



INTERNATIONAL ENERGY FORUM



## IEF - IFP SYMPOSIUM TECHNOLOGY IN THE PETROLEUM SECTOR

RIYADH, 15 DECEMBER 2008

AN IEF EVENT IN COOPERATION WITH THE IFP

“An increase of one percentage point in the average recovery rate of existing oilfields would be equivalent to two years of world oil consumption.”

### BACKGROUND

The 11th IEF (Rome, April 2008) concluded that “a sustainable energy future implies efficiency improvements, technological advances in both production and consumption of fossil fuels, and development of alternative low-carbon energy sources”.

The International Energy Forum and the IFP convened a symposium on technology in the petroleum sector in Riyadh in December of 2008. The symposium was held with the participation of international oil companies, technology and service providers, and international organizations as well as representatives from producing and consuming countries in both the developed and developing world. The participants discussed technological developments in the upstream sector and the role of technology in increasing fossil fuel supply. They exchanged their views on how to promote technological developments and deployment, as well as the best means to enhance cooperation among stakeholders.



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## KEY FINDINGS

### TECHNOLOGICAL DEVELOPMENT

- Even in a carbon-constrained world, oil is likely to dominate the primary energy mix for decades. Improvements in technology will aid in the retention of this position, on both the supply and demand sides.
- Advances in technology can raise the global average recovery rate, now at around 35%, as the industry has witnessed close to 50% recovery in some fields. Estimates indicate that a 1% increase in recovery rates worldwide would equal approximately 2 years of global consumption.
- Developments in technology are more important than ever as new resources are more likely to be found in deeper, harsher geological and surface conditions.

### CARBON CAPTURE AND STORAGE (CCS)

- Carbon capture and storage can play a crucial role in a sustainable energy future and should be included in the Clean Development Mechanism (CDM) as soon as possible.
- CO<sub>2</sub>-EOR is a “double-win” which increases recovery rates while reducing emissions.

### COOPERATION AND PARTNERSHIP

- Sharing best practices among governments and industry would enhance environmental sustainability and long-run energy security for both producers and consumers.
- The IEF can assist in tackling the opacity in current CCS projects and advance a dialogue among CCS players.

## RECOMMENDATIONS

- International partnerships and commercial-scale demonstration projects are needed to make CCS an economically viable option. Until these are implemented, CCS will be unable to achieve its emission-reducing potential.
- NOCs, IOCs, service firms, research facilities and universities should collaborate more comprehensively to improve efficiency and increase output. Increased cooperation on the deployment and implementation of new technology is also necessary.
- Increased interdependence between oil and gas producers and consumers is an opportunity for cooperation, particularly in upstream technology. This opportunity must be exploited and sustained.

