



The importance of carbon capture and storage to the EU

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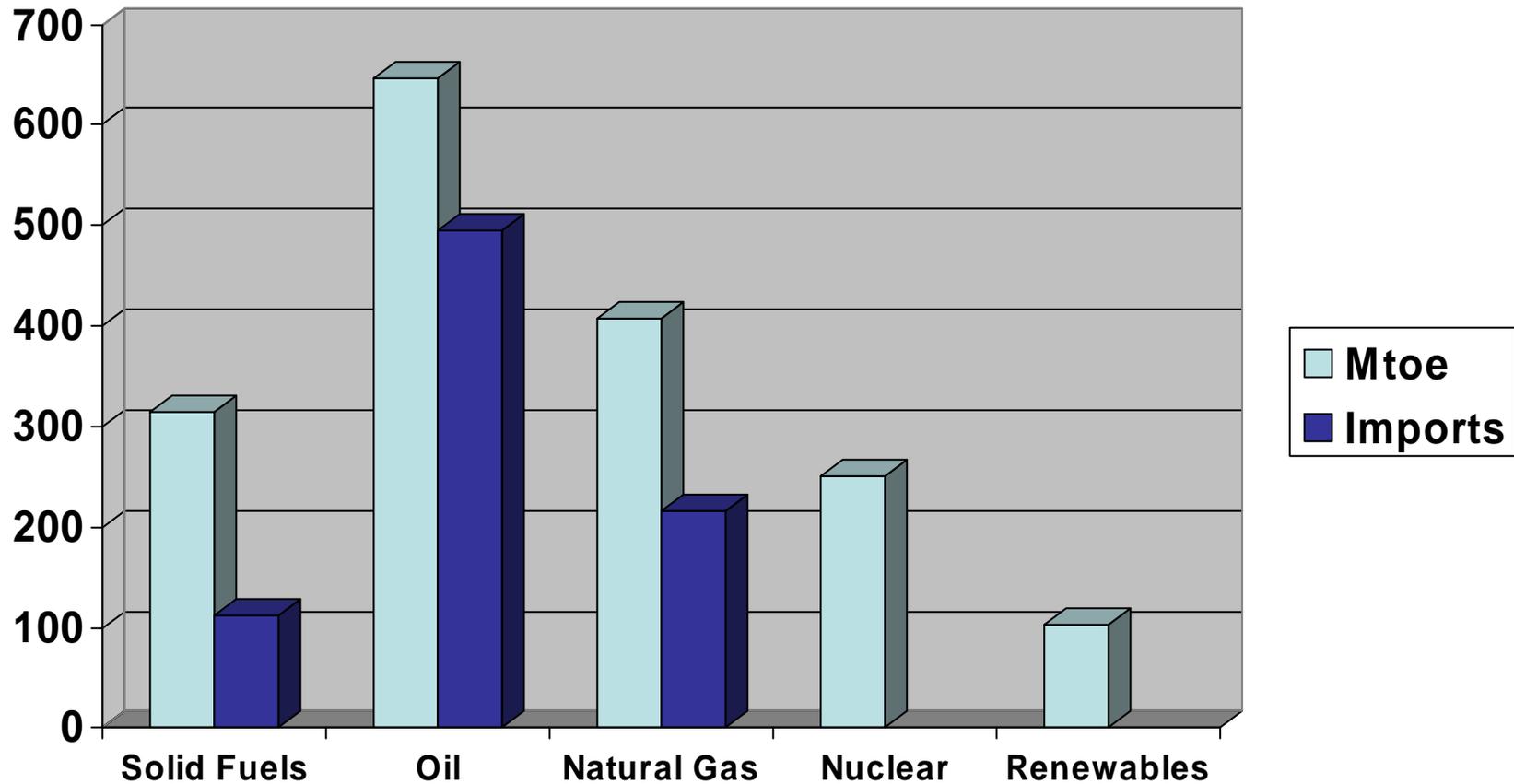


EU Energy Policy

- The Green Paper on a “European Strategy for Sustainable, Competitive and Secure Energy” was adopted by the European Commission in March 2006
- It is based on the three pillars identified in its title
 - Sustainability
 - Competitiveness
 - Security of supply



EU Energy Mix/Imports - Gross Inland Consumption -





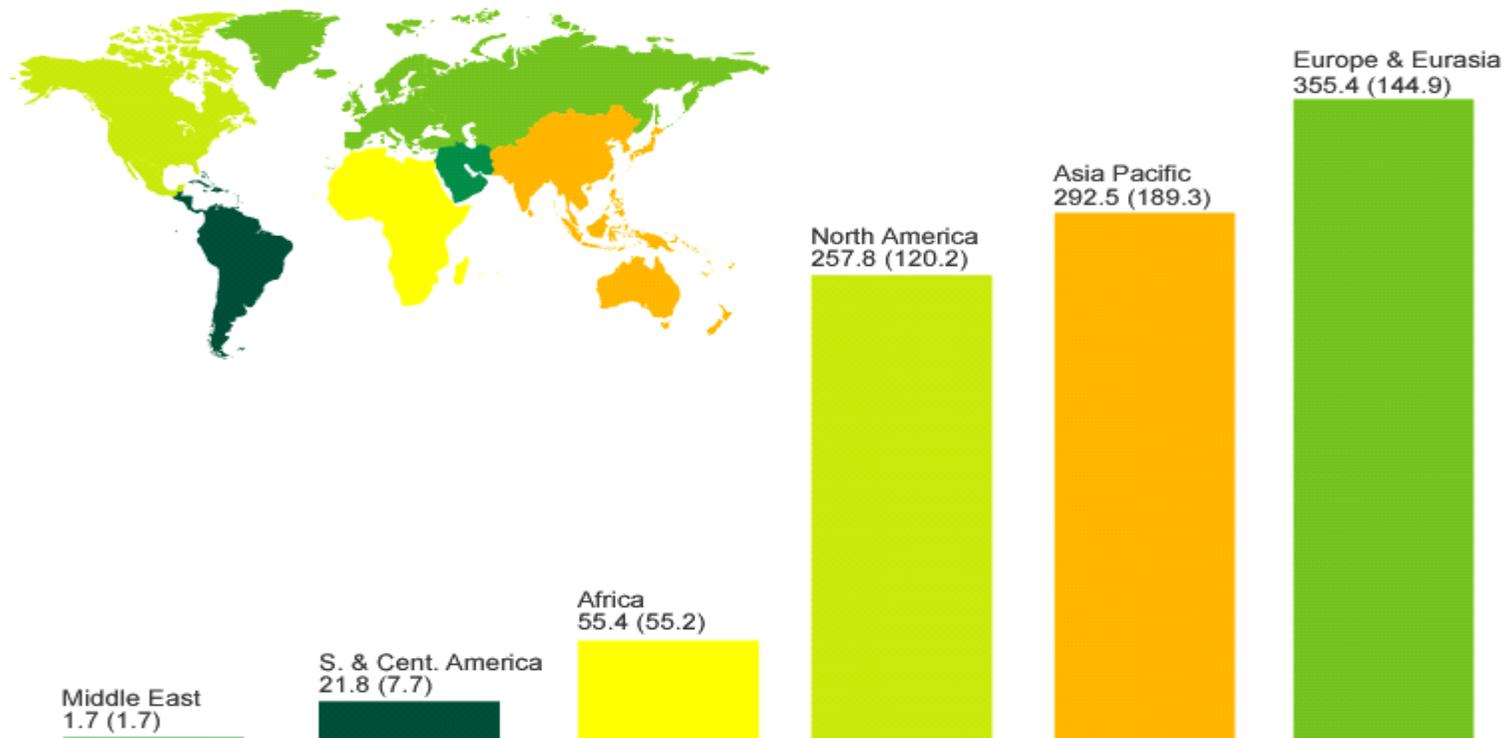
The role of solid fuels

- From the point of view of security:
 - The EU is less dependent on imports of solid fuels (coal and lignite) than it is on the other fossil fuels.
 - The EU has over 200 years of reserves of coal and well over 100 years of lignite reserves. (Resources are much greater)
- From the point of view of competitiveness
 - Burning solid fuels are among the least expensive ways of generating electricity



Proved coal reserves at end 2003 - World

Thousand million tonnes (share of anthracite and bituminous coal is shown in brackets)



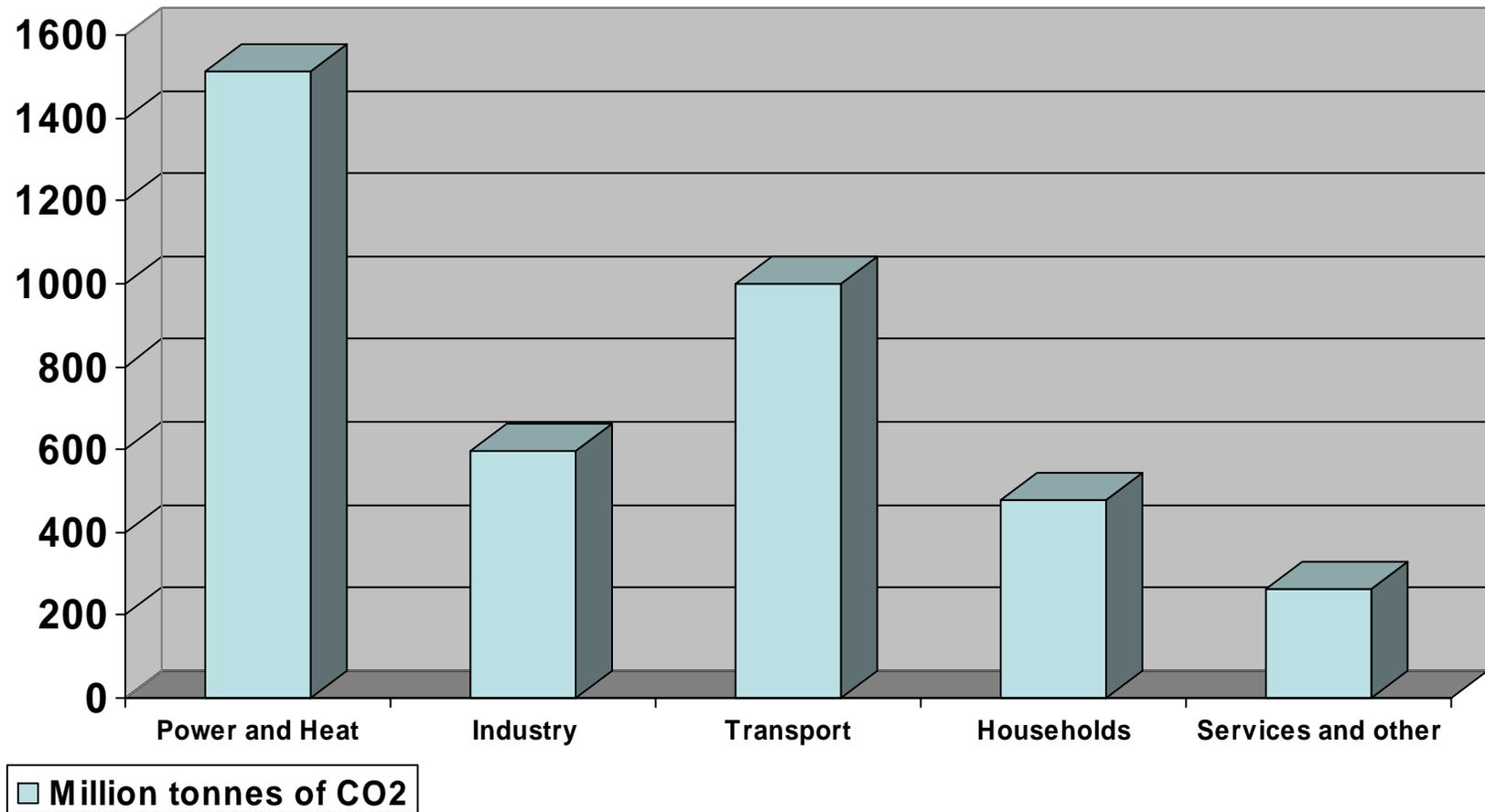


Sustainability

- Unfortunately, burning solid fuels - and to a lesser extent natural gas – to produce our electricity is the single major source of CO₂ emissions (40% of total).
- Fuels that presently increase our supply security also have the strongest impact on the environment. It impact will increase!
- Their continued use – ***without CCS*** - is ***not sustainable***.



EU CO₂ emissions by sector





A few early conclusions

- **EU needs to diversify its energy mix away from imported fossil fuels**
- **Commission is encouraging and fostering zero-emission power generation**
- **Expecting to see Zero Emission Technology to be fully demonstrated by 2015 – or sooner!**
- **Several technology routes need to be developed**
- **But need for geological CO₂ storage to be “safe & controllable” and accepted**
- **There is a great need for enhanced international cooperation**
- **Climate Change is a global problem – it needs a global solution!**