



UNION FENOSA

gas

GAS TO POWER EUROPE

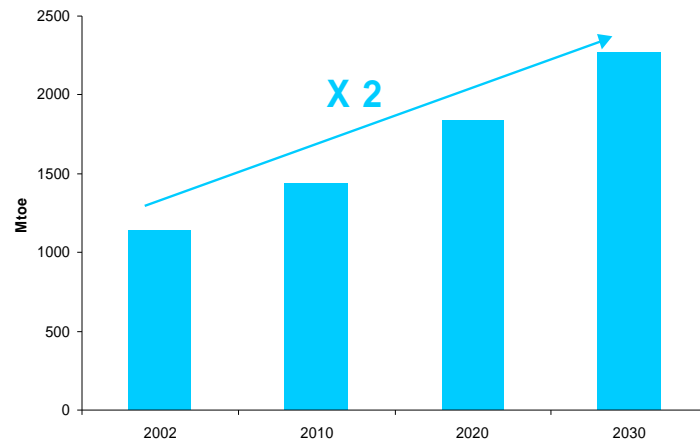
Eloy Alvarez Pelegry
Secretary General
UNION FENOSA gas
6th June

GAS TO POWER EUROPE

- Electricity demand and ageing of existing facilities drive new generation capacity development
- Environmental policies favour gas & renewables
- CCGTs are “easy” and “complex”
- Prices are now a concern
- Items for security of supply:
 - Diversification (origins, gas infrastructures generation mix)
 - Participation throughout the gas chain

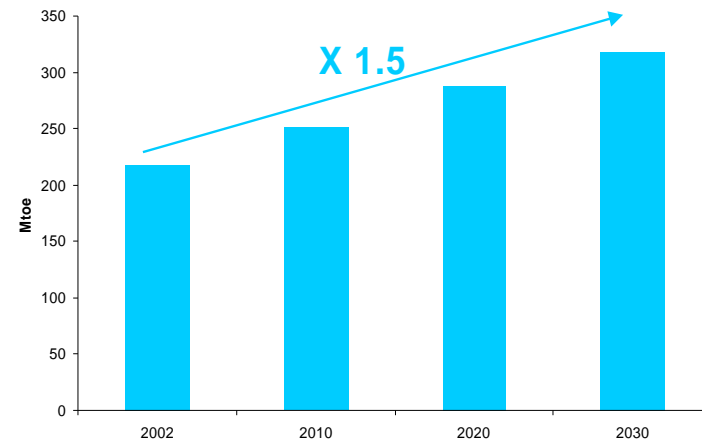
Electricity demand and ageing of existing facilities drive new generation capacity development

World Electricity demand (2002-2030)



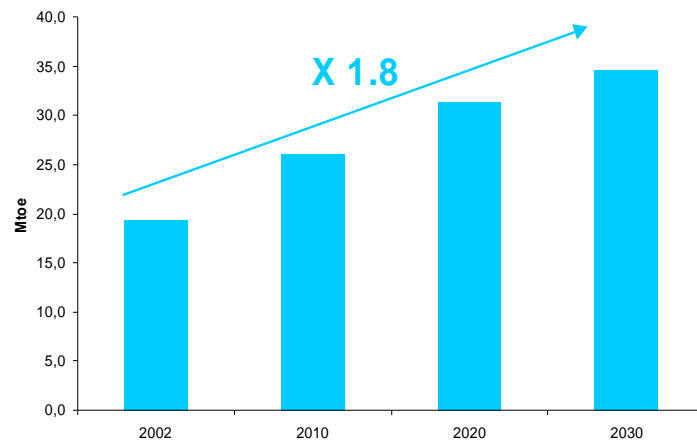
Source: IEA

European Electricity demand (2002-2030)



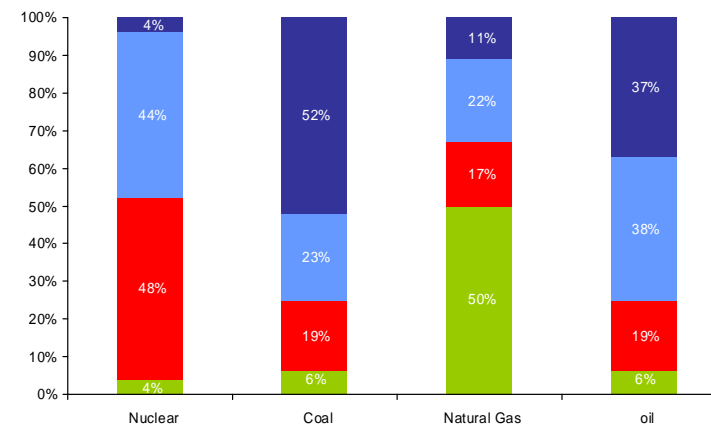
Source: IEA

Spanish Electricity demand (2002-2030)



Source: EU, MITyC

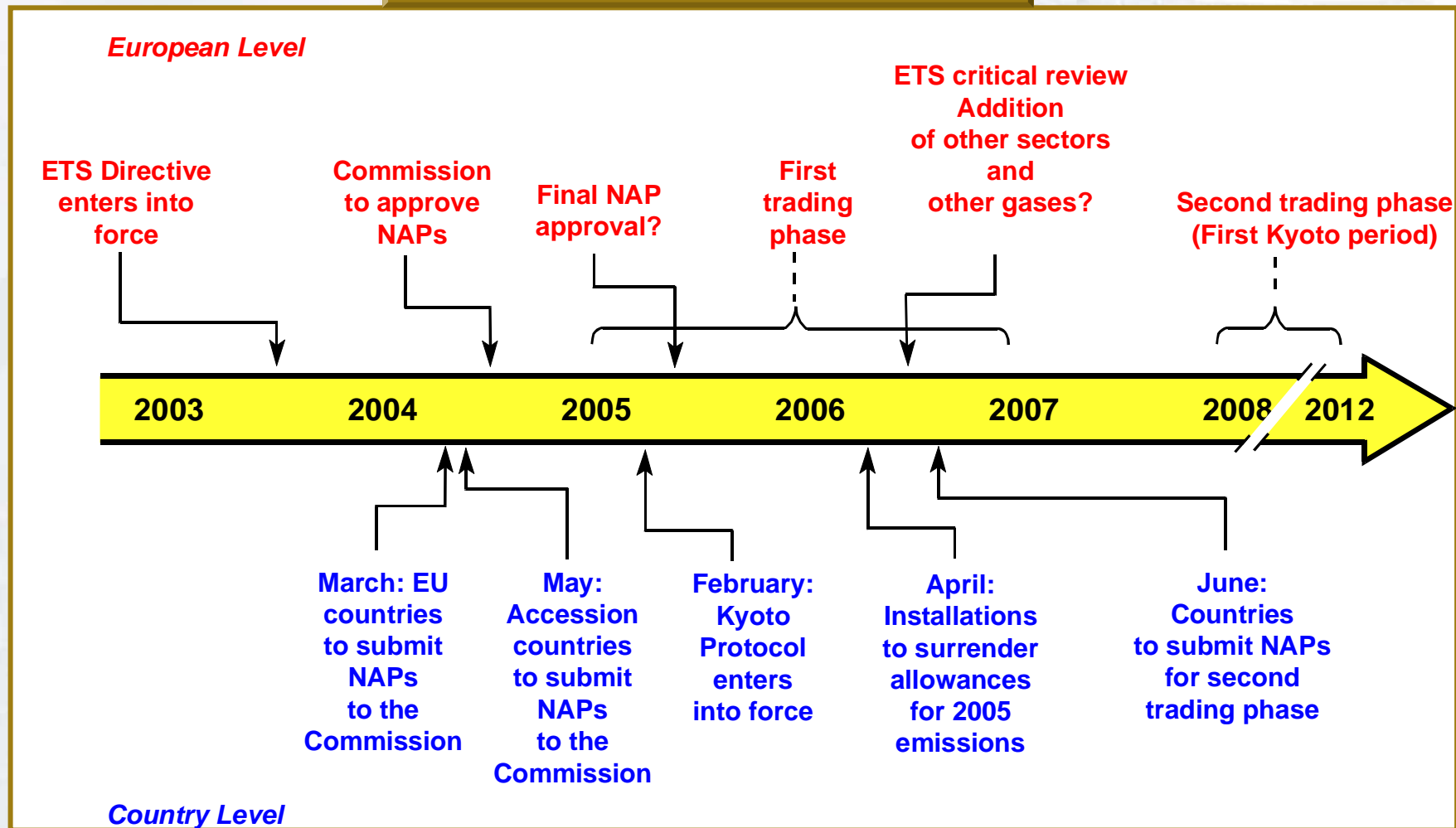
Age of generation facilities EU 29



Source: WEC

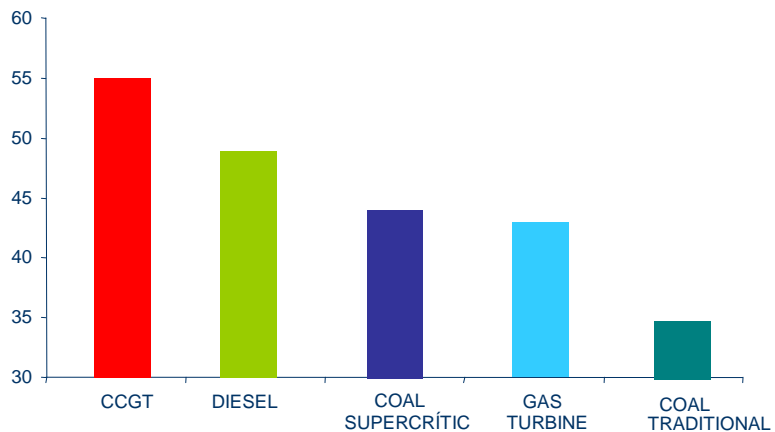
Environmental policies favour gas & renewables

Kyoto Protocol Process



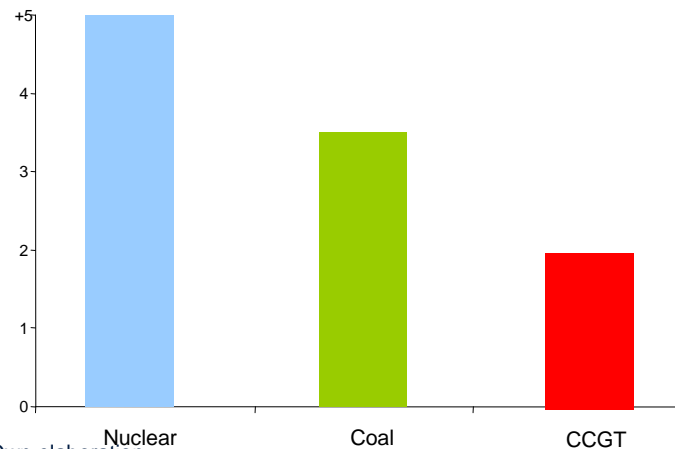
CCGTs are “easy”

Energy Efficiency (%)



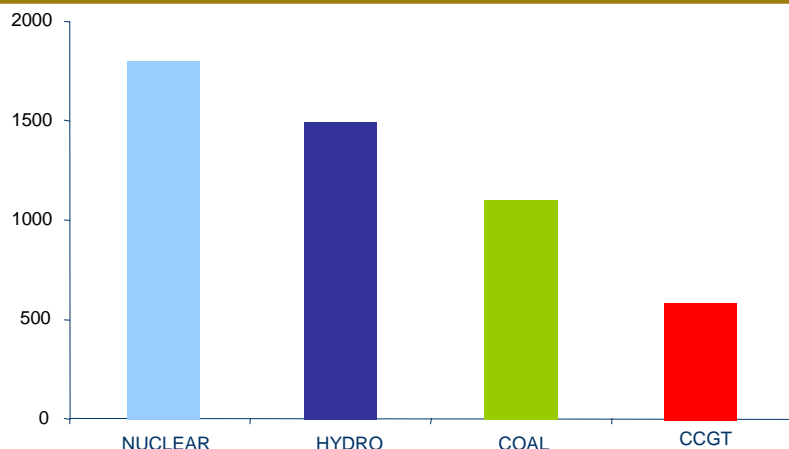
Source: Own elaboration

Estimated construction period (years)



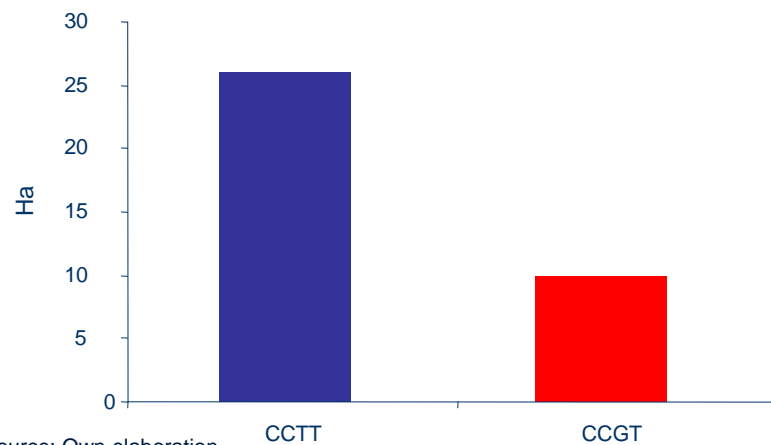
Source: Own elaboration

Typical Investment (€/kW)



Source: Own elaboration

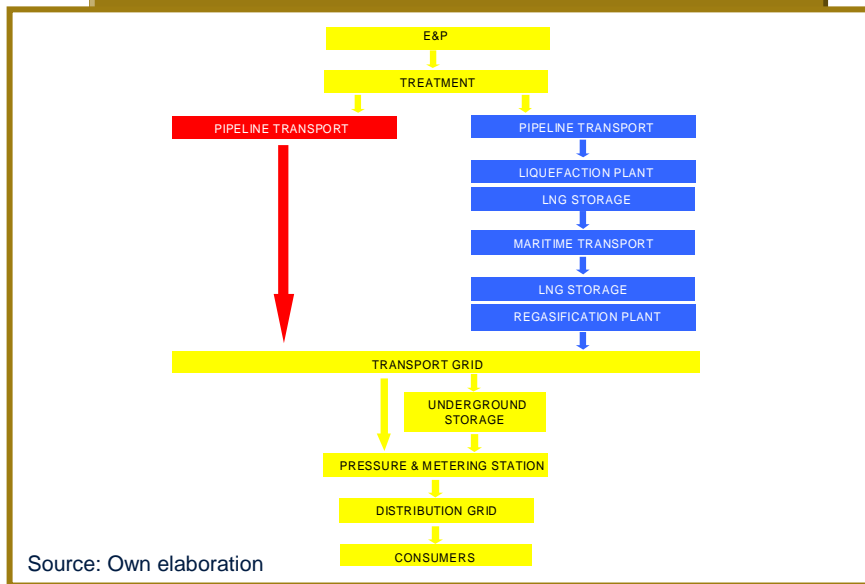
Land requirement (Ha)



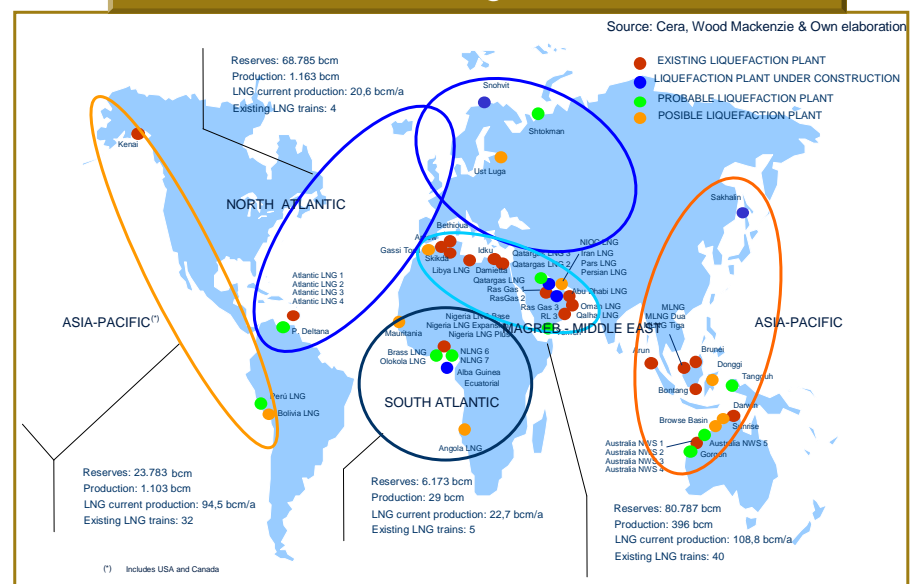
Source: Own elaboration

CCGTs are "complex"

NG & LNG Chains

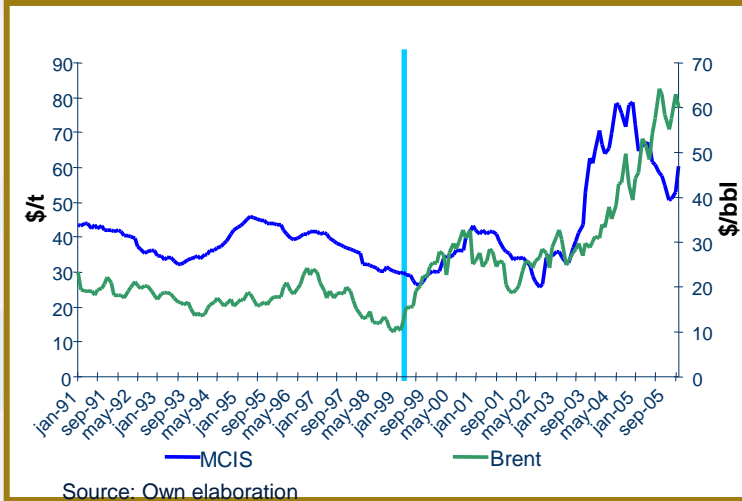


International gas markets

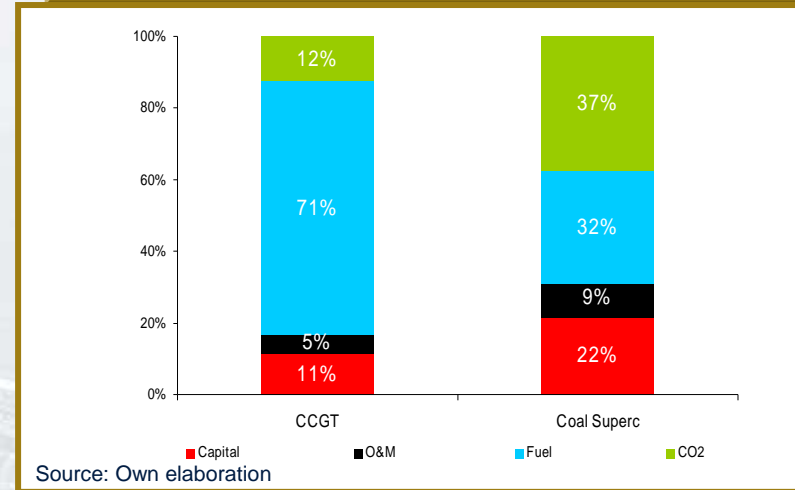


Prices are now a concern

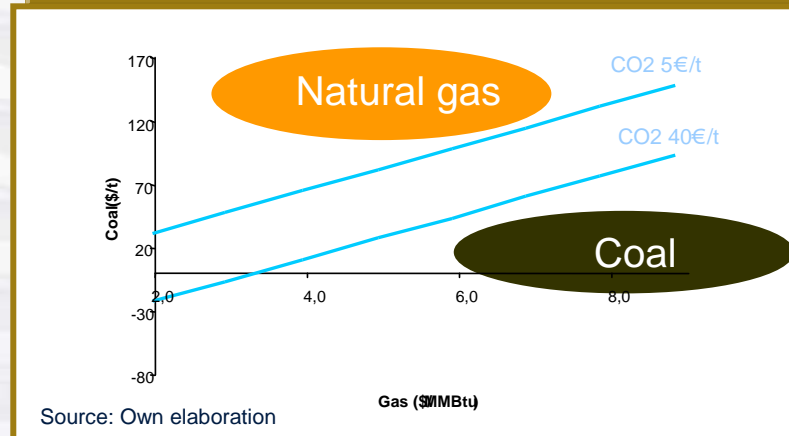
Brent and MCIS price evolution



Generation cost structure (high prices scenario)



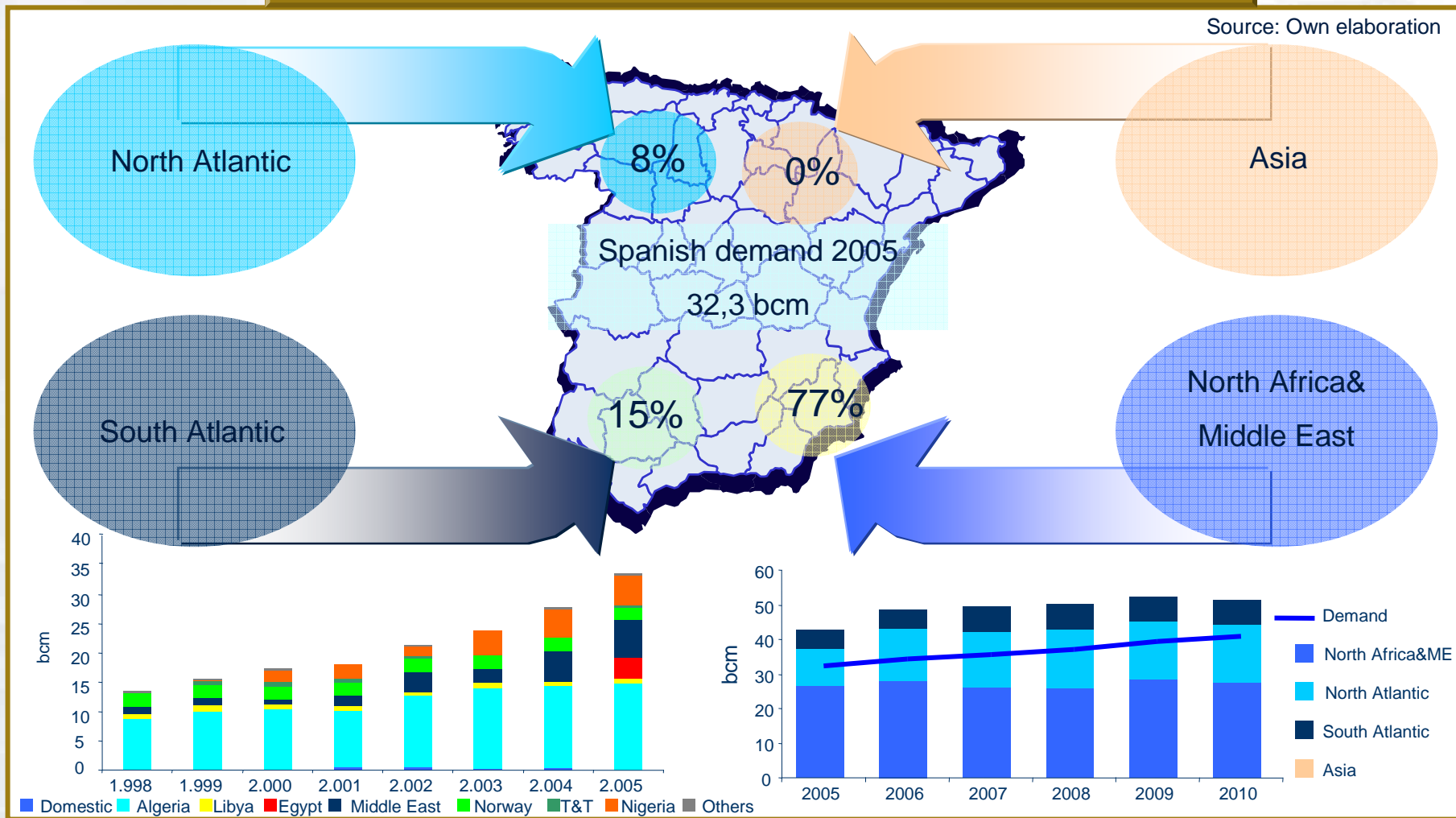
Indicative relationships gas, coal, CO₂.



Items for security of supply: Diversification (origins, infrastructure gen.mix)

Natural Gas supplies to Spain

Source: Own elaboration



An aerial photograph of an offshore oil platform in a harbor. A large tanker ship, the 'BRAGLIA SVETI', is docked at a pier. The platform has several tall towers and a complex network of pipes. In the background, there are other smaller structures and a crane. The water is calm, and the sky is overcast. The image has a semi-transparent circular graphic overlay on the left side.

Thank you for your attention