



*International Workshop on  
Near Zero Emissions Coal Power Generation  
with Capture & Storage in China  
Beijing, 4-5 July, 2006*

# **COACH**

**"Cooperation Action within CCS China – EU"**



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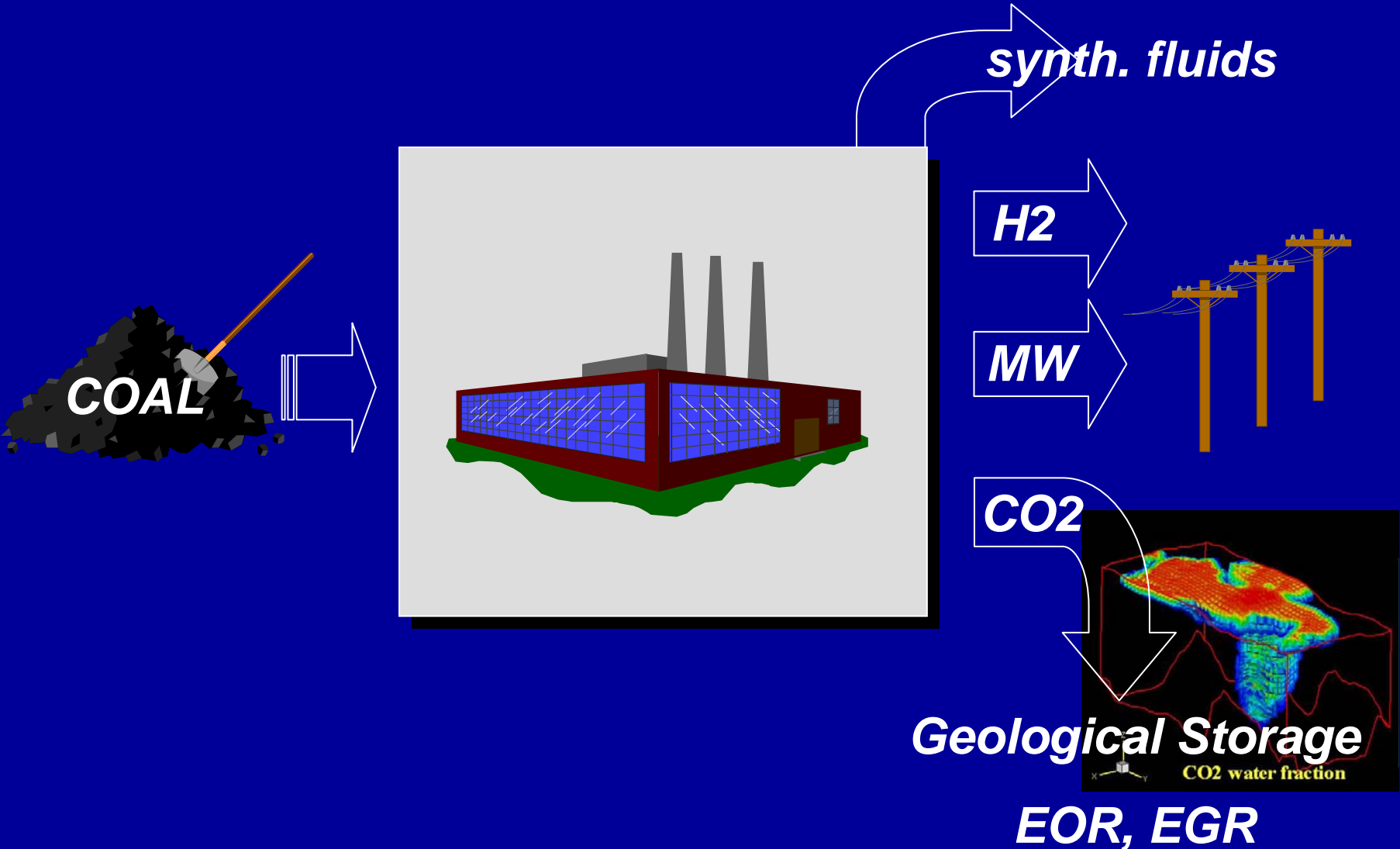
# Demonstration of advanced 'NZEC' Near-Zero Emissions Coal technology through CCS in EU and China

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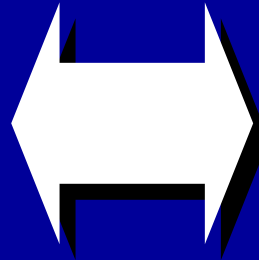
## The FP6 COACH project :

- Target
  - Prepare for demonstration of near-zero emissions coal technology through CCS in China
- The main objective
  - Research and coordination overlooking the Chinese / European MoU on clean coal

- Prepare the ground for
  - 3 year project
  - implementation of large scale clean coal energy facilities ...
  - including options for coal based electric power generation with CO<sub>2</sub> capture, transport and storage ...
    - 90% capture rate and 50% cost reduction
  - as well as production of H<sub>2</sub> ...
    - 25-50 MW, from 0% to 100% H<sub>2</sub>
  - options for synthetic fuels ...
  - and provisions for Enhanced Recovery of Oil and Gas



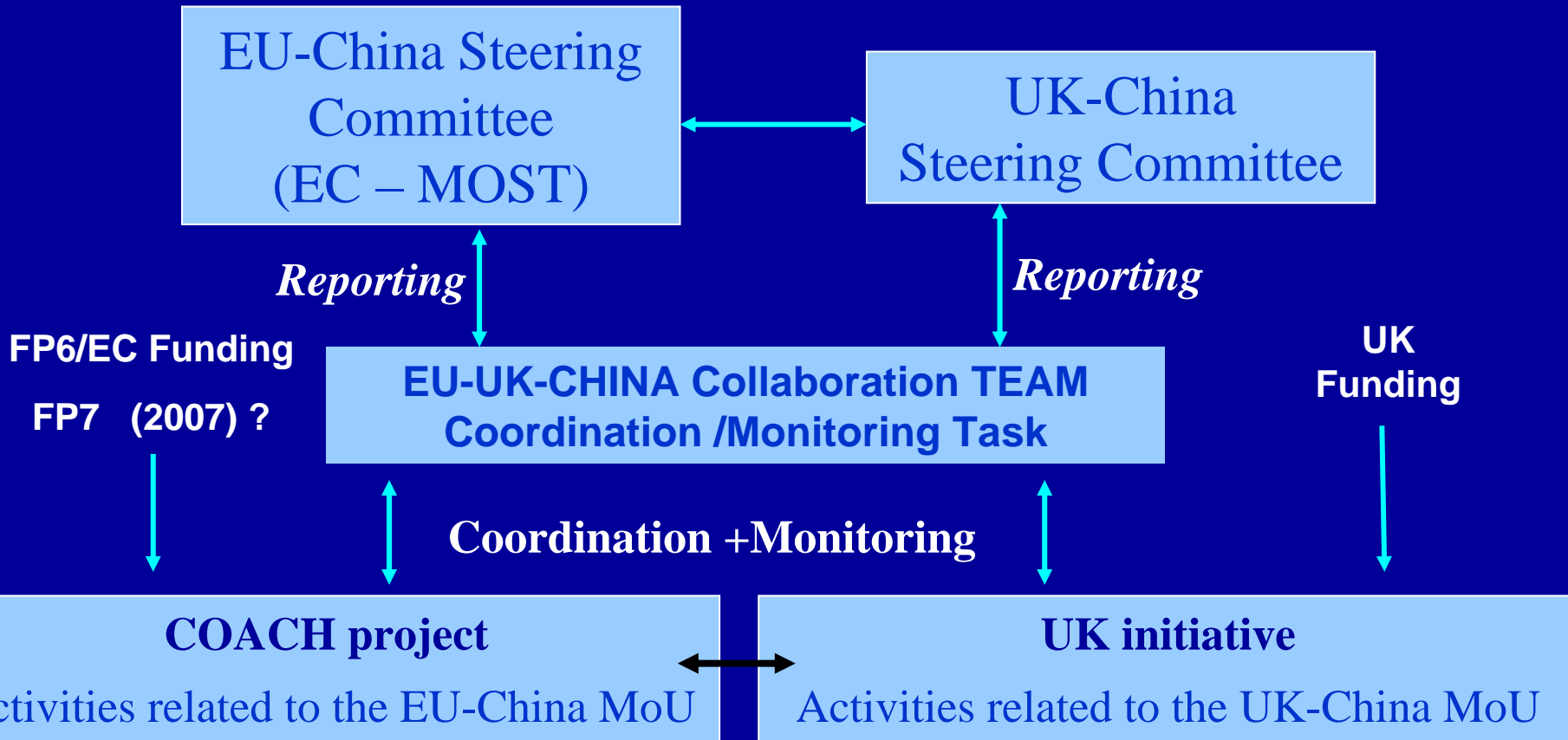
- Knowledge sharing & capacity building
- Coal-based polygeneration schemes including CCS
- Identification of reliable geological storage capabilities
- Societal anchorage including legal, regulatory, funding and economic aspects, and public issues



***IFP, co-ordinator***  
***SINTEF, GEUS, BGS, KTH,***  
***BP, STATOIL, SHELL,***  
***SCHLUMBERGER,***  
***ALSTOM, AIR LIQUIDE,***  
***ATANOR***

***ACCA21***  
***Tsinghua Univ.***  
***Zhejiang Univ.***  
***Inst. of Engng Thermophysics***  
***Thermal Power Research Inst.***  
***Inst. of Geol. & Geoph.***  
***RIPED***  
***GreenGen, Huaneng Group***

# Possible scheme for the governance structure



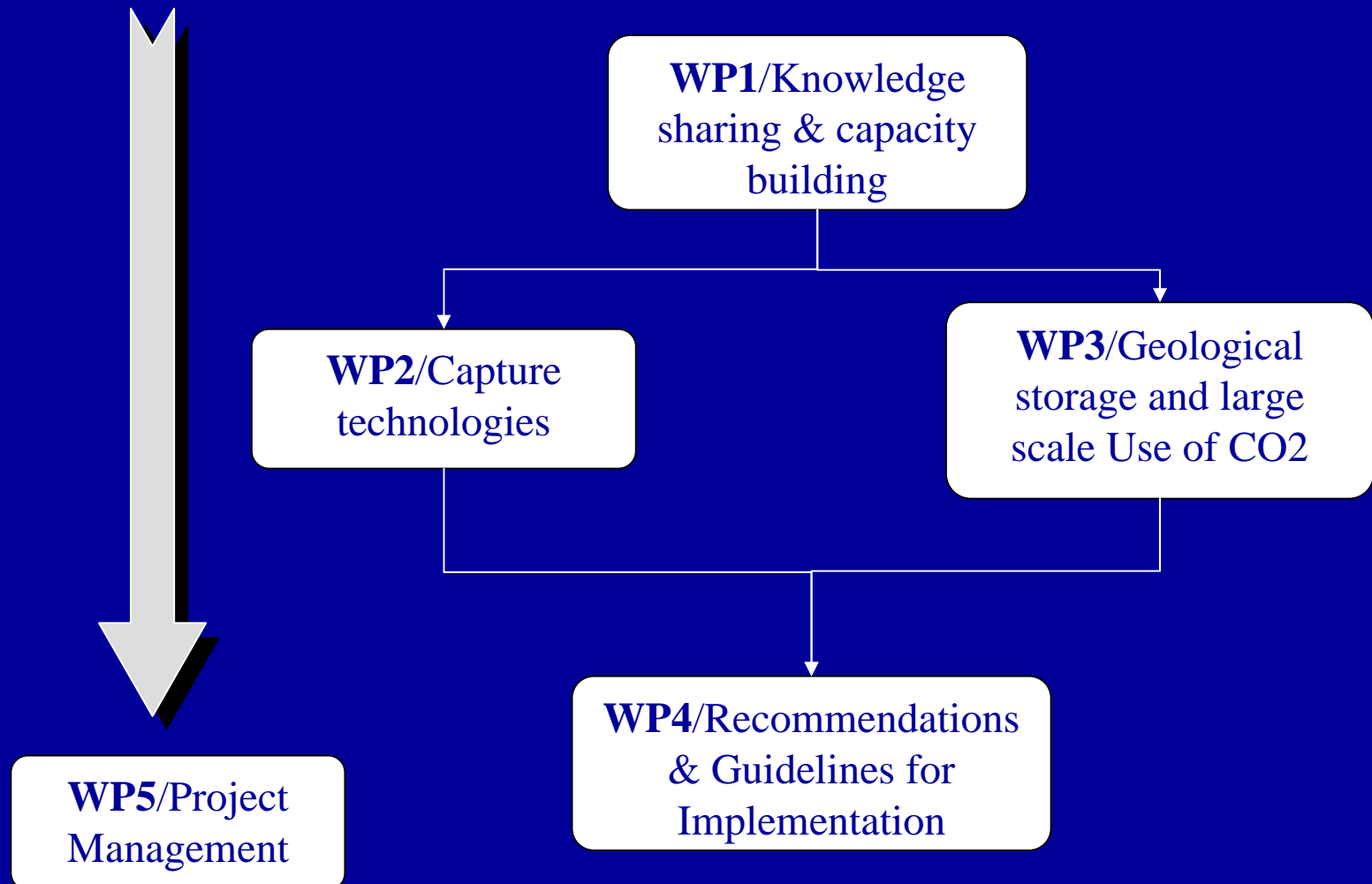
- **WP1/ Knowledge sharing and capacity building**
  - organisation of workshops, information exchange and dissemination, mobility scheme and education
- **WP2/ Capture technologies**
  - inventory of options, concept study of coal based plants, polygeneration, CO<sub>2</sub> transfer conditions
- **WP3/ Geological storage and large scale use of CO<sub>2</sub>**
  - assessment of geol. storage capacity of a selected basin, GIS mapping of geology and source points, storage selection criteria



- **WP4/ Recommendations and guidelines**
  - options for Chinese European demonstration projects, recommendations for future work, strategic cooperation and knowledge transfer opportunities
- **WP5/ Project management**
  - decision taking, legal-administrative-financial management
- **WP6/ Overview, monitoring & reporting of Chinese European MoU activities**
  - Chinese European seminars, dissemination, editing of synthesis reports, communication to the public

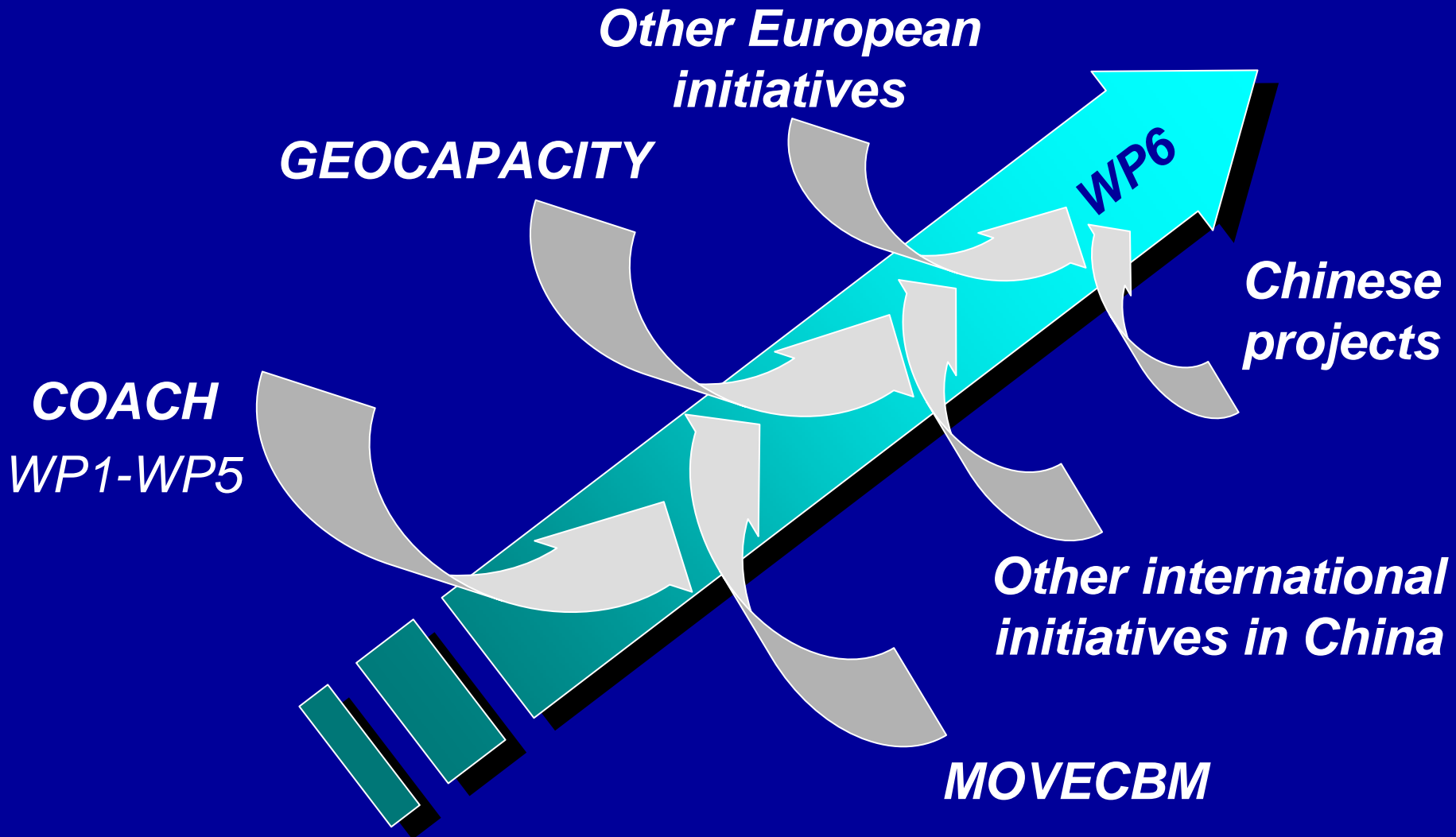


# COACH 'internal' Structure : 4+1 workpackages





# COACH WP6/ Strengthening the relationship with China



- **To mobilise Chinese and European proficiency to facilitate strategically important cooperation initiatives with China**
- **To contribute to the future practical implementation of European carbon capture and storage technologies in China**
- **To stimulate cooperation through established international cooperation frameworks**
- **To enable the implementation of clean coal power technologies with option for hydrogen production**



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