

INTERVENTION BY SAUDI ARABIA

CSD 14
New York – May 3, 2006
Afternoon Session

Thematic Discussion: Meeting growing needs for energy services through increased use of renewable energy, greater reliance on advanced energy technologies, including advanced fossil fuel technologies

In my morning intervention I mentioned that the world demand will grow by 50-60% over the coming 25 years. The world needs Giga Watts and that is not going to be supplied by wind turbines. I heard some reactions to this that Germany had 10 or 12 GW of installed wind energy. And I also heard another similar reaction I believe from Spain. Perhaps I should be more specific with some numbers.

Mr. Chairman, I recent study on the reform in china power industry, indicates that by 2020, the total installed capacity in China will be 900GW. That's a lot of GWatts, and that's only in china. Growth in the rest of the developing countries is also great.

Renewable energy are important, and they will continue to grow, and they will provide a great source for rural areas.

But what about real growth in base load, in major cities. This will be met by fossil fuels.

The supply of energy to meet this thirst and growing demand will mainly come from fossil fuels, 80% of the energy mix as all outlooks and forecasts show.

We have heard from Norway and Canada about some of their experiences and successful applications of CCS.

According to the Special Report on CO₂ Capture and Storage (CCS) issued by the Intergovernmental Panel of Climate Change, CO₂ sequestration has the potential to reduce global CO₂ emissions by 9–12% by 2020, and 21–45% of global CO₂ emissions by 2050. 45% of total global emissions! no other substitute or technology can achieve that.

It was mentioned that the cost of CCS is very high, and even making it higher than renewable energy, this is not accurate. Application of CCS to electricity production, under 2002 conditions, is estimated to increase electricity generation

costs by about 0.01–0.05 US dollars per kilowatt hour (US\$/kWh), depending on the fuel, the specific technology, the location and the national circumstances. Inclusion of the benefits of Enhanced Oil Recovery would reduce additional electricity production costs due to CCS by around 0.01–0.02 US\$/kWh.

There are a number of success stories in the application of CCS. The successful sequestration of 5 million tons of CO₂ into the Weyburn field in Saskatchewan, Canada. This is equivalent to taking one million cars off the road.

There is the Salt Creek Field in Wyoming where the use of CO₂ injection is expected sequester about 29 million tons of CO₂, and to increase production and recover more than 150 million barrels of oil from this century-old field. About 7,200 tons a day of CO₂ will be sequestered by delivery and injection.

CCS has the potential to reduce overall mitigation costs and increase flexibility in achieving greenhouse gas emission reductions. The widespread application of CCS would depend on diffusion and transfer of the technology to developing countries and their capacity to apply the technology, regulatory aspects, and public perception.

We need to evaluate the obstacles and iron them out in order to allow for this technology to spread. There is great potential for the application of CCS in many developing countries.

Saudi Arabia for example has a great potential along with other countries in the region. There is a great opportunity for applying CCS for Enhanced Oil Recovery, and for storage in geological formation and depleted oil and gas fields. And it is no secret that Saudi Arabia and the region has a very high potential for this technology. We need full deployment of this technology and capacity building for its application.