

The priorities for CO₂ sequestration are quite clear. For sources, it is obvious that associated gas, as done in the Sleipner case, or planned for Gorgon in Australia, will be the first priority. Next will come coal fired power plants, then gas-fired power plants. Finally we will need to look at hydrogen production. It is clear that the first hydrogen production plants will come from fossil fuels (this is by far the most efficient hydrogen production method), but it requires CO₂ sequestration if it is to be climate friendly.

On the sink side, deep saline aquifers have huge potential—they could accept thousands of billion tons of CO₂ and this is probably the most interesting place to start. Depleted gas reservoirs are also interesting: injecting CO₂ at the bottom of the reservoir will increase the pressure and allow more natural gas production—by doing so, we kill two birds with a single stone, as this would produce more gas, and store CO₂ as well. By the way, CO₂ has a global warming potential 23 times smaller than methane, so doing this would reduce environmental risk by a very substantial amount. Depleted oil reservoirs have also good potential, as shown by the Weyburn project in

Canada. Finally, ocean sequestration is being considered. There have been several experiments here in Australia and New Zealand, but the current thinking of the scientific community is that this is probably a bad idea as it has a negative effect on life in the ocean.

Now let me try to finish by answering my question—Can the oil and gas industry do it? Well it's very clear to me that planning and operating a CO₂ sequestration project requires exactly the same business and technical skills as in the oil and gas industry. This is also a very large-scale effort—we are talking about tens of thousands of Sleipners requiring tens of thousands of wells. Our industry is very good at doing such large-scale projects. Finally keeping costs low will be essential and this is again something our industry has learned how to do well in the last 20 years.

So my answer is, of course, yes. This is something for which we have all the skills, and it would be also a tremendous service for the public. The last question is: "Will we do it?" First, I think it is in our interest. It allows using the hydrocarbon resource fully and still controlling CO₂ emissions. It is also very much the interest of the public.

It allows low cost, climate friendly energy from fossil fuel, so you can have both your cake and eat it, if you want (Well eating coal is no good, and oil and gas is no better, right?) But the important thing for many countries in the world, Australia first, but also the US, Russia, China and India, is that this would allow them to use coal for hundreds of years. Finally, I think the key question is: "How will we be paid?" Who is going to pay for it is very clear—it's going to be the consumer, all of us, at the end of the day. But how this is done is very unclear today, and my final message is that this is probably the most important decision that has to be made in this business in the coming few years. We need to decide what the environmental and legal and the financial environment will be to allow this to happen.

So ladies and gentlemen, yes I think we can do it and on top of that I think it is going to be a lot of fun.

Vice President and Chief Scientist of Schlumberger Limited, New York, **Dr Philippe Lacour-Gayet**, delivered this plenary address to the 44th APPEA Conference in Canberra on Tuesday, 30 March, 2004.

What drives the thinking of the community of Our Nation?

This is an abstract of Mark Textor's presentation. The full presentation is not available for publication.

Most pollsters tell you what people think and stop at that. But to stop there with resource and environmental issues, particularly those affecting APPEA members, gives only half the story.

A pollster can help to leverage both existing and potential perceptions,



*Mark Textor, Managing Director,
Crosby|Textor*

and in so doing can change behaviour. This address will give some relevant examples of what people think and why they think it. This in turn provides insights into the sort of advice given to CEOs and Prime Ministers.

Managing Director of Crosby|Textor, **Mark Textor**, delivered a plenary address to the 44th APPEA Conference in Canberra on Tuesday, 30 March, 2004.