

The oil-services industry

Rigging the market

Business is set to boom for the firms that help oil companies get at their prize

WHEN the price of oil goes up, oil firms drill deeper. They also venture into harsher climes and seek out unconventional sources of oil and gas that, in happier times, would be too costly to extract. National oil companies (NOCs) often lack the skills to do any of this. The world's big independent oil firms struggle, too. So they turn to the oil-services industry, which is set for a gusher of profits.

Four big firms dominate the business of managing geological data, digging wells, building rigs, handling infrastructure and developing the technology needed for large projects. Baker Hughes and Halliburton have their headquarters in Texas, as did Weatherford, though it recently moved to low-tax Switzerland. Schlumberger, a French company with revenues of some \$27.4 billion in 2010, also has a big office in the Lone Star State.

America is the centre of the boom, says James Crandell of Dahlman Rose & Co, a bank. Oil-services firms there pioneered the technique of horizontal drilling, which is used to extract shale gas from America's vast fields (conventional oil and gas are extracted using vertical wells). The same trick can be used to get at shale oil. As a result exploration and production (E&P) budgets in America are swelling.

There's more to come. Morgan Stanley, a bank, reckons that shale-oil production will increase nearly fivefold by 2016 (to around 1.9m barrels a day). This means a huge increase in the number of rigs supplied by the oil-services firms. The logistical and technological challenges of unconventional oil and deepwater drilling, now getting back up to speed after the Deepwater Horizon disaster in the Gulf of Mexico, will also boost demand. The harder the oil is to extract, the bigger the rewards for the oil-service companies. Halliburton is gearing up by boosting its workforce of 60,000 by 25% this year.

The bonanza is not restricted to America (see next article). Most oil that is cheap and easy to get at has been found. Fewer and smaller discoveries mean that oil companies are forced to spend more on E&P to get at unconventional shale oil, heavy oil and tar sands as well as sinking wells deep underwater. Dahlman Rose reckons that global exploration budgets will rise by some 14% in 2011, to \$533 billion.

Oil-services firms have plenty of conventional work, too. Iraq is trying to boost its output. In March Saudi Arabia, keen to



Harsh climes, big profits

maintain a buffer of spare capacity, said that it planned to increase its rig count by 30% by some point next year. The Saudis are not alone in their desperation to stem the declining output of big and ageing oil fields. This means lots more spending on technologies to arrest decline rates and on maintenance to keep older wells around the world in tip-top condition.

By offering the full array of oil-field services, the big four have an advantage over smaller rivals. NOCs generally prefer to deal with one firm that can offer all the services they need rather than dealing with a crowd of different contractors. Mr Crandell reckons profits for the big four could nearly double over the next couple of years, as they wring oil and gas out of ever-more-inaccessible places. ■

Energy in Poland

Fracking heaven

WARSAW

Other Europeans fear fracking. Poland is steaming ahead

POLAND may have western Europe's largest reserves of shale gas. A dozen global gas-exploration companies have promised to drill as many as 120 test wells over the next few years to find out. The prize could be trillions of cubic metres of gas. It is "a huge and expensive gamble", says Tomasz Maj, the head of Polish operations for Talisman Energy, one of the exploration firms. The rewards could be vast. Shale gas could free the country from its dependence on coal, a dirtier fuel, which currently accounts for 95% of Polish power generation. It could also mean that Poland

no longer has to rely on Russia, the neighbourhood bully, for most of its natural gas.

But the extraction of shale gas is controversial. It requires fracking: blasting fissures in subterranean rock and pumping in water and sand, and occasionally nasty chemicals, to force out the gas. France won't do it. There is local resistance in the Netherlands. Yet other countries' qualms may make fracking more attractive for Poland. If others won't frack, they will probably buy Polish gas.

European energy policy is in turmoil. Germany decided last month to abandon nuclear energy. A referendum in Italy on June 12th also said "no thanks" to nuclear power. Reliable sources of energy are inadequate to meet future demand. Poland sees an opportunity.

"We'll never be an oil state, but we could become a Norway," says Andrzej Kozłowski of PKN Orlen, an oil company in which the government has a 28% stake. The Polish government is keen to attract firms with experience of fracking in North America, such as ExxonMobil and ConocoPhillips. It has awarded nearly 90 concessions so far. These are cheap, and production royalties will be low. But firms will be penalised if they fail to drill the promised test wells.

Oil-and-gas firms have been fracking on a large scale in Canada and America for over a decade. In May a delegation of Polish geologists and officials visited Canada to wise up on social and environmental as well as technical issues. The government is also taking advice from GFZ, a geological institute in Potsdam, Germany, and from demoseuropa, a think-tank in Warsaw.

Fracking is a completely new industry for Poland, so the government is anxious to get the rules right. Taxes must be low enough to encourage investment, but high enough to raise revenues. Getting neutral advice on the environmental risks is not easy. Fracking can damage the water table, disrupt communities and even cause earthquakes. (In Britain on May 31st Cuadrilla Resources said it was halting a fracking operation near Blackpool, pending investigation of two small earth tremors which it may have triggered.)

The French government imposed a moratorium on fracking on May 11th. In Britain, by contrast, a parliamentary committee was friendly to fracking. EU law allows member states to exploit their natural resources as they see fit, but subject to minimum environmental standards. The European Commission is due to roll out its long-term energy strategy in November, which could affect fracking. But Poland, whose six-month presidency of the European Council begins in July, is in a good position to influence what it says. On June 21st Poland was the only EU member to vote against a proposed tightening of carbon-emissions targets for 2020. ■