

Experience & Challenges of Electricity Interconnections

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Secretary General

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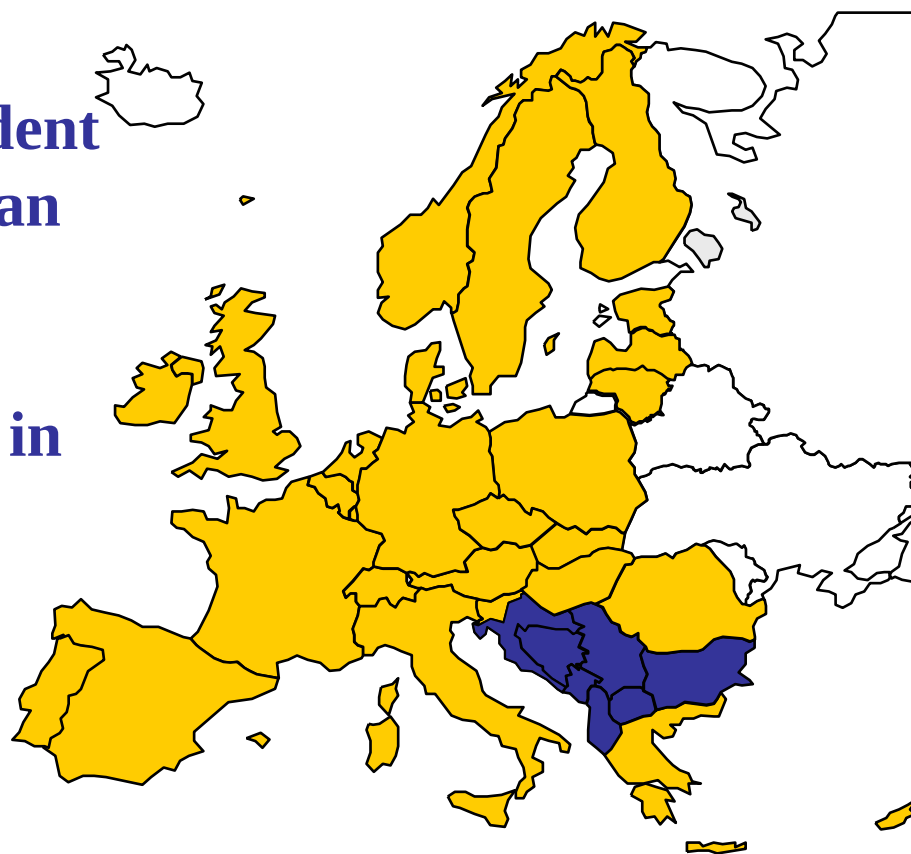


ETSO was established in 1999

Direct membership of all independent TSOs in the EU and other European countries

ETSO is the EU-wide interlocutor in market and regulatory affairs for TSOs

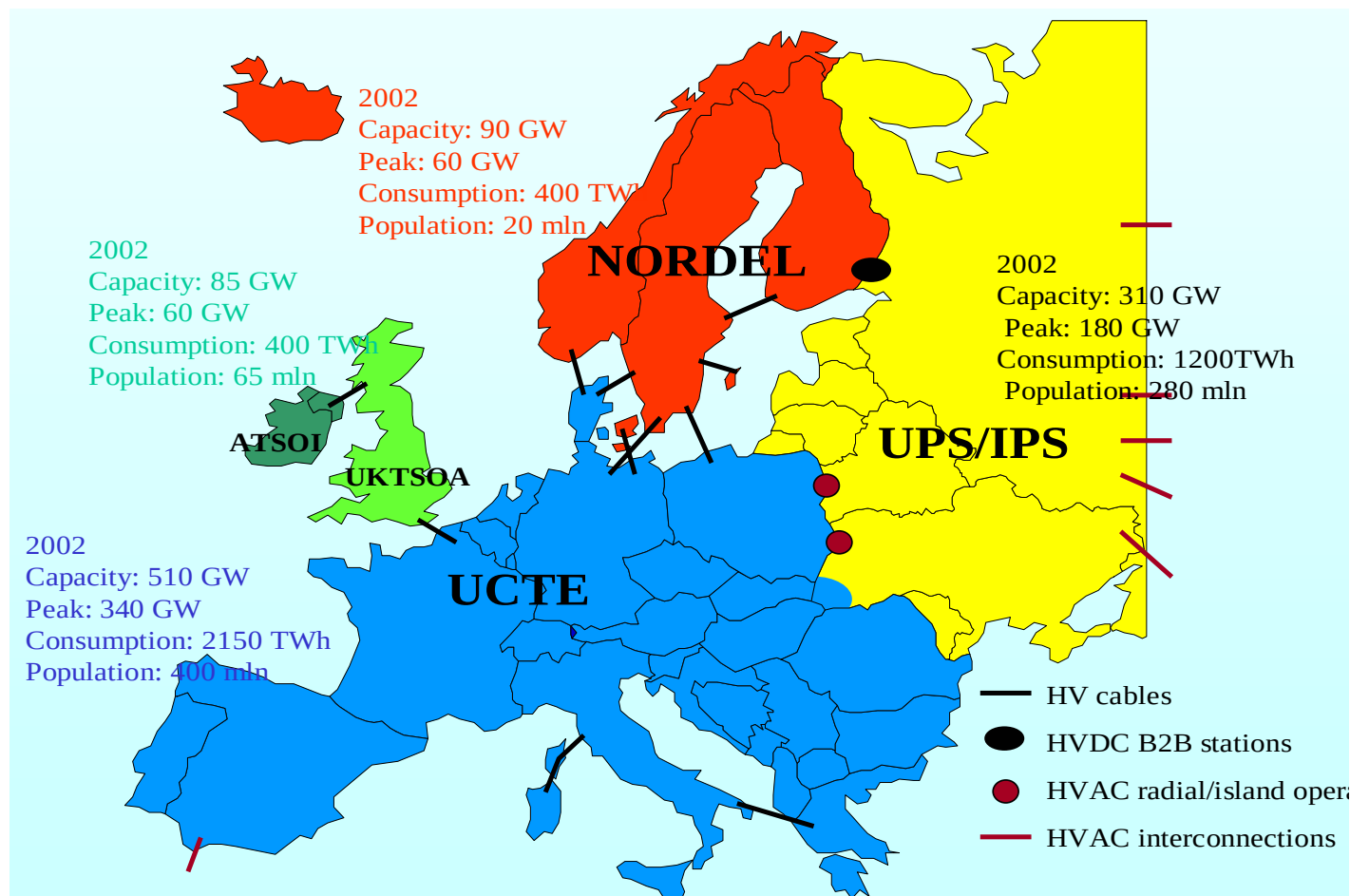
**Covers an area of 490M people,
3200TWh yearly electricity
consumption and more than 290.000
km of lines**



 Members
 Special relationship



Synchronous Areas in Europe - 2004



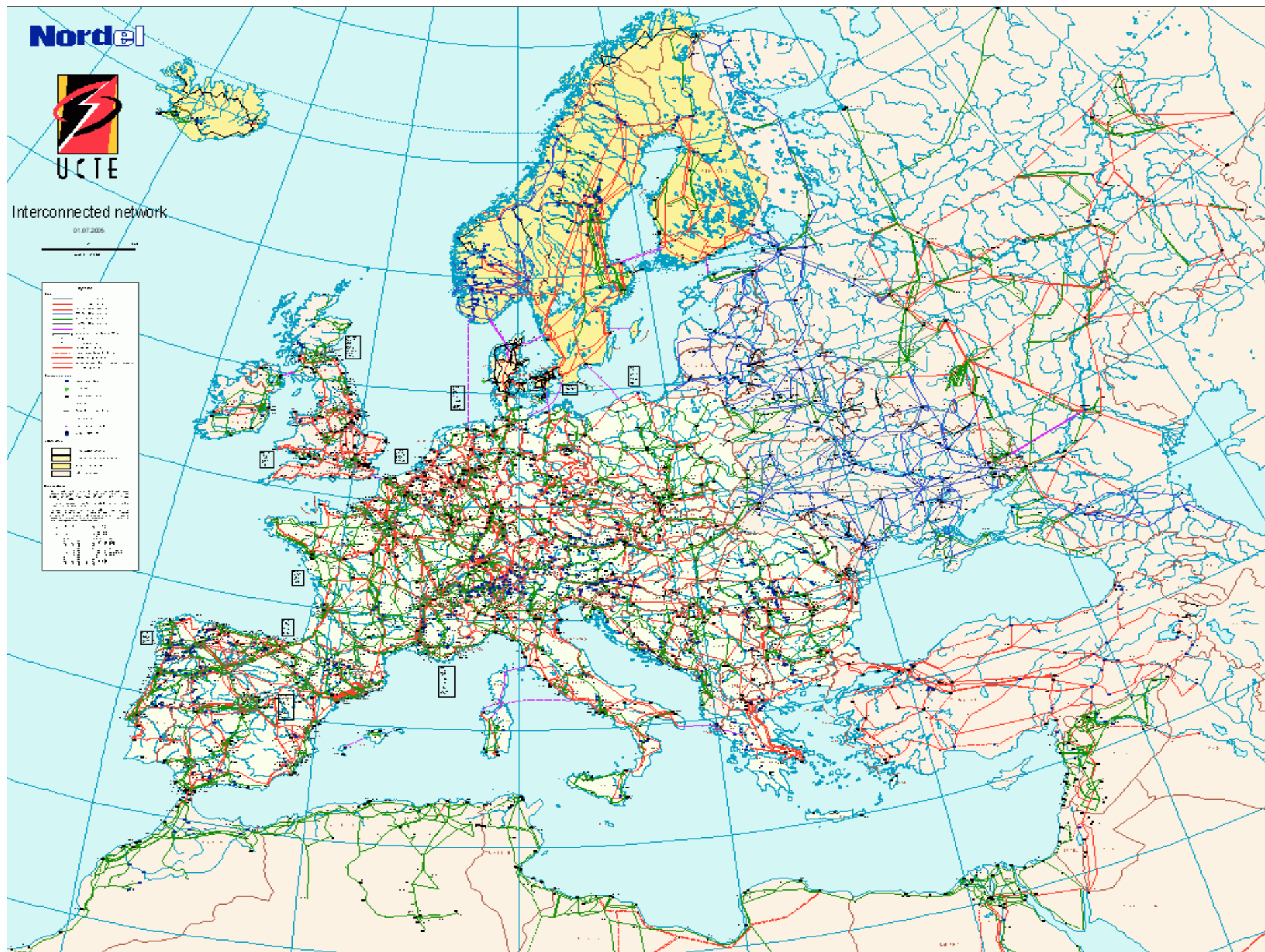
Nordel



Interconnected network

01.07.2005

0 100 200 km



- ➔ Ensure continued adequate and reliable security of supply
- ➔ Market facilitators... as long as legislations allow



Experience with the IEM as regards TSOs proposals

- ➔ In 2002 cross-border fees for electricity exchanges are starting to be eliminated among EU countries: ITC mechanisms
- ➔ Market-based congestion management mechanisms are implemented at many borders: gain in efficiency
- ➔ TSOs develop a European approach and try to create an even balance between restrictions of the national markets and limitations of cross-border capacities
- ➔ All TSOs in Europe are in the position to offer non discriminatory access: most opted for ownership unbundling
- ➔ The net transfer capacities have increased at all borders: publication of NTC values



- ITC mechanism since 2004:
elimination of border fees
- Coordinated auction dry run project
- Pilot project to be launched on
balancing markets
- Independent TSOs



Challenges for a real integrated electricity market

- a. developing new interconnectors: necessary for any market development***
- b. providing the right signals for new generation investments***
- c. harmonisation of allocation capacity procedures***
- d. implementation of methods to prevent and manage congestions***
- e. increase in data transparency and publication***
- f. regulatory harmonisation***
- g. EU energy policy***



Developing new interconnectors

- ➔ NOT a question of financing
- ➔ BUT of regulatory incentive
- ➔ BUT a problem of getting rights of ways for building the lines:
 - ➔ 400 kV infrastructures bring a large collective economic benefit
 - ➔ But limited benefits for local populations
 - ➔ While having an environmental impact
- ➔ TSOs need a political support from governments for the sake of the general interest
- ➔ They need faster authorisation procedures to build new lines

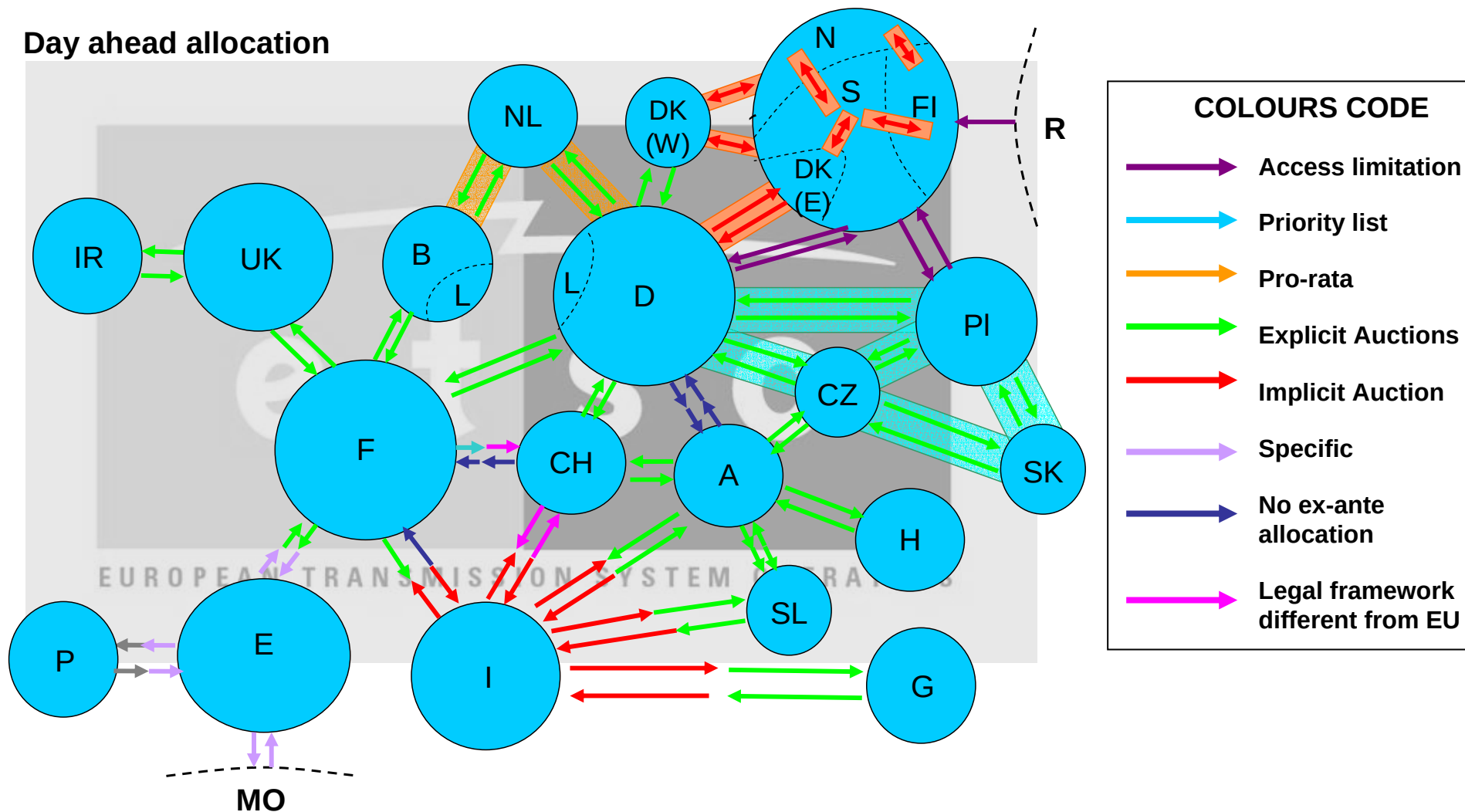


- ➔ TSOs proposed to set up a European generation/load balance report to provide information: EU Adequacy report
- ➔ Economic signals are given by market-based congestion management methods (e.g. auctions)



Harmonisation of allocation methods

Day ahead allocation



- ➔ Discussion on scope of data to be published to the market
- ➔ Removal of legal barriers for necessary data exchange between TSO's
- ➔ Further improvement on models like linear flow based modelling



Regulatory harmonisation

- A great variety of different national regulatory or governing arrangements
- Efficient cooperation between Regulators has become a major challenge
 - Sharing a clear long-term political vision, with the support of Member States, is crucial
 - Currently, the question of inter-TSO cooperation is second to the harmonisation of legal and regulatory frameworks



Future EU energy policy

- Definition of a “**EU-based energy mix**” taking into account
 - the best location for energy resources as well as
 - their impact on transmission grids
- ensuring availability and sustainability of primary energy sources for the medium and (very) long term for the “whole EU”
- continuously monitoring and preventing imperfect competition within and between Member States
- Compatibility of EU legislation and between Member States



Continued adequate and reliable supply of such a 'tricky product' implies

- making unambiguous political choices today
- knowing that their "real-time" impact will be felt within 3 to 15 years

→ The "Green Book" provides the opportunity

- to start a debate about a EU energy policy and
- to determine how to ensure its implementation.

