



SECURITY OF ENERGY SUPPLY

Diversity, Efficiency, Vision of the Future

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OUR ENERGY DEPENDENCE

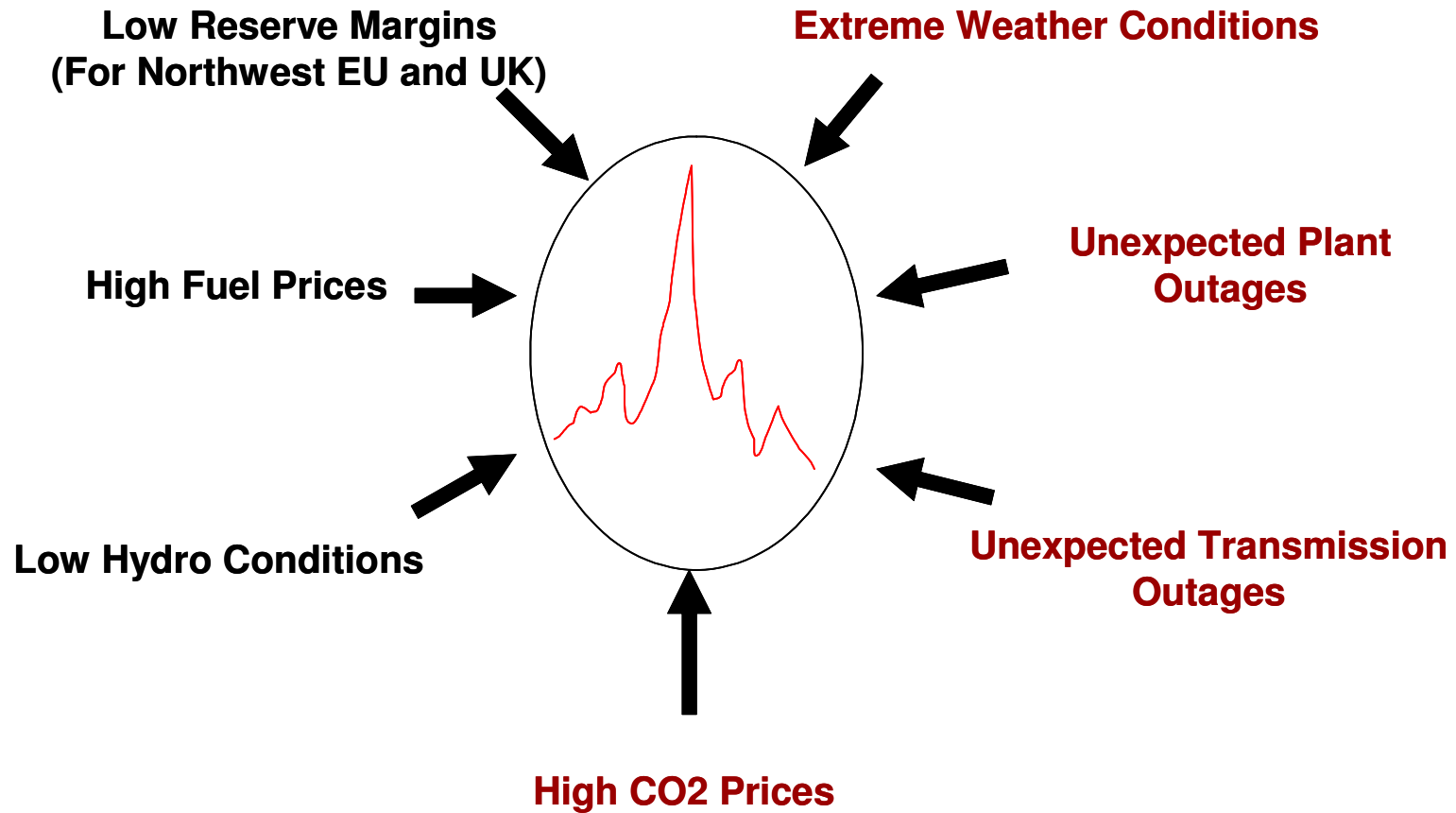
- Security : regular, secure flow of energy supply at a fair price from the access to primary sources to the final delivery to end users.
- Market mechanisms do not always work
- Energy dependence and Security of supply have a time and space dimension
- Global economic dependence from energy: foreign and domestic



DEPENDENCE FROM ELECTRICITY

- Electricity is an essential good (1999 storm in France)
- Technological dependence
- Climatic or meteorological dependence
- Geopolitical dependence
- Market dependence: the question of electricity markets

Price Spikes: The unexpected happens



Source: Cambridge Energy Research Associates.



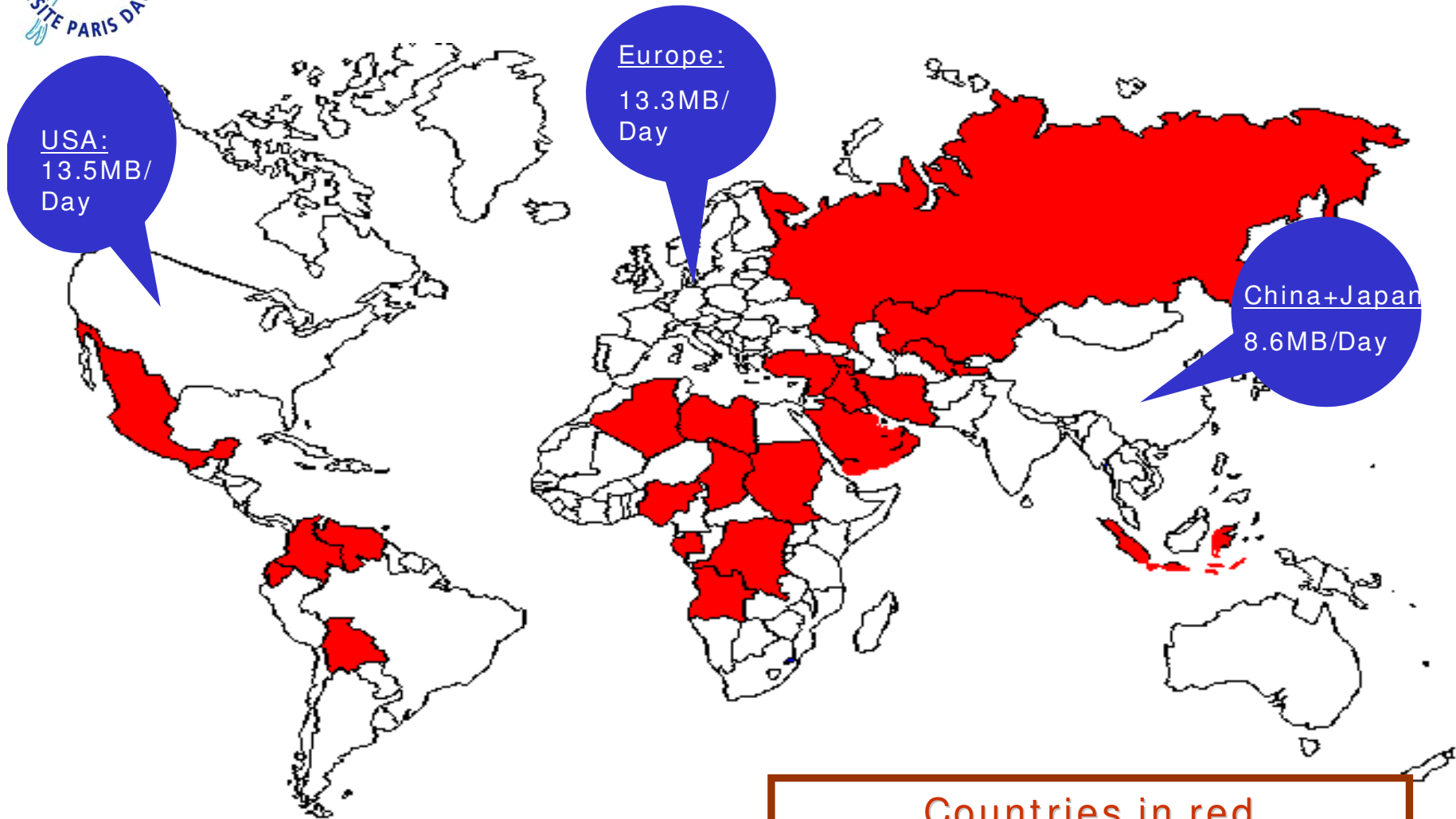
DEPENDENCE FROM HYDROCARBONS

- Countries' specific situations
- The question of reserves: a question of elasticity
- Oil dependence and the question of geopolitical turbulences

Concentration, oil's curse, demography, countries' closure

- Natural gas calls for interdependence and diplomacy
- Price risks and interdependence

Oil and Gas exporting countries at risk: 43 MB/day



Total oil imports 2005: 50MB/D

Data source: BP Statistical Review World Energy 2006

Countries in red
89% of World Oil Reserves
81% of World Gas Reserves



The European Energy Vision

- A growing energy interdependence
- Kyoto and the Greenhouse Gas Emission Reduction.
- The improvement of Energy Efficiency
- The Energy balances diversification
- Security of supply: oil – gas - electricity

EUROPEAN ACTION TO ENSURE SECURITY (I)

- Energy efficiency as a major political priority
 - Energy Energy efficiency is a major component of competitiveness
 - The role of local communities, cities, administrations
 - The key role of information
 - Financial incentives for the financing
 - A field of business opportunities for equipments and energy services (CDM and Kyoto related opportunities)

- Measuring externalities
 - Externalities (local and global) have to be integrated and paid
 - There is no perfect energy technology

- Diversify energy balances
 - Promoting renewable at an acceptable cost with limits
 - Nuclear has its place
 - The question of transports
 - Developing flexibility



EUROPEAN ACTION TO ENSURE SECURITY (II)

- Diversify sources of supply
- Strategic storage

- Secure and reinforce networks
 - European interconnexions for gas and power
 - Better coordination of information and management
 - Toward an integrated power network for continental Europe ?

- A model of “regulated liberalization” to be invented
 - The question of investments
 - Pure market mechanisms or more “cooperation”