



IEF-IFP Symposium

Enhancing Global Energy Security, Role of Technology in the Petroleum Sector

15 December 2008, Hotel Al Khozama, Riyadh, Saudi Arabia

Agenda

08.30-09.00: Registration

09.00-09.30: Opening remarks

Noé Van Hulst, Secretary General, IEF Olivier Appert, Chairman and CEO, IFP

Moderator: Said Nachet, Energy Director, IEF Secretariat

09.30-11.00 Session 1: Technology development in the upstream sector

- Pushing the limits; impact of upstream technological advances on future oil supply.
 Maurice Bouteca, Director Exploration & Production, IFP
- A technology user perspective: the case of Saudi Aramco.
 Nabeel A. Al-Afaleg, Chief Technologist, EXPEC Advanced Research Center, Saudi Aramco
- Technology developments to foster oil resources in difficult access regions.

 Mohamed Hashem, Regional Technology Manager, Middle East, Caspian & SE Asia, Shell
- A technology provider perspective.
 Mahmut Sengul, Vice President Middle East and Asia, Schlumberger Carbon Services

Roundtable discussion: issues related to technological challenges in the upstream sector will be discussed in this session: development opportunities to meet supply needs over the 50 years ahead, future oil supply, enhanced oil recovery, fields with extraction difficulties (access, drainage, architecture, geology), complex crudes (high viscosity crudes, heavy crudes, sour gas).

11.00-11.15 *Coffee break*

11.15-12.45 SESSION 2: CCS, reducing GHGs and enhancing oil recovery

- Enhancing oil recovery: what role for CCS?
 Francois Kalaydjian, Deputy Director Sustainable Development, IFP
- Australia's Global Carbon Capture and Storage Initiative.
 Michael Sheldrick, General Manager, Global CCS Initiative, Project Team, Department of Resources, Energy and Tourism, Australia
- CO₂ geological storage in In Salah, Algeria, a sustainable development project. Noureddine Bounoua, Manager, Upstream Activities, Sonatrach
- European Union CCS activities.
 Derek Taylor, Energy Advisor, Directorate General for Transport and Energy, European Commission

Roundtable discussion: the 11th IEF Ministerial noted that carbon capture and storage is an important option to reduce greenhouse gases emissions from fossil fuels. CCS development and deployment will play a crucial role in delivering a sustainable energy future. How to accelerate R&D and deployment of CCS, in connection with enhanced oil recovery?

12.45-14.00 Lunch

14.00-15.30 Session 3: Producer-consumer cooperation in technological developments

- Technology developments, challenges and opportunities for a global energy security. Antonio Pflüger, Head, Energy Technology Collaboration Division, IEA
- Technology partnership versus joint technology development: avenues for co-operation between producing and consuming countries.
 Taher Najah, Downstream Oil Industry Analyst, Energy Studies Department, OPEC

Roundtable discussion: supplying energy in the context of climate change: technological challenges, hurdles and opportunities (technology, policies, regulation), regional versus global strategies. Possible avenues for cooperation in the field of technology between producers and consumers.

15.30-15.45 *Coffee break*

15.45-17.00: Session 4: Wrap-up

Panel: Noé Van Hulst, Secretary General, IEF Olivier Appert, Chairman and CEO, IFP Speakers

- What are the main technological challenges for the petroleum sector over the next three decades?
- Will public and private R&D be up to these challenges?
- What incentives could be implemented by governments in order to encourage R&D as well as deployment of technology?
- How can technological cooperation between producing and consuming countries help improve global energy security?
- What hurdles should be removed to facilitate cooperation and partnership in technological development?

Conclusion of the symposium