



Fracks in the system

How advances in oil and gas extraction have compromised Southeast Asian countries' attempts to develop their own much needed energy industries *By Luke Hunt*

Impoverished countries hoping to strike it rich by developing their limited oil and gas reserves are being urged to move quickly or risk having their expectations clipped by fracking, which is depressing market prices while adding life to old fields once thought to be exhausted.

The message is particularly potent in Southeast Asia, where most countries have at least some oil and gas potential and governments have raised electoral expectations over recent years that standards of living will rise on the back of resource development.

Thailand, the Philippines, Vietnam, Cambodia and Malaysia had intended to bolster their bottom lines through yet to be developed offshore oil and gas reserves.

Brunei already has a world class and well established oil industry while East Timor, Papua New Guinea, Myanmar and Indonesia have developed their industries in fits and starts.

For the most part, however, these countries have failed to capitalise on promising exploration results amid protracted negotiations with oil companies, territorial disputes between neighbours, insufficient infrastructure and heated debate over environmental concerns.

Additionally, fracking is overhauling the entire oil and gas industry, leading to substantially reduced oil prices and potentially rendering the costly development of limited resources in smaller countries uneconomical. ➤

ENERGY CHANNEL: The construction of natural gas pipelines is considered essential to tap regional reserves.



» PricewaterhouseCoopers has estimated that fracking — where water is pumped into rock formations, widening the cracks and allowing for increased flow of oil and gas — would restrict oil prices by up to 40% of their potential by 2035.

This could put prices at below US\$90 (2,690 baht) a barrel, which would benefit users while undercutting producers.

Oil is currently trading at about \$100 a barrel, down from an all-time high of \$145 a barrel in July 2008.

Back then many in the industry thought the US was poised to run out of the precious commodity, but fracking-based forecasts predict the US will be the world's largest oil producer by 2017.

Fracking in the United States has also led to an oversupply of liquefied natural gas, resulting in price falls of more than a third between 2008 and 2012. Major energy producers like Australia, Canada, Russia and central Asian countries are following the US lead with oil and gas once trapped in shale deposits now being accessed and fields once thought spent reopened.

As a result, politically unsettled countries such as East Timor, Papua New Guinea and Cambodia are becoming much less attractive than they were five years ago when the price of oil was at its peak.

East Timor has an added dilemma. This weekend an agreement with Australia expires and Dili must decide on whether to proceed

with construction of an LNG processing plant with project operator Woodside Petroleum and the development of the Greater Sunrise field under a revenue sharing agreement with Australia.

The sticking point is Dili wants the plant built on East Timorese soil, while Woodside argues this is neither economically viable nor technically advisable and it would prefer to see the processing plant built on a floating pontoon.

Their issues go much deeper.

With reserves worth perhaps \$50 billion, Dili signed off on several resource sharing agreements with Australia in 2007. Through the Certain Maritime Arrangements in the Timor Sea (CMATS) and the bilateral Timor Sea Treaty, which allocates revenue from the Joint Petroleum Development Area (JPDA) in the Timor Sea, East Timor receives 90% of the revenue while Australia gets the remaining 10%.

Overlapping the JPDA is the Greater Sunrise field. About 80% of the field lies outside the JPDA and those revenues are to be shared evenly under the Sunrise International Unitization Agreement. These deals go back to East Timor's early days as a nation and its dispute with Australia over control of the fields, which lie within East Timor's Exclusive Economic Zone (EEZ).

Damien Kingsbury, director of the Centre for Citizenship, Development and Human Rights at Deakin University in Australia, said

there was no resolution in sight for the East Timor dispute, which is threatening to cancel Woodside's involvement in the \$20 billion project.

East Timor can then opt out and under international law claim the entire area within the EEZ for itself. But finding another partner could prove difficult given weak market prices and the damage East Timor would do to its own business reputation by reneging on the CMATS.

Agreements have already been signed by East Timor to provide gas to South Korea for an initial seven years while exploration deals have also been reached with Thailand.

"Timor-Leste's issues regarding Woodside are bigger than just immediate revenue access," Mr Kingsbury said. "At stake [is] not just that issue, which may be able to be addressed later with a different partner, perhaps, but that over Timor-Leste's sovereignty and maritime boundaries."

Turning positive exploration results from the Gulf of Thailand into a thriving commercial industry has also proved difficult amid maritime border disputes and control over oil deposits between Cambodia and Thailand.

The two countries signed a memorandum of understanding for joint management of the Overlapping Claims Area (OCA) in 2001. A joint working group held talks until 2007 and two years later management of the OCA was put on hold by Thailand.

Secret talks have continued in recent years,



FUEL FEUD LOOMING?: Trucks cross the Thai-Cambodian border at Aranyaprathet. Both countries claim 26,000 square kilometres in the Gulf of Thailand that may contain oil and gas, as illustrated on the map on the opposite page.

PHOTOS: CORBIS AND BLOOMBERG



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but by 2009 as the fall in oil prices was whittling back profits it found the oil difficult to extract and scattered in pockets.

Prime Minister Hun Sen and his government's oil policies were roundly criticised for lacking transparency, while onshore exploration had resulted in thousands of people being displaced and damage to protected wildlife areas.

Subsequently, Hun Sen described such criticisms as "crazy" and forecasted oil would be extracted by 2012. To date nothing has been delivered.

The maritime dispute between Thailand and Cambodia is not that different from the complexities afflicting the South China Sea, where China, Taiwan, Vietnam, the Philippines, Malaysia and Brunei have overlapping territorial claims.

A decade-long attempt to build a consensus on a code of conduct for dispute resolution between China and members of Asean has persistently failed, and those efforts descended into acrimony last year when Cambodia attempted to mediate on a deal.

One seasoned observer, who declined to be named, said ethnic conflicts in Myanmar, opposition to mining by the Catholic Church in the Philippines, political turmoil in Thailand and anger over environmental damage in Papua New Guinea and Indonesia by mining companies had weighed heavily on the industry.

"Governments, like East Timor, had also been holding out for more money. Now they

but according to Pavin Chachavalpongpun, lead researcher for political and strategic affairs at the Asian Studies Centre in Singapore, the OCA is a "very politically unpopular issue" in Thailand, and that compromise carries serious political risk.

"I think an agreement on the street level is something that's not palatable to the Thai

public. Preah Vihear needs to be solved first," he said, comparing the maritime issues with the border dispute around the 12th century temple ruins at Preah Vihear.

In 2005, Californian-based oil giant Chevron estimated there were 400 million barrels, enough to earn Cambodia \$1.7 billion a year, more than the government's annual budget,



GETTING THEIR FILL: Business is booming at this petrol station in Phnom Penh. The International Monetary Fund says Cambodia's economy is recovering but still faces risks from the fragile global situation.

need to reassess and ask themselves why would an oil company want to invest in their country?"

Perhaps ironically, had these disputes been settled a decade earlier — as opposed to festering with no end in sight — then Southeast Asian countries might have been in an ideal position to take advantage of

fracking, which would suit their geological conditions.

But as oil prices fall and the bickering continues, traditional producers are looking closer to home for cheaper and easier access to energy supplies through fracking — and regional countries that have promised much now risk missing out altogether. ■