse ;
 - Des prix élevés et surtout stables via la fiscalité ;
 - Affectation de la ressource fiscale pour aider à la mutation des transports (transports collectifs, rail à grande vitesse, transport combiné...).

Le cadre politique d'une Europe de l'Énergie

• Le 1^{er} choix – Réduire les contraintes

- Accroître l'efficacité énergétique,
- Développer des comportements plus sobres,
- Valoriser les ressources renouvelables,
- Dégager les transports du pétrole.

C'est l'intérêt de tous les pays.

Ce sont des priorités morales.

Ce doit être le socle commun d'une politique européenne de l'énergie.

• Le 2nd choix – Répartir les contraintes restantes

Entre :

- Les hydrocarbures (dépendance extérieure, ressources limitées, impact effet de serre) ;
- Le charbon (pollution de l'air et impact effet de serre) ;
- Le nucléaire (risques technologiques et politiques).

Des politiques énergétiques nationales encore longtemps divergentes ;

Un pays ne peut imposer ses options aux autres ;

Laisser ouvert pour les politiques nationales.

10

Pour un leadership européen

- **Un paradoxe**
 - La pauvreté de l'Europe en ressources énergétiques fossiles lui fait anticiper ce qui sera le sort commun du monde à long terme.
- **L'Europe qui innove**
 - L'efficacité énergétique au cœur du nouveau modèle de développement,
 - Des modes de vie qui valorisent culturellement les comportements sobres,
 - Les énergies renouvelables, un secteur industriel mondial où l'Europe est en avance,
 - Une mutation profonde du système de transports,
 - Le leadership au plan international dans une transformation de la civilisation qui garantisse la stabilité du climat,
 - Une Europe qui ainsi facilite, pour les pays du sud, l'accès à un développement durable.

Dans un siècle de prix de l'énergie croissants, gagneront ceux qui s'activeront les premiers à optimiser l'utilisation des ressources.

