

**European Energy Cooperation: From the European Coal and Steel Community to
the European Energy Charter
Seoul 14 September 2002**

**Diego Canga*
European Commission
Member of the Cabinet of Vice-President Loyola de Palacio**

***The opinions expressed are the personal responsibility of the author alone and in no way bind the institution to which he belongs**

Table of contents

1) Legal instruments of energy cooperation

- The European Coal and Steel Community**
 - The Euratom Treaty**
 - The Energy Charter**
- The example of research and development**

2) The problem of security of supply at European level: the dependence from third countries

- The Green Paper of Security of Supply**

3)The creation of a single European market in the field of electricity and gas

DRAFT SPEAKING POINTS

THE EUROPEAN COAL AND STEEL COMMUNITY

Fifty years ago, a generation of European leaders started work on an unprecedented pathway to reconciliation and progress for Europe.

The first formal move to an integrated Europe was made by Jean Monnet. In 1950, he submitted a memorandum to Robert Schuman, the French Minister for Foreign Affairs, suggesting the creation of a community for two vital commodities – steel and coal – as a means of achieving peace in Europe.

Schuman accepted the proposal and on the 9th of May 1950 launched the idea of a “European Coal and Steel Community”(ECSC). The French initiative resulted in the Paris Treaty, signed in 1951 by France, Germany, Italy, Belgium, the Netherlands and Luxembourg. It came into force on the 25th of July of 1952 for 50 years.

a) This initiative was based on several factors.

1. First of all, economic factors motivated the project. The idea was to control the production of steel and coal, the basis for industrial development. According to Article 2 of the Treaty, the ECSC has the task to serve *“economic expansion, growth of employment and a rising standard of living in the Member states”*.
2. But the real goals were political. The idea was to eliminate the possibility of a war in Europe, especially between Germany and France. The first sentences in the treaty are indicative of this:

“Considering that world peace can be safeguarded only by creative efforts commensurate with the dangers that threaten it”,

“Convinced that the contribution which an organised and vital Europe can make to civilisation is indispensable to the maintenance of peaceful relations”,

“Resolved to substitute for age-old rivalries the merging of their essential interests, ...”

“We have decided to create a European Coal and Steel Community”

Above all, the project constituted a new way to build Europe, relying on an economic construction process to achieve political goals. As Robert Schuman famously said: “Europe will not be made all at once, or according to a single plan. It will be built through concrete achievements which first create a de facto solidarity”

There thus emerged the idea of a concrete construction of Europe, with economic relationships paving the way for political relationships.

b) Completely different from traditional international co-operation, the ECSC has been the model for the Community institutions.

1. A High Authority, composed of independent personalities from the Member States, is responsible for managing the common market and, to do so, has powers of decision with regard to Member States and companies. Its decisions are collective. The High Authority has its own resources based on a real European tax.

2. The political control of this High Authority is in the hands of the Assembly, composed of representatives of the peoples of the Member States.
3. The Council of Ministers makes sure that the High Authority acts in co-ordination with the Member States.
4. A Court ensures the application of the common law.

In 1952, these institutions were revolutionary because they were different from the traditional relationships between States and really expressed the idea of supranationality. 50 years later, our common system is still based on these institutions.

C) 50 years later, the ECSC has proved to be a positive experience

1. Most certainly, ECSC didn't achieve all its purposes.
 - For example, the fundamental ban on State aid was diluted with time.
2. But, on the whole, it was a very positive experience
 - From an economic point of view, the ECSC is very positive. The ECSC gave Member States access to Ruhr coal at the same price as German users; it removed all customs barriers to the sale of coal and steel between Member States.
 - Above all, the ECSC opened the way for peace in Europe. The links established through the common system make wars not only impossible, but also unthinkable. Finally, it was an element for bringing stability and prosperity.

The ECSC has expired recently on 23 July 2002. The continuation of activities is ensured through the European Community Treaty EC.

EURATOM

After the ECSC Treaty, the Rome Treaty and the Euratom Treaty were signed on the 25th of March 1957.

a) The Euratom Treaty, which came into force in 1958, had **a simple objective**:

« Create the conditions necessary for the development of a powerful nuclear industry which will provide extensive energy resources », as indicated in the Treaty's preamble.

1- According to Article 1, the idea was « to contribute to the raising of the standard of living in the Member States and to the development of relations with other countries by creating the conditions necessary for the speedy establishment and growth of nuclear industries ». Actually, Member States wanted to encourage the growth of their nuclear industries, which were lagging behind in comparison with the United States, the USSR and Great Britain. The forecasts relating to energy needs as a result of economic growth and the shortfall in conventional energies motivated the project. Nuclear energy was seen as the pillar of energy independence.

2- But the growth of nuclear energy was difficult because of its enormous costs. The costs of research and investment that were too high for a single State would be shared between Member States in order to ensure supply security.

b) **The EEC and Euratom institutions are the same.** They are very similar to the ECSC institutions.

In the general framework of the Communities, Euratom policy is divided into **4 main areas**:

1- Supply policy

- The main idea is to forbid all practices designed to secure a privileged position for certain users;
- An Agency is established. It has a right of option on ores, source materials and special fissile materials produced in the territories of Member States and an exclusive right to conclude contracts relating to the supply of ores, source materials and special fissile materials coming from inside the Community or from outside.

2- Research activities and dissemination of information

- The Commission co-ordinates, directs and supports Member States' research.
- The Community is also in charge of its own research programmes. It is in charge of its own scientific programme, but also has responsibility for health and safety, in the form of protection of workers and the population against the dangers of ionising radiation.

3- The development of nuclear industries, presupposing two kinds of tools

- Financial instruments, in order to encourage investments
- Legal instruments. For Euratom, the legal tool is the Joint Undertaking, which can, for example, be exempt from tax.

4- Foreign affairs

Foreign affairs for Euratom are based on customs prices and international agreements. For example, in 1975 Euratom signed an agreement with the International Energy Agency. This agreement establishes a framework for co-operation and consultation on certain questions. Finally, the Community monitors Treaties signed by Member States in the nuclear area in order to check their compatibility

c) **The assessment of the application of the Treaty appears overall very positive**

On the basis of more than forty years of existence, the Euratom Treaty has undeniably showed its effectiveness by allowing the development of the European nuclear industry under good conditions of safety.

1) Euratom action has been particularly decisive in the field of **research and development**, via co-ordination and planning of research and training projects.

2) The implementation of Chapter 3 of the Treaty on **radiation protection** has been another focus of important work for Euratom. It is within this framework that several major directives have been enacted, in particular setting uniform safety requirements in order to protect the public and workers against the dangers of ionising radiation. These health

standards, which concern the nuclear industry, but also medical applications, research and industry, are applied in all the Member States under national legislation.

3) Euratom action in **the field of investments** and joint ventures has also been of great importance. Actually, it allows the combination of the means necessary for the creation of a European nuclear industry covering the totality of the fuel cycle and the construction of facilities ensuring 35% of the electricity needs of the Community. Euratom action has taken practical form in particular in the periodic publication of indicative programmes, the examination of more than 200 investment projects and the creation of joint ventures.

4) The role of Euratom has been essential in the field of **safeguards**. The creation of the Euratom Safeguards Office, endowed with an inspection body, has made it possible to ensure that nuclear materials for civil use are not diverted for military purposes and guarantee the application of the non-proliferation provisions.

5) In addition, **numerous agreements** have been adopted between the Community and third countries and international organisations such as the International Atomic Energy Agency. It is within this framework, for example, that the Euratom/United States Agreement of 1996 was concluded. The object of this agreement is to promote and organise nuclear trade with the United States.

ENERGY CHARTER

At the meeting of the European Council in Dublin in June 1990, the Prime Minister of the Netherlands suggested that cooperation in the energy sector could stimulate economic recovery in Eastern Europe and Soviet Union. The Commission proposed the concept of a European Energy Charter that was signed in December 1991 by 51 countries.

A double objective is fixed for the so-called Energy Charter process:

- to strive towards open, efficient, sustainable and secure energy markets;
- to promote a constructive climate conducive to energy interdependence on the basis of trust between nations

The framework of this co-operation is contained in the Energy Charter Treaty and in the Energy Charter Protocol.

a) The Energy Charter Treaty

1- **The aim of the Treaty** is to establish a legal framework in order to promote long-term cooperation in the energy field in accordance with the principles of the European Energy Charter.

2- **The Treaty's most important provisions** concern investment protection, trade in energy materials and products, transit and dispute settlement.

- With regard to investments made, the Contracting Parties must encourage and create stable, favourable and transparent conditions for foreign investors and apply to them the most favoured nation principle or accord them the treatment they accord to their own investors, whichever is the most favourable.
- Trade in energy materials and products between Contracting Parties is governed by GATT rules. This means that the signatory countries to the Treaty

must apply GATT rules to trade in energy materials and products even if they are not party to the GATT or WTO.

- For transit, each Party must take the necessary measures to facilitate the transit of energy materials and products in line with the principle of freedom of transit and without distinction as to the origin, destination or ownership of such energy materials.

In the event of a dispute on transit methods, it is prohibited to interrupt or reduce the flow of energy materials and products prior to the conclusion of the dispute resolution procedures provided for in such cases.

3- The Treaty provides for **rigorous procedures for settling disputes**, whether they arise between States or between individual investors and the State in which the investment was made.

- In the event of a dispute between an investor and a State, the investor may decide to submit it to an international arbitration procedure.

- In the event of a dispute between States, an ad hoc arbitration tribunal may be constituted if a settlement has not been reached through diplomatic channels. The solutions decided on under these arrangements are binding

b) The Energy Charter Protocol on energy efficiency and related environmental aspects

1- **Its objectives are:**

- the promotion of energy efficiency policies consistent with sustainable development;
- the creation of conditions which induce producers and consumers to use energy as economically, efficiently and environmentally soundly as possible;
- the fostering of co-operation in the field of energy efficiency.

2- The Contracting Parties undertake to establish energy efficiency policies and legal and regulatory frameworks which promote, inter alia, the efficient functioning of market mechanisms, including market-oriented price formation.

ENERGY RESEARCH

Examples of activities of research in the field of energy which are included in the sixth research framework programme adopted in June 2002.

1- In the **non-nuclear energy** area,

- Current research is demonstrating that fuel cells, using hydrogen not hydrocarbons as fuel source, have the potential to replace a large part of the current combustion systems in all energy end-use sectors.
- The research, technological development and demonstration (RTD) effort is helping to achieve significant reductions in energy use in buildings, which account for 40% of the EU's total energy requirement. Reducing the level of demand and using energy much more effectively is a major step to sustainable development.
- Research is also oriented towards energy production from renewable sources, like wind, solar thermal, biomass...

- Concerning cleaner energy from fossil fuels, the research focus is on improving efficiency while reducing production costs and environmental impact.

2- For fission and radiation protection,

The idea is to help exploit the full potential of nuclear fission energy. The research goal is to achieve this, in a sustainable manner, by making current technologies even safer and more economic and by exploring promising new types of power plants. These activities are carried out as part of the 'Research and Training Programme in the field of Nuclear Energy' within the European Atomic Energy Community (EURATOM) sixth research framework programme. In this programme, special attention is given to:

- management of radioactive waste
- radiation protection.

3- In the area of nuclear fusion

The principal focus of fusion research is on confining and heating plasmas using strong magnetic fields. It is carried out within the European Atomic Energy Community (EURATOM) sixth research programme. As the research moves closer towards demonstrating the feasibility of a **fusion power station**, efforts are being devoted increasingly to looking at the safety, environment and economic aspects of fusion power.

Achieving the aim of making fusion a viable energy source will require a sustained long-term research effort. Because of the scale of this research, and the need for expertise in a wide range of disciplines, all EU Member States are carrying it out as a joint effort



Why a Green Paper on the security of energy supply?

Why the security of energy supply?

- ➡ The Union 's increasing dependence as regards its energy supplies: 70% in 2030
- ➡ Disturbing consequences: e.g. rocketing oil prices
- ➡ New challenges: climate change, internal energy market

Why a Green Paper?

- ➡ Need for a comprehensive thorough-going discussion
- ➡ No discussion of this type has ever really taken place

Why now?

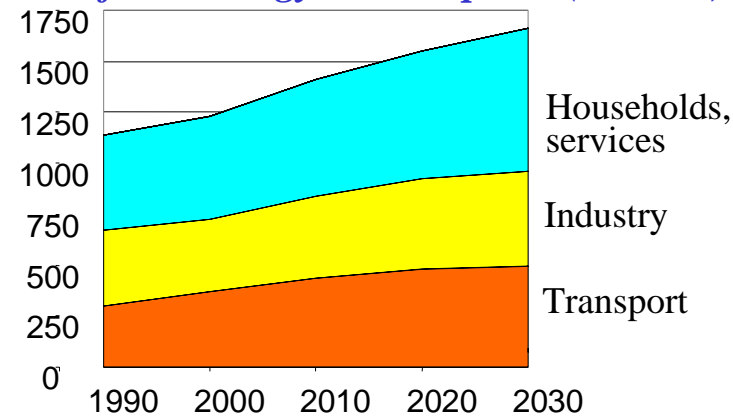
- ➡ Major energy-investment decisions will be taken very soon
- ➡ Action to combat climate change is urgently needed

The basic facts about energy

Energy self sufficiency is impossible to achieve

➔ ***An energy-intensive economy:
consumption + 1 to 2%/ year***

Europe-30: final energy consumption (in mtoe)



➔ ***The EU's resources are limited***

Coal: cost of production is 4 - 5 times the world price

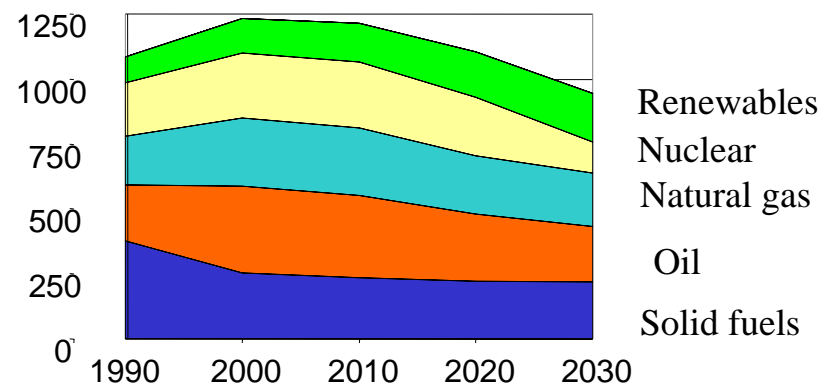
Oil: cost of production 2 - 7 times the world price, 8 years' reserve

Natural gas: 2% of the world's reserves, 20 years' reserve

Uranium: 2% of the world's reserves, 40 years' reserve

Renewables: potential abundance

Europe-30: energy production, reference scenario (in mtoe)

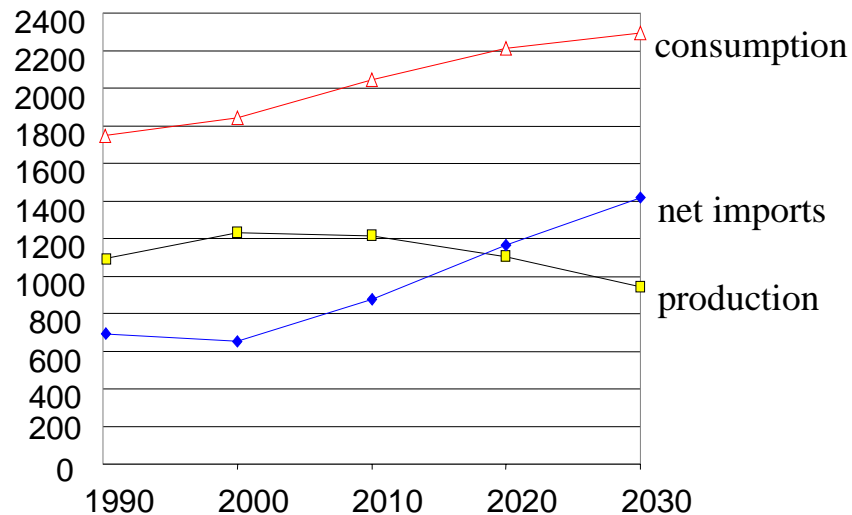


The basic energy facts

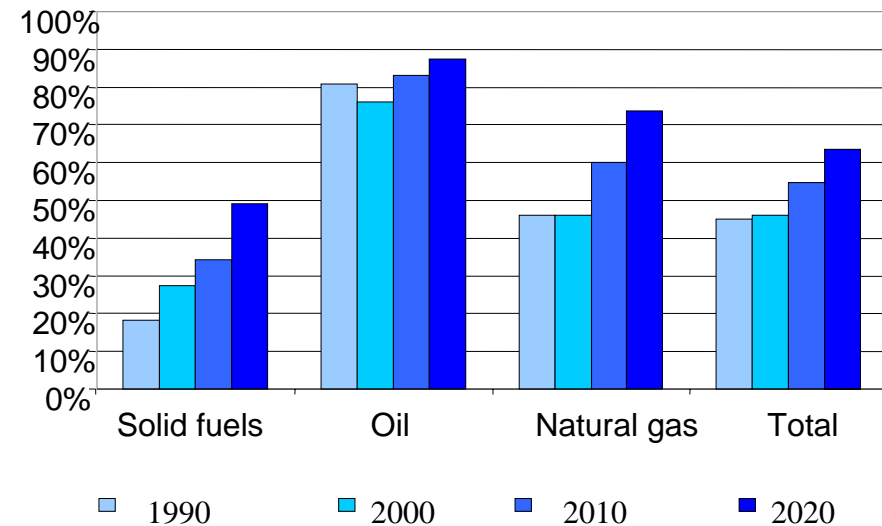
Energy self sufficiency is impossible to achieve

➔ *The Union's growing dependence on external sources of supply*

*Europe-30: total energy
(reference scenario in mtoe)*



EU 30: external dependence per energy product



Impact on the European Union

- *major player on the world market (14/15% of energy consumption)*
- *no clout in world energy pricing*
- *unsatisfactory policy for preventing supply crises*

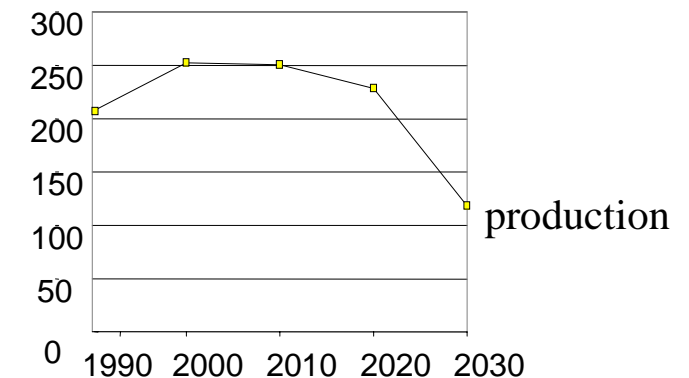
The basic energy situation

Less than perfect energy options

➔ *Nuclear power: an energy source in doubt*

- Cannot expand without a political consensus
- The thorny issue of waste must be resolved in a satisfactory, transparent manner
- The Union must maintain its nuclear-technology skills

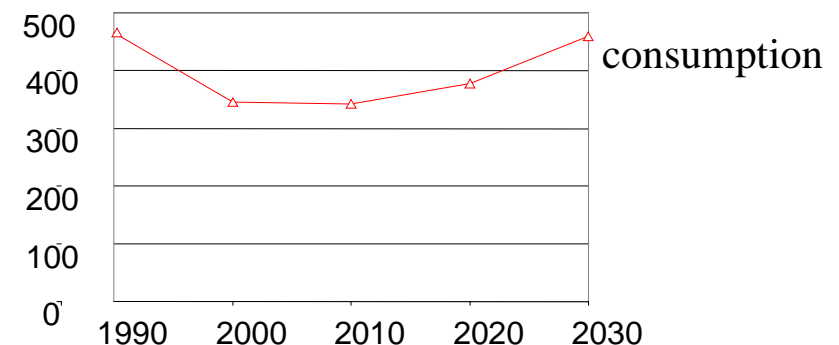
*Europe-30: nuclear
(reference scenario in mtoe)*



➔ *Coal: a glorious past*

- No major supply problem
- No economic future for production in the EU
- Future depends on reducing its environmental impact

*Europe-30: solid fuels
(reference scenario in mtoe)*

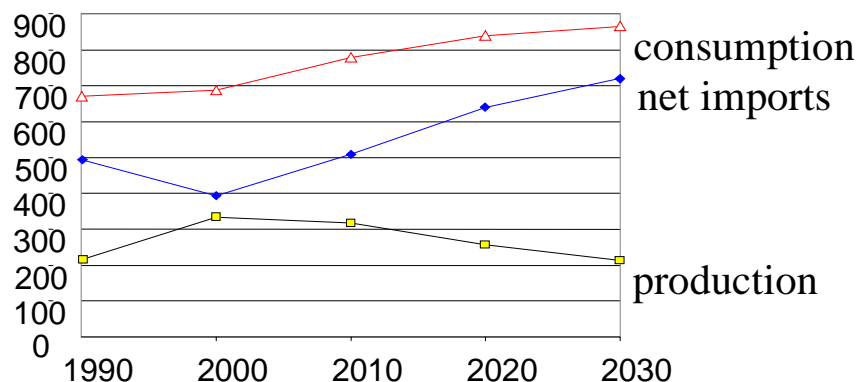


The basic energy situation

Less than perfect energy options

➔ *Still the favourite: oil*

*Europe-30: oil
(reference scenario in mtoe)*

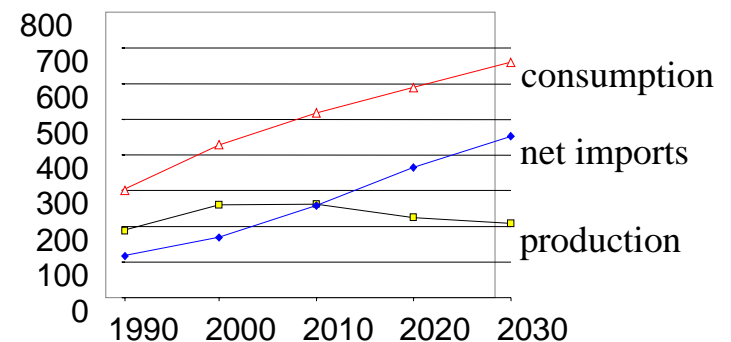


- The dependence on oil could rise to 90% by 2020
- Action on substitution is needed, particularly in road transport
- Europe's economy should come to terms with an oil price of more than \$20

➔ *Natural gas: towards a new dependence*

- Risk of long-term supply problems (imports largely from Russia and Algeria)
- Risk more pronounced as carbon consumption becomes less intensive

*Europe-30: natural gas
(reference scenario in mtoe)*

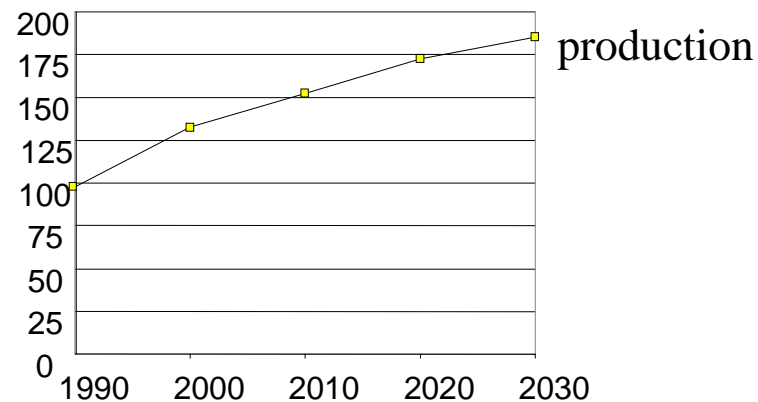


The basic energy situation

Less than perfect energy options

➔ *New and renewable energy sources: a political priority*

*Europe-30: renewables
(reference scenario in mtoe)*



- Renewables offer a potential to be exploited
- EU target: 12% of total energy consumption in 2010
- They have differing growth prospects
- Their takeoff assumes that financial or tax incentives will be provided

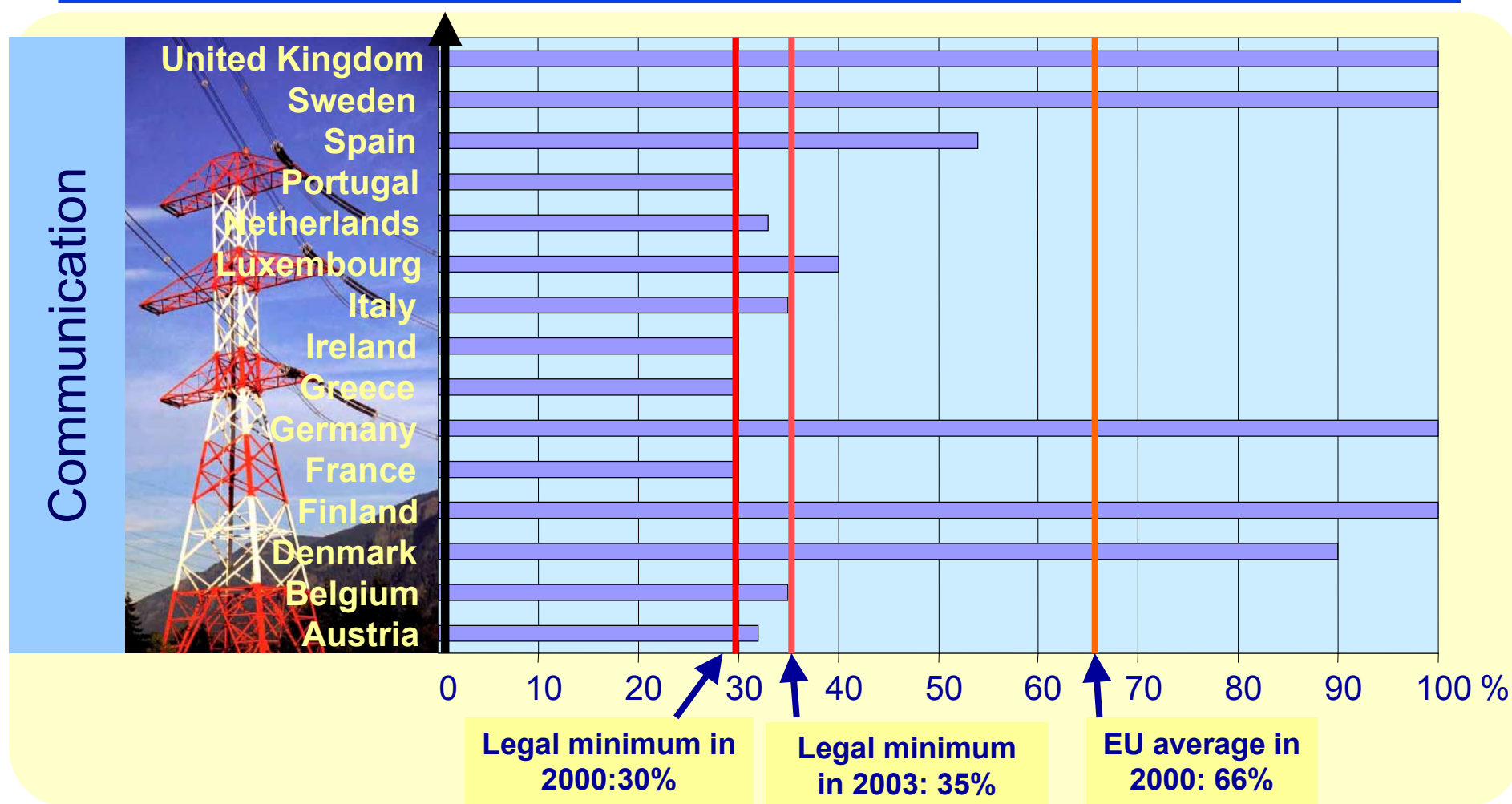
Impact on the European Union

- *No energy option on its own can meet the Union's needs*
- *The Union's room for manoeuvre as regards energy supply is restricted*



Electricity market opening

State of play

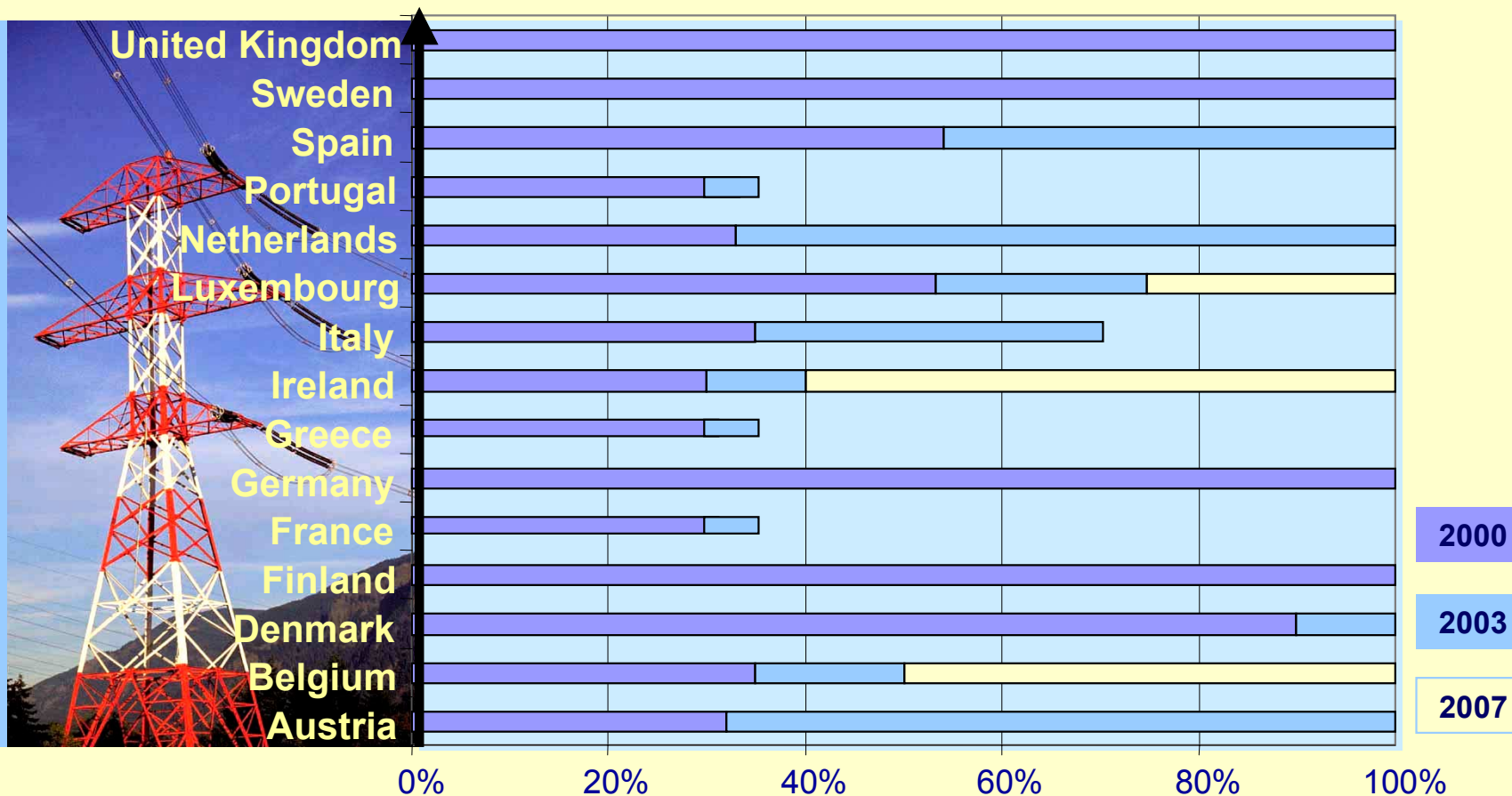




Electricity market opening

Member States' current plans

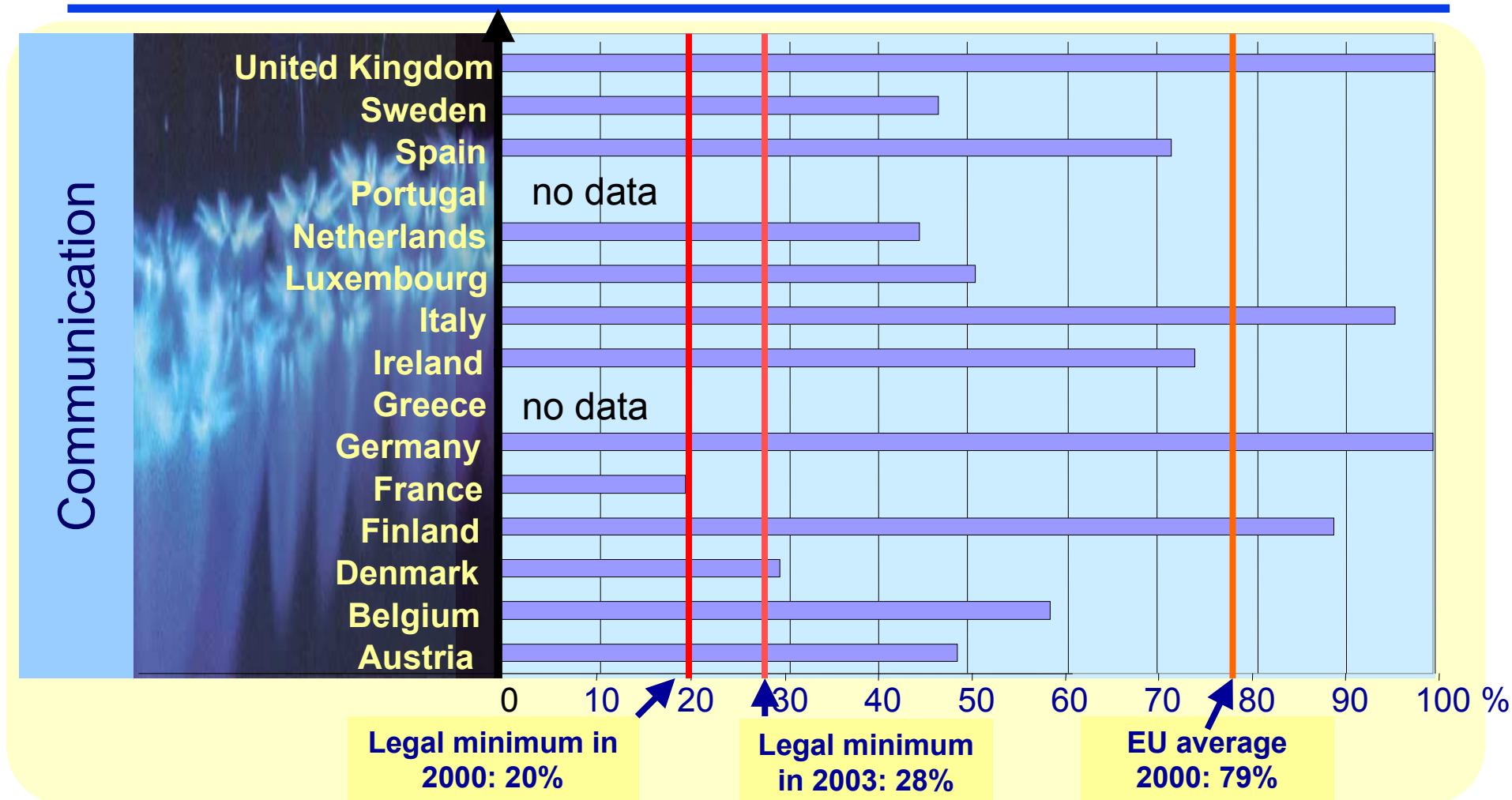
Communication





Gas market opening

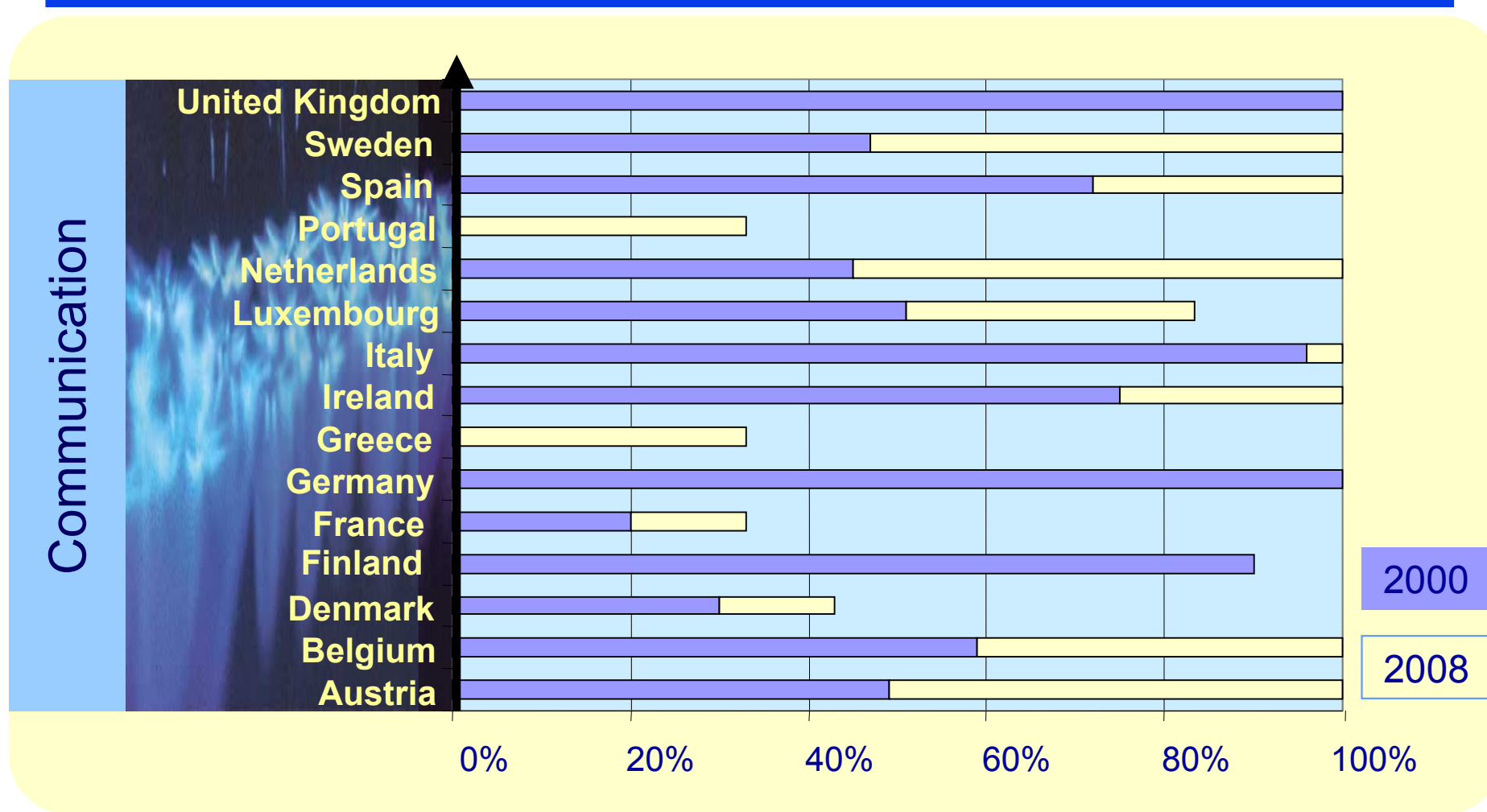
State of play





Gas market opening

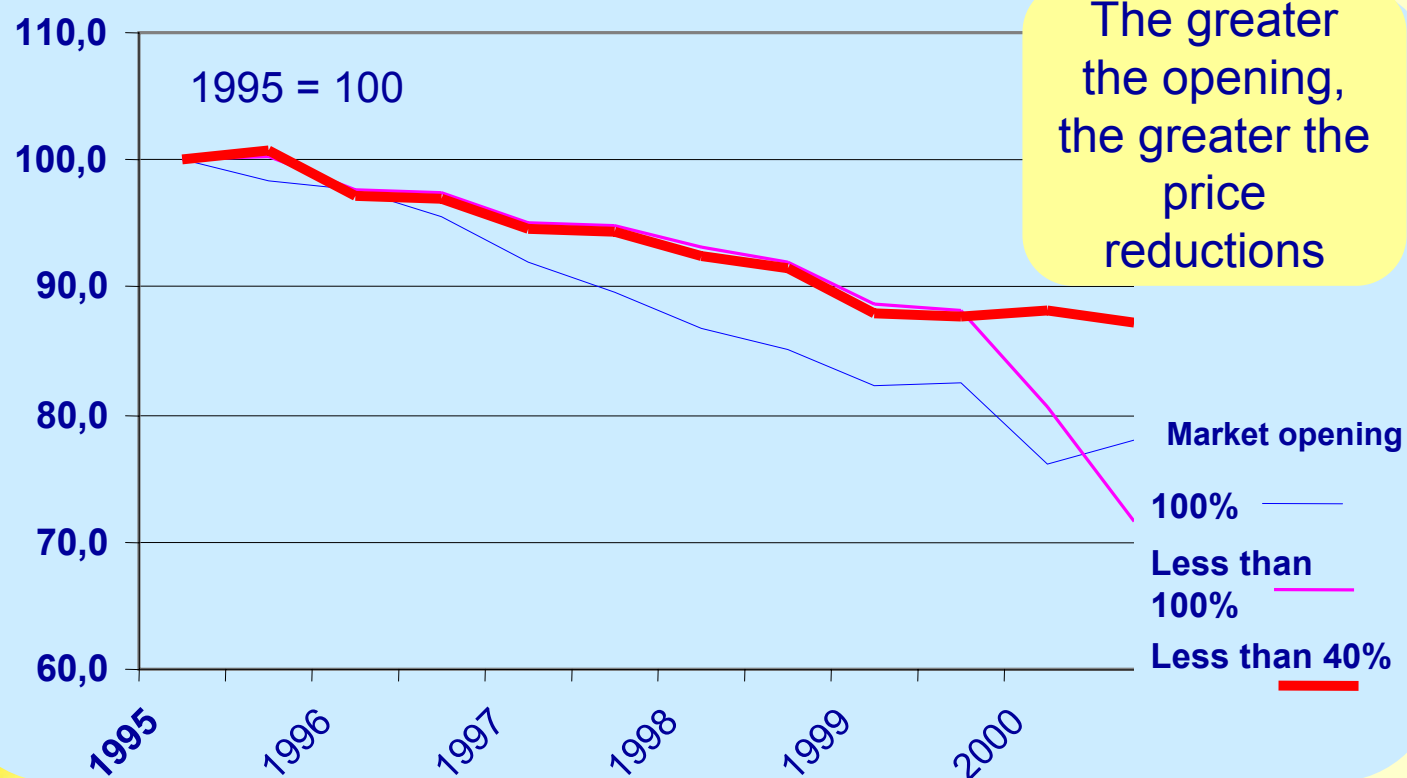
Member States' existing plans





Electricity Price Development for Industry 1995 - 2000

Communication





Revision of the Directives: Objectives



**Revision of the
existing
Electricity and
Gas Directives**



Greater opening of the market

Quantitative Full opening of national markets
by 2005

Better functioning of the market

Qualitative

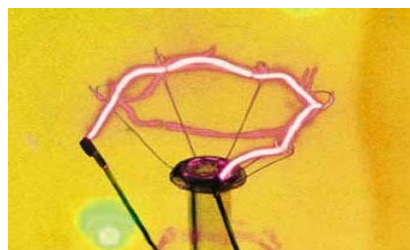
- higher level of unbundling
- regulated third-party access
- independent regulators
- improve public service provisions
- safeguard security of supply





Quantitative

Full opening of the energy market



**Revision of
the existing
Electricity
and Gas
Directives**



A new timetable for market opening

2003

All EU companies free to choose electricity supplier

2004

All EU companies free to choose gas supplier

2005

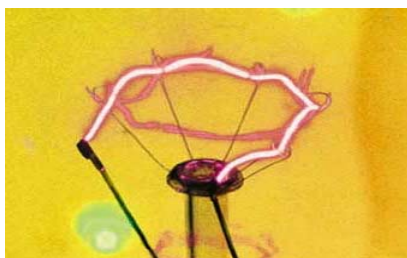
All EU consumers free to choose electricity and gas suppliers





Qualitative

Unbundling and third party access



Revision of the existing Electricity and Gas Directives



Unbundling

Independent Transmission System Operators

Member States to ensure that transmission is carried out via an independent system operator, legally and functionally separate from energy generation and sales activities.

Independent Distribution System Operators

Also a legally and functionally separate undertaking. But Member States may exclude small distribution companies (100 000 consumers)

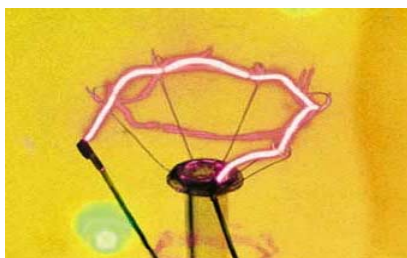
Third party access

Tariffs to be published and regulated for transmission, distribution and access to LNG

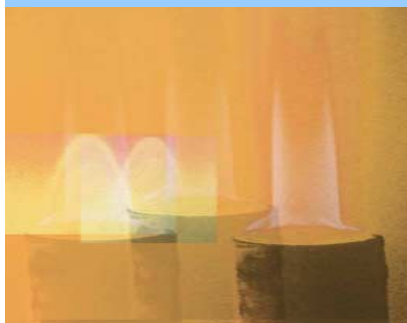




Qualitative Independent regulators



Revision of the existing Electricity and Gas Directives



Regulators

Independent regulators are pivotal in ensuring non-discriminatory access to the network. Nearly all Member States have established regulatory authorities, save Germany.

Regulators will need to:

- be **independent** of the electricity/gas industry
- have a set of **minimum competences** including:
 - | power to set/approve tariffs
 - | power to implement EU agreed trading arrangements



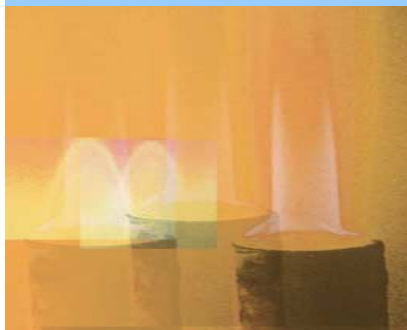


Qualitative

Improving standards of service



Revision of the existing Electricity and Gas Directives



Public service

The impact so far on service standards has been **positive**: standards have gone up.

The Commission proposes to increase their level further:

- **Universal service**
Obligation to supply electricity to all at reasonable prices
- **Protection of vulnerable consumers**
- **Better protection of consumer rights**
Contractual terms, disputes settlement
- **Continuous benchmark exercise** of service levels in Member States





Qualitative Security of supply



**Revision of
the existing
Electricity
and Gas
Directives**

Comparison California/EU

The situation in California resulted from inappropriate structures:

- obligatory pool
- prohibition of bilateral agreements to hedge risks
- no tendering for new capacity
- excessively strict planning procedures (7 years)
- no internal market in the US
- no effective trading arrangements

Such structures do not exist in the EU market

Security of supply

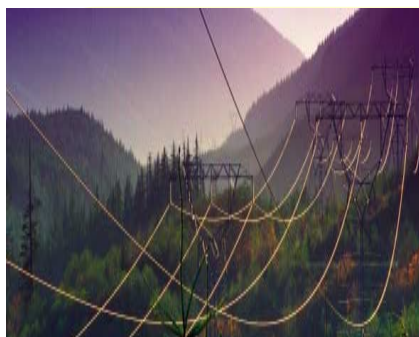
**Additional
safeguards in
new proposals**

- careful monitoring at EU and national level
- tenders where necessary
- internal market
- harmonised network security standards





Regulation: objectives



Regulation on cross-border exchange in electricity



Create a single EU energy market

Still 15 separate national markets

- Trade in electricity: around 8% of electricity production
- Number of customers having switched suppliers

Highest
where market
opening
started early

UK

20%

Finland

30%

Spain

France

Germany

Portugal

5%

Most opt for another national supplier

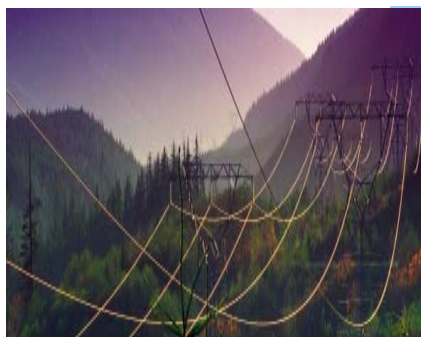
Missing elements

- Cross border trade tarification rules
- Congestion management rules
- Increased interconnection capacity, where economically justified





New cross-border trade rules



Regulation on cross-border exchange in electricity



Tariffication rules

Compensation between Transmission System Operators TSOs

- TSOs will receive compensation or pay for transit flows
- Cost-reflective compensation
- Fragmented national cross-border tariffs and pancaking abolished
- Detailed implementing rules through comitology procedure

Congestion management

Interconnection capacity

- Information on available interconnection capacity to be made public
- Better information exchanges between TSOs

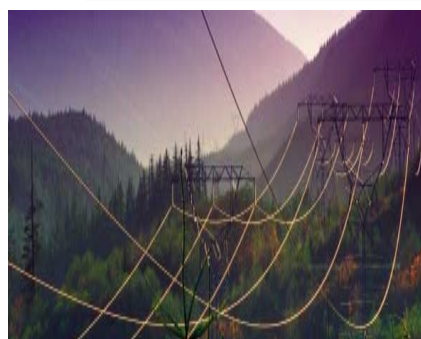
Allocation of capacity in case of congestion

Harmonised market-based approaches to reduce trade distortions





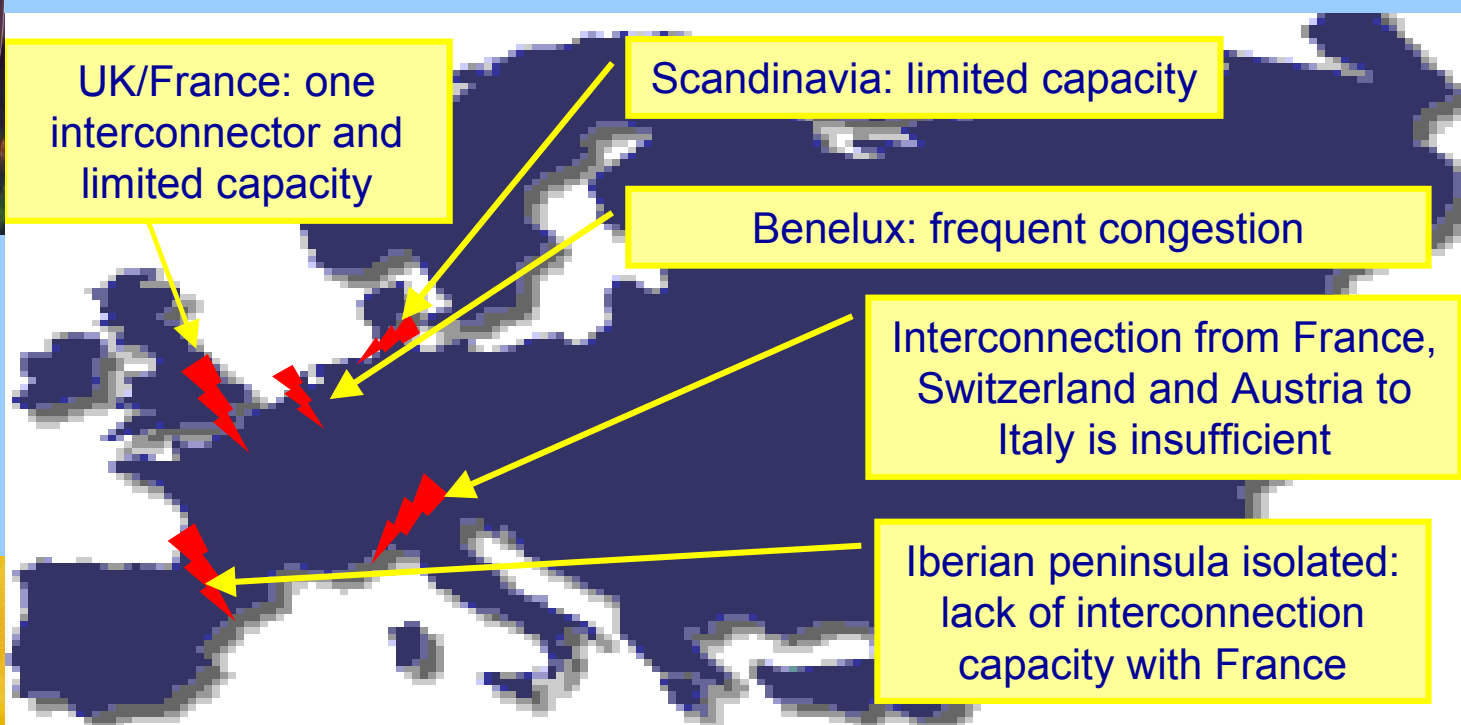
New interconnection capacity



**Regulation on
cross-border
exchange in
electricity**



Main interconnection bottlenecks



The Commission will present a European interconnection plan

