

Eternal Sunshine, but an oil-less planet

If you, like me, have recently been watching the price of a barrel of oil go up in world markets, continuing to break records, and wondered whether you should be trading your petrol-guzzler for a Toyota Prius or Honda Civic, you may well be using that excellent sense of logic that we engineers seem to have.

It seems that Saudi oil may have peaked, as reported Aljazeera.Net last month. The subject of peak oil, the point at which the world's finite supply of oil begins to decline, is a hot topic in the oil and environment industries. One of the concerns is that the larger Saudi fields, which are responsible for much of the world's oil, may be damaged due to over-production. In other words, if the oil is pulled out of the ground too fast, it damages the fragile geological structure of the field, which can make as much as 80% of the oil within the field unextractable. Indeed Shell wrote off about 20% of its oil reserves in 2004, and El Paso, a staggering 41%. But, the Saudi's are not admitting to any such losses from damaged fields. However, they are willing to admit that the cost of production is increasing.

There are no firm predictions on how long our existing reserves may cater a growing, and oil-thirsty world. The oil and gas industry is always optimistic about finding new fields, but the new finds of recent times seem to be minuscule in comparison to the Saudi Ghawar fields, which has supplied the largest quantities since the 1970s. But, more to the point is what the cost of oil will be when demand outstrips supply, or due to the increasing cost of production. Some experts have already started indicating that the current record \$US55 per barrel may well go to \$US80 per barrel within the next three years, which would mean doubling in price within a decade.

While this may sound gloomy, the planet may well benefit from a oil crises. That is, for more environmentally sympathetic alternatives, such as solar, to be developed and embraced, reducing not only the dependence on oil, but also the impact on climate change from greenhouse gas production. After all, there is, at least to our knowledge, eternal sunshine.

Previously published in an edited format in Engineers Australia – April 2005

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