

Global oil and gas transactions review 2010



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Introduction

Welcome to Ernst & Young's annual review of global oil and gas transactions. In this report, we look back at some of the main trends in oil and gas merger and acquisition activity over 2010 and consider the outlook for deal activity across the sector in 2011.

We concluded last year's publication by predicting that 2010 would be a healthier year for upstream and oilfield services transactions, whereas over-capacity in some regions was likely to drive a period of uncertainty and challenges in the downstream sector. By and large, these predictions have held true, although there have been diverse regional trends underlying this macro view. 2011 looks set to continue the themes of 2010 against the backdrop of gradually improving capital market conditions.

In aggregate, 947 deals were announced in 2010, with upstream continuing to dominate the landscape, accounting for 73% of transactions. Volumes were 5% higher when compared to last year. The total value of oil and gas transactions announced globally reached US\$270b. This is one of the highest values of total deals recorded for the sector, and 35% higher than last year's figure.

Rebounding crude prices (Brent averaged US\$79.62/bbl in 2010 compared to US\$61.53/bbl in 2009) and better capital availability provided a support to the increase in deal values. Gas prices, a victim of a robust supply position in a time of moderated demand, were not as strong, but this dynamic also represented an important, albeit more opportunistic, driver of transaction activity in many regions.

An improving corporate environment and strengthening share valuations have led to a reversal of last year's dominance of corporate transactions, with asset deals moving from 34% of 2009 transaction values up to 58% of 2010. Valuation, of course, is only one determinant of whether to pursue a corporate or asset acquisition strategy. There is a range of other factors to be considered: for example, the people dynamic, often overlooked in asset-hungry upstream expansion, has grown in prominence in recent years. Corporate transactions enable acquirers to quickly establish an experienced workforce, which could be invaluable when expanding into new geographies, products or customer types.

In Ernst & Young's separately published *Capital Confidence Barometer*, at the end of 2010 half of all oil and gas respondents indicated that they were actively looking to take advantage of inorganic growth through M&A. This is more than double the percentage who held this view at the end of 2009.

We anticipate this increasing optimism will underpin robust transaction activity levels in 2011, with a greater range of acquirers being active. Smaller companies which have been nursing their balance sheets through recent years may feel greater confidence to return to acquisition activity, and financial investors are also re-establishing their interest in the sector. IPO activity levels look set to rise. Upstream is likely to remain the engine room of deal flow, with a similarly positive outlook for the oilfield services sector. This optimism, however, must be taken in the context of the wider economy, which drives demand for the key end products of the oil and gas industry and determines capital availability. Downstream looks most susceptible to these near-term trends, and activity could remain subdued in this sector while over-capacity continues.

Upstream

2010 has been another year of speculation and uncertainty in the global transactions market. However, the relative stability of oil pricing and improving investor confidence have seen M&A activity pick up in the upstream sector.

A late climb in oil price at year-end has had little impact on industry pricing forecasts. While there is a watchful eye for any slowdown in Chinese and Indian manufacturing sectors, general consensus, in the US\$70 to US\$80 per barrel range, has meant a reasonable convergence on valuations, something that was seldom achievable with the pricing volatility witnessed in 2008 and 2009. In addition, the strength of the oil price has seen a strong resurgence in the targeting of the more capital-intensive tar sand and shale oil projects. US natural gas pricing hasn't demonstrated the same pricing stability, and the ongoing depressed gas pricing has been a further driver for transactions activity as companies have looked to diversify their exposure.

2010 has witnessed the coming to market of a number of non-core assets as companies emerged from a year of self-reflection in 2009 with clear divestment plans. With transaction conditions demonstrating improvement in 2010, both in terms of valuation metrics and access to funding, companies have looked to take the opportunity to raise funds by streamlining portfolios.

While access to funding has undeniably remained a challenge for some, the availability of funding in the public markets has improved significantly with a host of upstream players accessing cash injections through secondary fund-raisings, benefiting majors and juniors alike. In addition, this year has witnessed a number of IPOs in the sector, providing supporting evidence that investors are returning. Of note, out of 67 oil and gas companies interviewed as part of Ernst & Young's *Capital Confidence Barometer* in October

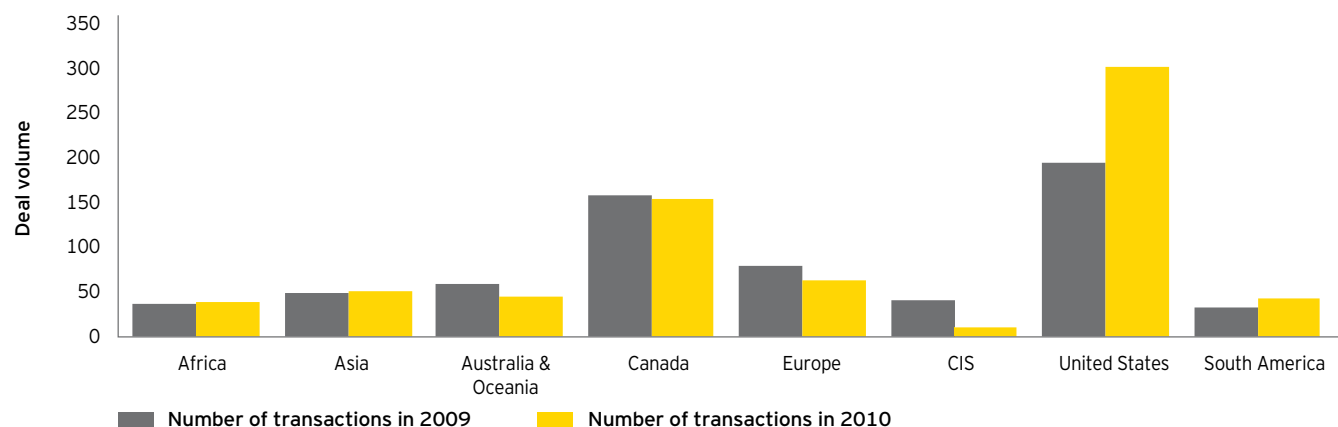
2010, 48% were confident they could access short-term funding. This compares with only 15% six months previously, further indicating the change in confidence over the year. Private equity is seldom slow to react to positive trends, and activity has picked up through the second half of the year, particularly in the US.

It would be inappropriate to discuss 2010 without making reference to the Macondo oil spill in the Gulf of Mexico. While the full impact on the upstream sector is still uncertain, ongoing deepwater projects are likely to be subject to increased review and potentially increased costings. Drilling activity in the Gulf will have been affected by both the six-month drilling moratorium, and the resulting migration of rigs to unaffected regions; however, E&P companies are likely to have been less affected than the local oilfield services market where operating cost structures tend to be less flexible. One noticeable impact on the transactions market has been the coming to market of a number of BP's assets as the oil major looks to bolster cash reserves to meet the financial cost of the accident.

2010 transaction activity exceeded 2009 in both deal volumes and value, with 694 transactions announced versus 636 in 2009, and disclosed deal value of US\$220b compared with US\$147b seen in 2009. Asset deals continue to dominate the upstream transactions landscape, accounting for 86% of deal volume and increasing in number by 21% from 2009 on the strength of oil pricing. Noticeably, corporate deal activity was down 31% from 2009, with only 100 deals announced this year, as market pricing recovered.

With the absence of another Exxon Mobil/XTO-sized transaction, the disclosed value of corporate transactions was down almost 50% on 2009 at US\$54b. Vedanta Group's announced acquisition of a 51% to 60% stake in Cairn India for between US\$8.8b and US\$9.8b ranks

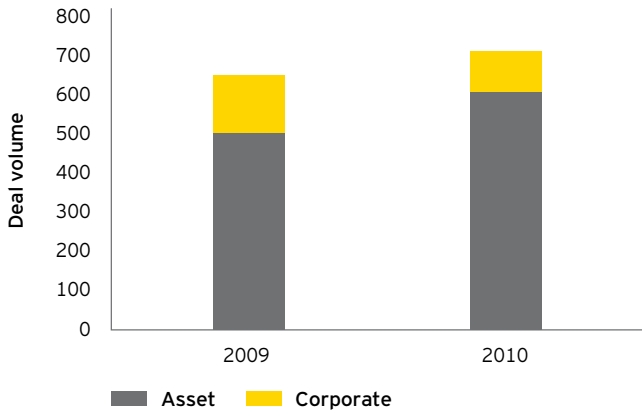
Regional activity



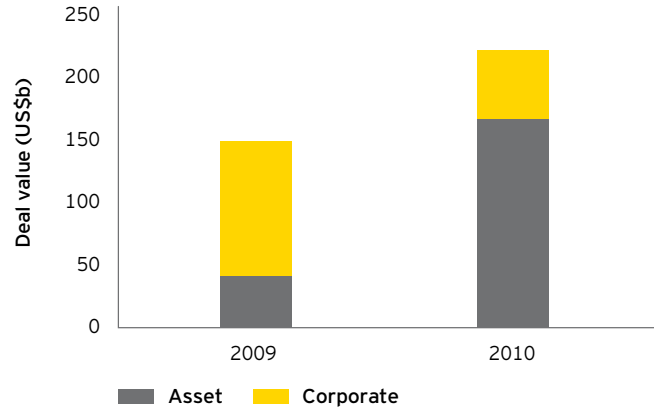
Source: IHS Herold



Deal asset versus corporate



Source: IHS Herold



Source: IHS Herold

as the largest corporate transaction of the year. Disclosed asset deal value increased by over 290% on 2009 with US\$166b, although this was dwarfed by Petrobras' US\$42.5b new share issuance to finance payments to the Brazilian Government for rights to produce from various undeveloped offshore fields.

On a regional basis, North America continued to lead transaction activity with over 65% of announced transactions from the region, up from 50% in 2009. Despite the global increase in total deal activity, only Africa, the Americas and Asia contributed increased transaction volumes on 2009 data. Although Canadian deal volume was broadly in line with 2009 figures, reported deal activity decreased in all other areas, with European deal activity down over 20% and the CIS witnessing a 74% drop in deal volume from 2009, disproportionately affected by a significant decline in corporate transactions.

The North American bias is echoed for transaction value, with 47% of announced deal value being in North America. Four of the largest deals of the year targeted North American reserves, with larger independents and national oil companies (NOCs) demonstrating ever-increasing appetite for unconventional North American resources. Recent discoveries continue to confirm the abundance of the US and Canadian shale gas resource, and in particular, the strategic investments of Asian NOCs in these resources is representative of the longer-term view being taken with respect to natural gas reserves. Despite the continued weakness of US gas prices, natural gas reserves represented 64% of acquired US proved reserves for the year.

The resurgence of US private equity (PE) investments in the upstream sector further enforces the improved investor confidence, and 2010 witnessed increased PE interest. CCMP

Capital Advisors' acquisition of a 37% stake in privately owned Chaparral Energy Inc. was the largest disclosed PE-backed acquisition of the year with total transaction value of US\$767.1m.

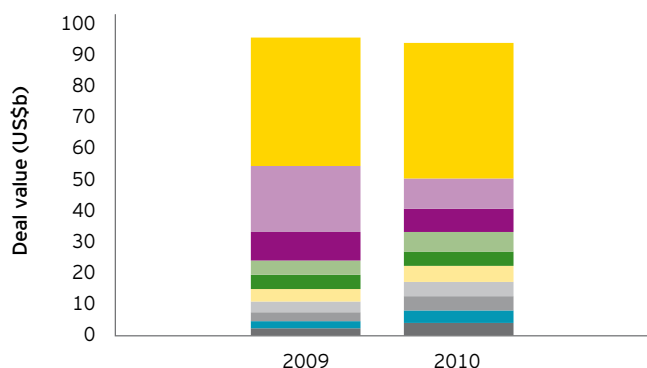
The international resource targeting of Asian NOCs continued with increased fervor throughout 2010 as the Chinese, Indians and Koreans chased insatiable reserve or production targets. NOCs dominated the transaction landscape in 2009 through their ability to access cash in a funding-constrained market. While financing options opened up in 2010, terms and conditions remained – and ongoing valuation scrutiny (from third-party financiers) continued to hand the advantage to state-backed NOCs. With over US\$16b on acquisitions in Latin America and continued North American targeting, Asian NOCs were at the forefront of 2010 transaction activity. Of greater significance is their seeming ability to pay whatever is required to secure targeted reserves. While independent oil companies must typically justify transaction valuations with reasonable expected shareholder returns, NOCs can often forgo such limitations, sacrificing margins in oil and gas operations to secure much needed supply. This critical fuel source is then used to generate material returns for their economies later in the value chain through sizeable in-country manufacturing industries.

The acquisition of Dana Petroleum by state-backed Korea National Oil Company (KNOC) for US\$3.7b is likely to be the most talked about transaction of the year. While not among the largest transactions, the takeover is noticeable in that it is the first successful hostile takeover by an NOC. Not only are NOCs willing and able to pay above market for assets, but this deal suggests that they may be prepared to go to whatever lengths necessary to acquire reserves this won't have been missed by the independent sector.

North Sea continues to attract

With a number of newsworthy discoveries throughout the year and record interest in the 26th licensing round, the North Sea is showing something of a resurgence since the economic downturn. KNOC's acquisition of Dana supports claims that the region continues to be attractive to international oil companies as well as national players. 2010 showed further evidence of European utilities moving upstream to secure natural gas reserves in the North Sea. Centrica's acquisition of a further 9.44% interest in Norwegian Statfjord field and Scottish and Southern's acquisition of selected North Sea gas assets from Hess and subsequent investment in, and agreement, with Faroe Petroleum are examples of this growing trend of upstream reserve targeting.

Top 10 transactions by value



Source: IHS Herold

Announced date	Buyers	Sellers	Deal type	Value US\$m
02/09/2010	Public Markets	Government of Brazil/ Petroleo Brasileiro SA	Share issue	42,550
16/08/2010	Vedanta Resources plc; Sesa Goa Limited	Cairn Energy plc	Corporate	9,888
29/11/2010	Bridas Corp	BP plc	Asset	7,060
26/03/2010	AFK Sistema	RussNefit; Sberbank Rossii OAO; Glencore International AG	Corporate	6,140
28/05/2010	Royal Dutch Shell plc	East Resources Inc; Kohlberg Kravis and Roberts & Co	Corporate	4,700
15/04/2010	Apache Corporation	Mariner Energy Inc	Corporate	4,685
12/04/2010	China Petrochemical Corporation	ConocoPhillips	Asset	4,650
09/11/2010	Chevron Corporation	Atlas Energy Inc	Corporate	4,308
01/10/2010	China Petrochemical Corporation	Repsol YPF SA	Asset	4,265
21/03/2010	Royal Dutch Shell plc and PetroChina Company Ltd	Arrow Energy Limited	Corporate	3,901

Source: IHS Herold

A key challenge in keeping the momentum of M&A activity in the aging North Sea is the growing issue of abandonment liabilities. With significant potential exposures at stake and inherent uncertainty, treatment of abandonment liabilities continues to present a challenging obstacle to those transacting in the region.

Increased activity in 2011

2011 looks set to continue where 2010 left off. With improved funding conditions and relative commodity price stability, we expect to see a buoyant year for M&A activity in the upstream sector.

There continues to be a strong range of buyer types actively targeting opportunities. Asian NOCs are chasing sizable reserve/ production targets as well as looking toward strategic partnerships to gain technical expertise. Larger independents are actively looking for development opportunities to top up forecast production levels. A number of PE investors have been holding large funds over the last couple of years and now face increasing pressures to put them to use.

Unconventional reserves will continue to generate interest, and the high development costs should sustain the level of investment opportunities coming to market. On the conventional side, frontier exploration activity in East Africa and the Arctic among other geographies will be closely monitored, and 2011 should see a further wave of non-core assets coming to market.

Downstream

Transaction activities continue to decline during 2010

The downstream sector experienced further decline in transaction volumes during 2010, continuing the trend that started in 2008. This was primarily driven by the cautious outlook on oil demand recovery, especially in mature markets. There were 121 transactions in the sector in 2010, some 21% lower than 2009. However, the disclosed value of downstream transactions was US\$40.2b in 2010 compared with US\$38.0b a year earlier. The buyers involved in downstream transactions included international oil companies (IOCs), NOCs, independents and PE.

Based on disclosed values, the top 10 deals in the sector during 2010 had a combined value of US\$21.8b, accounting for some 54% of the disclosed value of all transactions in the sector globally. Included in the largest announced transactions of the year were CF Industries Holdings Inc.'s acquisition of Terra Industries Inc. for US\$4.8b (petrochemicals) and AGL Resources' acquisition of US natural gas distributor Nicor Inc. for US\$4.4b.

Top 10 transactions in 2010 based on disclosed value

Similar to 2009, the volume of asset transactions exceeded those that were corporate in nature. There were 79 announced asset transactions with a disclosed value of US\$13.3b, compared with 42 corporate transactions with a disclosed value of US\$26.9b.

More than 47% of downstream transactions volumes were in North America (57), with Europe (24) and Asia (15) together accounting for a further 32% of volume.

Refining – no shortage of opportunities in North America and Western Europe

There were 19 transactions involving refineries during 2010, of which 13 involved refineries in North America and Europe. The largest refining transaction in terms of disclosed deal size is Rosneft's acquisition of Petr6leos de Venezuela S.A.'s 50% stake in Ruhr Oel GmbH for US\$1.6b.

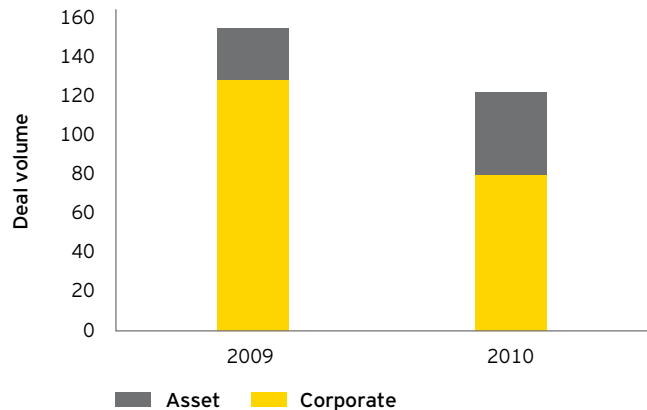
Although world oil demand increased by 2.2% (1.9 million barrels per day) during 2010, 52% of this increase was driven by Asia. Oil demand in North America has not recovered sufficiently in 2010 to levels seen pre-recession, and oil demand in Europe continued to decline, although at a slower rate than 2009.

As such, over-capacity has restricted growth in margins and utilization in North America and Europe. Furthermore, competition from additional refining capacity (particularly in Asia and the Middle East) and compliance with increasingly stringent environmental and product quality legislations have exacerbated the pressure on margins.

Announced date	Buyers	Sellers	Deal type	Value US\$m
05/03/2010	CF Industries Holdings Inc.	Terra Industries Inc.	Corporate	4,790.5
07/12/2010	AGL Resources Inc.	Nicor Incorporated	Corporate	4,405.3
11/06/2010	Buckeye Partners LP	ArcLight Capital Partners LLC; Buckeye GP Holdings LP; Kelso & Company	Corporate	2,651.7
22/10/2010	OMV AG	Dogan Sirketler Grubu Holding AS	Corporate	1,643.1
02/03/2010	Bain Capital	Dow Chemical Company	Corporate	1,630.0
15/10/2010	Rosneft	Petroleos de Venezuela SA	Corporate	1,600.0
20/12/2010	Buckeye Partners LP	First Reserve Corporation	Asset	1,360.0
26/05/2010	UIL Holdings Corporation	Iberdrola SA	Corporate	1,296.0
09/08/2010	Inergy LP	Inergy Holdings LP	Corporate	1,235.2
16/08/2010	MMEKA Makine Ithalat Pazarlama ve Ticaret AS	Government of Turkey	Corporate	1,210.0

Source: IHS Herold

Deal asset versus corporate

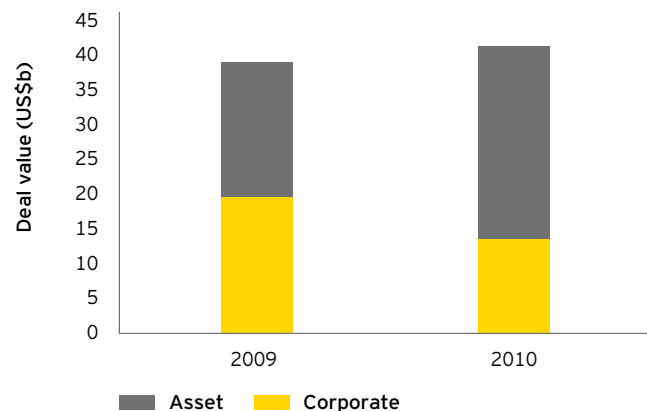


Source: IHS Herold

Refiners in North America and Europe are looking to rebalance their refining portfolio through one or a combination of the following:

- ▶ Divestment of non-core refining assets
- ▶ Partial shutdowns of key refineries
- ▶ Full shutdowns of less complex sites and conversion to storage terminals to defer expensive remediation and cleanup cost
- ▶ Postponing new refining capacity and upgrading projects

On the other hand, refiners in emerging markets are benefiting from growing regional oil demand and are therefore building new capacity. Due to their advantaged configuration and scale, low-cost crude and less stringent environmental legislations, there are indications that these refiners are looking to export into North America and Europe and have shown interest in a number of refineries and terminals in these regions.



Source: IHS Herold

Similar trend set to continue in 2011

In 2011, we expect that the major integrated oil companies as well as independent refiners will continue to divest their non-core North American and European refining assets as refining margins will remain under pressure.

There is likely to be interest from various groups of buyers, especially those from Asia and FSU with equity crude, for the relatively complex refining assets. Given the number of refineries that are in the market and the current low-margin environment, buyers currently benefit from negotiation strength and suppressed valuations. On the other hand, interest for relatively simple refineries is expected to be low, and those that are not successfully sold may end up being converted into storage facilities.

Strong demand for retail marketing assets

There were 31 transactions during 2010 involving retail marketing assets, with North America and Europe accounting for half of these transactions. The largest retail marketing transaction in terms of disclosed deal size is OMV's acquisition of an additional 54.17% stake in Turkish fuel retailer Petrol Ofisi for US\$1.4b.

Major integrated oil companies continued with their divestment plans to exit from mature retail markets where they do not have the necessary economies of scale to generate the required return on capital and where perhaps they lack an integrated refining position. This is predominantly driven by:

- ▶ Strategic focus on upstream – in part due to the higher level of returns but also because integrated oil companies are judged on their ability to replenish reserves. Hence capital expenditure is weighted toward E&P.
- ▶ Prioritization of limited downstream capital expenditure toward growth regions such as Asia.

On the other hand, the major integrated oil companies are prioritizing their downstream expenditure budget toward the development of retail marketing in emerging economies such as Asia, often in a joint venture with the local oil companies.

Similar trend set to continue in 2011

In 2011, we expect that the major integrated oil companies will continue to exit from mature retail markets. As marketing margins are usually more robust than refining margins, we expect to see continuing strong interest from various parties for retail marketing networks, particularly those with decent throughputs, strategically located sites and strong non-fuel offerings (or an ability to develop one), such as:

- ▶ Regional and national oil companies and independent retailers looking to expand within their supply envelope
- ▶ Other independent downstream companies looking to expand within the downstream supply chain
- ▶ PE firms looking to build competitive advantage through specialization as opposed to control over the full supply chain

Given the level of competition, retail marketing networks of a decent quality and size would likely command a premium.

Oilfield services

Confidence and M&A activity increasing in the oilfield services sector

Both corporate buyers and PE players have returned to the acquisition trail in 2010, following a period of muted activity. With many corporates sitting on cash reserves and seeing more opportunities to invest, deal activity has increased through the year. The main drivers behind transactions have been scale, expansion of product or service offering and expansion into new international markets.

The Macondo oil spill in April 2010 primarily affected valuations of those businesses focusing on deepwater drilling in the Gulf of Mexico, as well as in other territories where governments, such as Alaska and Norway, also restricted deepwater drilling. Increased regulations as a result of Macondo will ultimately benefit those oilfield service companies involved in sub-sectors such as health and safety and inspection and maintenance. Until there is clarity over the quantum and pass down of increased liability risks in the Gulf of Mexico, business valuations will be even more subjective, thus adding more uncertainty to deal activity in this region.

Recent research from Ernst & Young suggests further bright prospects for 2011. Our *Capital Confidence Barometer* reported that companies are more optimistic on prospects and also M&A. Nearly half of oil and gas respondents said they were actively looking at growth through M&A, while 70% expect to execute a transaction within two years.

Based on data from IHS Herold, transactions in oilfield services rocketed in 2010, with announced deals of more than US\$30b for the year, compared with just over US\$10b in 2009.

There has been an increase in both deal values and average deal sizes in 2010 driven by a general increase in the size of deals as well as more jumbo deals such as Schlumberger Ltd/Smith International Incorporated and Subsea 7/Aceryg SA. As for the average deal size, for those deals that disclosed value, the average of US\$900m compared with US\$238m in 2009. The table below lists the top 10 deals announced during 2010, where values were disclosed.

Flagship deals in 2010 included the agreement between Schlumberger and Smith International in February, an all-share deal that valued Smith at US\$12.4b, a 37.5% premium on the pre-announcement price. Schlumberger saw the opportunity to create a fuller drilling services offering in a single organization, as it forecast the need for higher levels of drilling to sustain world production.

The summer saw the tie-up of Subsea 7 and Aceryg, announced in June, creating a business valued in the region of US\$5.4b. Management pointed to the “growing size and technical complexity of subsea projects, driven by the demand to access ever more remote reserves in increasingly harsh environments” as a driver to combine the businesses. The deal – also paid for in shares rather than cash – was well received and, on announcement, the share prices of both businesses rose by more than 10%.

Top 10 transactions in 2010 where deal value is disclosed

Announced date	Target	Buyer	Transaction value US\$m
22/02/2010	Smith International Incorporated	Schlumberger Ltd.	12,400
07/10/2010	Dresser Inc.	General Electric Company	3,000
21/06/2010	Subsea 7	Aceryg SA	2,447
28/06/2010	FDR Holdings Limited	Noble Corporation	2,160
13/12/2010	Wellstream Holdings PLC	General Electric Company	1,156
13/09/2010	Prosafe Production Public Ltd.	BW Offshore Ltd.	1,100
25/03/2010	Geoservices	Schlumberger Ltd.	1,070
13/12/2010	Production Services Network (UK) Ltd.	Wood Group	955
13/08/2010	Allis-Chalmers Energy Inc.	Seawell Ltd.	813
09/08/2010	Superior Well Services Inc.	Nabors Industries Ltd.	802

Source: IHS Herold, mergermarket



General Electric (GE) expanded its oil and gas business in 2010, announcing a cash deal to acquire Dresser, a Texas-based gas engine manufacturer for US\$3b, an estimated 9.5 times 2010 EBITDA.

Deal activity continued throughout 2010, and the oilfield service transaction market had a busy end to the year with a number of deals announced in December such as the Wood Group's agreement to acquire PSN for a value of US\$955m. PSN will merge with Wood Group's Production Facilities business to create a leading brownfield services provider.

December also saw GE on the acquisition trail again with a recommended offer announced to buy Wellstream for around £800m. Wellstream, which is one of the world's largest manufacturers of flexible pipe, has significant operations in Brazil. This deal is an example of a growing trend for oilfield service companies to increase their presence in emerging markets through acquisition.

A number of these larger deals may prompt further activity that will ripple through the sector as other players look to consolidate to gain scale and avoid being left behind, while newly enlarged businesses restructure their operations and evaluate disposals of non-core operations. After Baker Hughes' recent acquisition of BJ Services, for example, it disposed of its Gulf of Mexico stimulation and sand control operations in the summer for US\$55m.

There has also been an increase in deal activity involving mid-market oilfield service companies during 2010. A number of corporate players have the cash resources and/or finance in place for acquisitions and see now as the time to expand geographically or grow capabilities through bolt-on acquisitions. One such deal was the purchase of Maine-based SGC Engineering by Senergy, the fast-growing Aberdeen energy services business. This secured Senergy's foothold in North America and consolidated its position in the alternative energy sector.

Another trend during 2010 that looks set to continue is that of forced accelerated disposals arising from both corporate and PE owned, distressed and over-leveraged groups. Here, purchasers prepared to move quickly can secure viable parts of the company, safeguarding jobs while growing their own operations. One such example was the acquisition of several subsidiaries of Sovereign Oilfield Group plc, which went into administration in the spring. Global Energy Group completed this deal in just 10 days, showing that deals can still get done quickly, even in the current climate.

There is also likely to be increased PE activity going forward, from those houses not burdened with poorly performing portfolios. There is a particularly healthy appetite for oilfield service companies that have strong management teams and display the right blend of geographical spread, sub-sector specialization, customer base and order book. Although corporate acquirers have led many of the major recent deals during 2010, a number of financial buyers are actively looking for investments in the sector, as they are attracted by the growth opportunities presented.

PE houses are, however, constrained by availability of debt toward deals. Interesting tactics used recently by some PE houses to combat this include financing deals with their own equity at the outset, then refinancing and injecting bank debt some time afterward, giving them a competitive advantage and enabling them to move quickly on quality opportunities.

The number of acquisitive and cash-rich trade buyers allied to the strengthening PE market has helped to stimulate deal flow during 2010, and improving valuation multiples are providing increased confidence for shareholders that now is the right time to sell.

It is worth remembering, however, that public markets remain volatile, and oilfield service companies remain susceptible to resultant pressures with a dearth of IPOs during 2010.

Future transaction trends and valuations are likely to be influenced by:

- ▶ Geographic footprint and access to growth markets
- ▶ Relationships with NOCs
- ▶ Technologies that reduce cost, improve performance or enhance access to hydrocarbons
- ▶ Health and safety records
- ▶ Increased regulation leading to increased inspection and refurbishment and likely earlier replacement of equipment
- ▶ Timing and certainty of shale and oil sand developments in North America



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Asia

2010 proved to be good for transactions in the oil and gas sector in Asia with a flurry of activity taking place in the year. Asian NOCs, led by the Chinese, maintained an aggressive and active pursuit of upstream acquisitions, spending more than US\$16b on acquisitions in Latin America, including nearly US\$13b in Argentina.¹

Some notable acquisitions by Chinese NOCs in the past year include:

- ▶ March 2010 – CNOOC International Limited (CNOOC International) acquired a 50% stake in Bidas Energy Holdings Ltd. for a cash consideration of US\$3.1b.
- ▶ November 2010 – China Petrochemical Corporation acquired Occidental Argentina Exploration & Production Inc. for a cash consideration of approximately US\$2.5b.²
- ▶ October 2010 – China Petroleum & Chemical Corporation acquired a 40% stake in Repsol for US\$7.1b.

These transactions provided much needed capital to develop growth projects and energy security for China.¹

This appetite for material upstream assets is not exclusive to China. Other Asian countries have shown that they are determined to do whatever it takes to make outbound investments to secure future oil and gas supplies. One such example is Korean National Oil Corporation (KNOC), which spent £1.87b to acquire Dana Petroleum Plc. This is in line with KNOC's previously disclosed plans to invest more than US\$6b on both organic and inorganic growth so that its output doubles by 2012.³ Gaining access to hydrocarbons is increasingly important to Korea given China's voracious appetite for oil and gas resources.

Participating in the shale gas wave across the world, China National Offshore Oil Corporation is investing US\$2.16b with Chesapeake Energy Corp. to make it the largest-ever Sino-American oil and gas deal. Chesapeake is a pioneer in the shale gas industry, and China is estimated to have 26 trillion cubic meters of shale gas reserves that are largely unexplored due to a lack of drilling ability. This deal allows Chesapeake to tap the shale gas deposits in China and boost its weak balance sheet while giving China the opportunity to develop its knowledge of shale gas extraction techniques.

At the same time, there is an emerging trend of large, non-government-backed Chinese groups becoming increasingly active in acquiring assets in politically difficult markets. An example is Hong Kong-listed United Energy Group Limited, which acquired from BP its Pakistan assets for US\$775m.

Within the region, leading companies in the offshore services sector are moving toward providing more integrated services to better capture value in subsea services and meet deeper drilling needs. Leading Singapore-listed company Ezra Holdings' acquisition of Norway-listed Aker Marine Contractors for US\$250m is a strategic move in that direction.

With the improved economic environment, the outlook for the sector in 2011 is expected to be positive, underpinned by the continued pipeline of transactions by NOCs, and consolidation of oilfield services, which will provide increased access to both capital and new markets.

(1) IHS Herold Inc. M&A Database

(2) Mergermarket

(3) Kang, S. & Lundgren, K. (2010), "Korea National Oil Makes US\$2.9 Billion Bid for Dana." *Bloomberg BusinessWeek*.

Australia

In 2010, Australia saw the return of some larger deals to the sector as consolidation continued in the Queensland coal seam gas market. There was a 159% increase over 2009 in the value of Australian oil and gas transactions to AU\$14.0b. The number of deals, however, remained steady at 84.⁴ Consistent with 2009, virtually all of the 2010 transactions (94%) were in the upstream sector.

The major transaction focus of 2010 was the Queensland coal seam gas market. The largest deal announced in 2010 involved Shell and PetroChina teaming up in a 50/50 venture to acquire the Australian-listed coal seam gas company Arrow Energy for AU\$3.7b. Arrow was rolled up with Shell's existing Queensland coal seam gas assets and proposed liquefied natural gas (LNG) facility at Gladstone to form an AU\$7.6b coal-seam-gas-to-LNG alliance between Shell and PetroChina. Shell was also a party in the other major Australian transaction of the year, selling down a 10% stake in Woodside Petroleum to institutional investors for US\$3.36b.

The coal seam gas sector also saw Santos and Petronas sell down a combined 42.5% of their Gladstone LNG project. Total SA acquired 27.5% in two tranches for AU\$1.08b, and Korean Gas Corporation acquired 15.0% of the project for an estimated AU\$660m. While most foreign investors in coal seam gas were focused on buying into the developing LNG projects, China National Offshore Oil Corporation (CNOOC) took a slightly different tack and undertook an AU\$50m farm-in deal for a 50% interest in five exploration permits covering 28,000km² in the emerging Galilee Basin.

While activity in the conventional oil and gas market was largely limited to farm-in deals, there was some consolidation activity in the mature Cooper-Eromanga basins as companies looked to consolidate ground to take advantage of some unexplored, unconventional opportunities in the region. We expect activity in this market to pick up in 2011.

Foreign investment from Asia's energy-hungry consumers has always been a prominent part of the Australian oil and gas market. This trend will no doubt continue in 2011, however the Shell/PetroChina alliance may signal the beginning of a more aggressive push by these consumers to acquire larger interests in Australia's developing LNG industry. Driven by a low, stable cost, these customers are increasingly more willing to put greater equity capital at risk to achieve these goals. In the current climate of scarce capital, this relationship is an important part of developing such projects and a trend that we expect to continue.

The outlook for 2011 is for an increased level of transaction activity in the upstream sector. With a number of the coal seam gas projects considering a final investment decision (FID), we expect to see further investment and consolidation activity for this market in 2011. As these capital-intensive projects head toward construction, we also expect to see some of the proponents rationalize other parts of their portfolios to release much-needed capital. We also expect to see an increase in corporate transactions among junior oil and gas companies, as a result of equity capital markets remaining relatively tight.

In the downstream sector, we saw a trend of oil majors looking to divest their interests in the smaller, mature markets such as Australia and New Zealand. Shell sold its New Zealand downstream business to local company Infratil, while ExxonMobil divested its 295-store Australian retail fuels marketing business to the Australian franchise of 7-Eleven. There may be further activity in this sector in 2011 as others look to follow this lead.

(4) Transactions greater than US\$10m. Number of 2009 transactions was 83.

Canada

In 2010, Canada witnessed a propensity toward fewer but larger deals. There was a 67% increase over 2009 in the value of Canadian oil and gas transactions to CAD35.7b.⁵ The number of deals, however, decreased by 5% from 2009.⁶ Virtually all of the 2010 transactions (99.7%) were in the upstream sector compared with 90% in 2009.

In 2010, the major focus centered on the Alberta oil sands and the Asian oil companies, with the number of oil sands-focused transactions tripling. The largest deal announced in 2010 involved China's Sinopec International Petroleum Exploration and Production Company's acquisition of ConocoPhillips, 9.03% interest in the Syncrude oil sands operation for CAD4.65b in April 2010. Thailand made its first foray into the Canadian oil sands with PTT's purchase of 40% of the Kai Kos Dehseh oil sands project from Statoil ASA for CAD2.28b. In all, Asian investment accounted for CAD9.2b during 2010 (compared with CAD5.9b in 2009 and virtually nil in 2008).

The oil sands sector also saw Total SA's acquisition of certain properties from Suncor for CAD2.43b, Total Canada's purchase of UTS Energy Corporation for CAD1.5b, BP Plc's purchase of a 75% interest in the Terre de Grace oil sands acreage in the Athabasca region of Alberta for CAD900m, China Investment Corporation's acquisition of a 45% interest in Penn West Energy Trust's bitumen assets in northern Alberta for CAD817m and KNOC subsidiary Harvest Operations Corp.'s purchase of a 100% interest in BlackGold oil sands project for CAD374m.

The oil sands also drove the IPO market with the two largest 2010 Canadian IPOs represented by Athabasca Oil Sands' CAD1.35b offering and MEG Energy's CAD700m offering.

In the conventional oil and gas sector, the majors placed a number of large packages on the market as they concentrated on their core business and rationalized their portfolios. The largest transaction was Apache Corporation's purchase of BP Plc's Canadian natural gas upstream business for CAD3.4b. Other transactions of significance were Husky's purchase of assets from Talisman for CAD1.77b, Sasol Limited's CAD1.04b purchase of gas assets from Talisman, Northern Blizzard's acquisition of Nexen's heavy oil properties for CAD975m and the acquisition of Hunt Oil's Canadian producing and undeveloped assets for CAD525m by Harvest.

The outlook for 2011 shows fewer of these types of packages on the market as most of the majors have divested their obviously non-core properties, along with the fact that current gas pricing does not support additional packages being placed on the market for those that do not "have to" sell. We expect an increase in

corporate transactions, however, as a result of the high debt levels of the junior oil and gas companies.

With unconventional emerging on the radar of global players looking to replace reserves, we expect the 2010 trend of foreign investment to be prominent again in 2011. This will be driven by higher oil prices, which improve project economics, and the fact that Canada is viewed as an attractive country for foreign investment given its stable financial and regulatory environment. Canada's oil and gas sector will continue to receive high levels of interest, particularly from Asian companies due to the increased demand for commodities in those regions and a need to secure supply of these products.

Another trend that arose in 2010 that we expect to continue is the frequency of Canadian and foreign entities partnering through strategic alliances and joint ventures, thereby sharing risk and pooling Canadian technology with foreign financial strength and resources. Technology continues to play an important strategic role in transactions, with foreign buyers looking to reap the benefits from these advancements being developed by Canadian oil and gas players.

In the oilfield services sector for 2011, we are seeing some large US oilfield service companies sitting on large amounts of cash and looking to re-enter the Canadian market. This observation also holds true for some Canadian services companies that have sat on the sidelines over the last few years and are now looking to consolidate and transact.

All of the above trends play into the hands of those in the Western Canadian Sedimentary Basin to proactively pursue new areas of sustainability (i.e., the oil sands) including the application of technology to drive down costs and enhance efficiency (i.e., the strides made in horizontal drilling, multi-stage fracturing and enhanced oil recoveries) and the continued building and strengthening of strategic relationships and alliances with key global players that were so prevalent in 2010.

Notwithstanding the above, and despite an optimistic outlook for 2011, oil and gas companies need to prepare for the unwelcome return of rising costs, a lack of available labor, and resulting project delays and budget overruns that plagued the sector leading up to the recent financial crisis. Although there's significant growth potential ahead, companies need to understand the new economic realities and the fact that they're operating in an increasingly global and competitive marketplace.

(5) 2009 figure excludes the CAD20.7b Suncor-PetroCanada merger.

(6) Number of 2010 transactions was 184 versus 174 in 2009.

EMEA

EMEA represents a diverse landscape for oil and gas transactions. The Middle East is awash with reserves, Europe is a mature market across all sub-sectors and Africa continues to be a key battleground for resources.

Despite its enviable resource position, there was limited transaction activity in the Middle East. Most of the region's resources remain controlled by NOCs. Just 3 of the 17 deals in 2010 in the Middle East were focused on the downstream sector, and the resource ownership position is likely to continue to favor joint ventures and strategic alliances over outright M&A.

Europe's mature downstream environment continues to bring a number of sellers to market, not always matched by the level of buyer interest. This has resulted in several lengthy on-and-off transaction processes, as well as creative deal structuring, to deliver a successful outcome. Conversely, the maturity of the upstream and oilfield services sectors has created a wealth of transaction opportunities. In the oilfield services sector, transactions have targeted strategic positioning relative to the global opportunity, whether these deals created global scale, leveraged technologies and products into new markets, or accessed new international customers. The re-emergence of PE interest in the sector is also expected to add to activity levels in 2011.

Two-thirds of the 92 oil and gas transactions in Europe (including the FSU) in 2010 were in the upstream sector. Some of the corporate transactions reflect the diversity of businesses that are active in the European capital markets, and an improving IPO landscape is likely to see expansion in the European-listed oil and gas universe. The balance of upstream transactions in Europe was predominantly asset deals in the North Sea, reflecting the changing ownership landscape as larger companies shift focus to other regions and smaller independents continue to be active in consolidating their positions.

Africa is one of the undoubted frontiers for the larger players, and given its geographical position between East and West, there is a strong competition between IOCs and NOCs for resource opportunities, particularly in West Africa. Various potential acquisitions of Kosmos Energy have been a microcosm of this dynamic, and we expect there to be continuing competition for material resource opportunities in 2011. The trend is likely to spread from West Africa into East Africa, although the more exploratory nature of East Africa could favor IOCs in this arena in the short term. North Africa, with its strategic supply position into Europe, is likely to see greater deal activity from European-based players, particularly in the gas market.

India

The rising energy demand in India is encouraging Indian oil and gas players to stay acquisitive, looking across borders and beyond conventional sources. From a traditional domestic focus and limited global footprint, Indian oil and gas majors are transitioning to become global players, actively looking to raise funds and invest globally.

The acquisition strategy followed by Indian E&P players shows an underlying appetite for production and development assets. In addition to the previously sought Africa, Latin America and the CIS regions, players have started acquiring assets in onshore US, Canada, Oceania and Middle East regions.

Intensifying competition from other major energy economies in the region and increasing nationalization of conventional assets is also driving Indian majors to evaluate unconventional oil and gas assets including oil sands, bitumen and shale gas plays. While Reliance Industries and Bharat Petroleum have acquired interests in established shale gas plays, some of the other public and private players are understood to be evaluating the same, as well as heavier oil assets.

Domestically, the Indian E&P space has seen the high profile Cairn Vedanta transaction. There is further expectation of consolidation of domestic E&P assets in the medium term.

The domestic oilfield services market is expected to continue offering growth opportunities, with a majority of the committed work program under the New Exploration Licensing Policy (NELP) bidding rounds still outstanding. Indian OFS players are also looking at expanding into offshore geographies, such as southeast Asia, Middle East and some parts of Africa.

The downstream gas sector is expected to be a key focus area over the next 5 to 10 years. The gas transmission network, in the medium term, is expected to almost triple from the current 10,000 km to 30,000 km. Additionally, more than 250 cities (over and above the 25 currently operational cities) are identified for development of city gas distribution projects in the next 5 to 10 years. Gas infrastructure players will be required to raise project finance in the short to medium term. Expansion of the city gas sector is also expected to provide opportunity for financial investors to build on their portfolio of city gas projects.

LNG, which currently constitutes approximately 20% of the total gas supply in India, is expected to continue to be a key supply source for the country, as overall gas consumption grows at about 9% per annum over the next decade. New regasification terminals are being planned in Kochi, Ennore, Mundra and Mangalore to provide for import of additional LNG cargoes. Investments in regasification terminals are expected to attract interest from both downstream players (transmission, city gas players, large gas consumers) as well as multinational energy and LNG traders.

India has a total refining capacity of 178 million metric tons per annum (MMTPA) with a surplus of approx. 45MMTPA, which is expected to further increase to more than 85MMTPA as new greenfield and brownfield projects are commissioned. Indian petroleum marketing players (most of which also own refining capacity) are investigating retail network acquisitions in overseas markets, which can provide access to new consumer markets for refined products. Synergies, in terms of access to storage facilities and other infrastructure, are also expected to be key drivers for these transactions.



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EYG no. DW0079



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