

IHS Herold

Global Upstream Performance Review

September 2014

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IHS™ Herold

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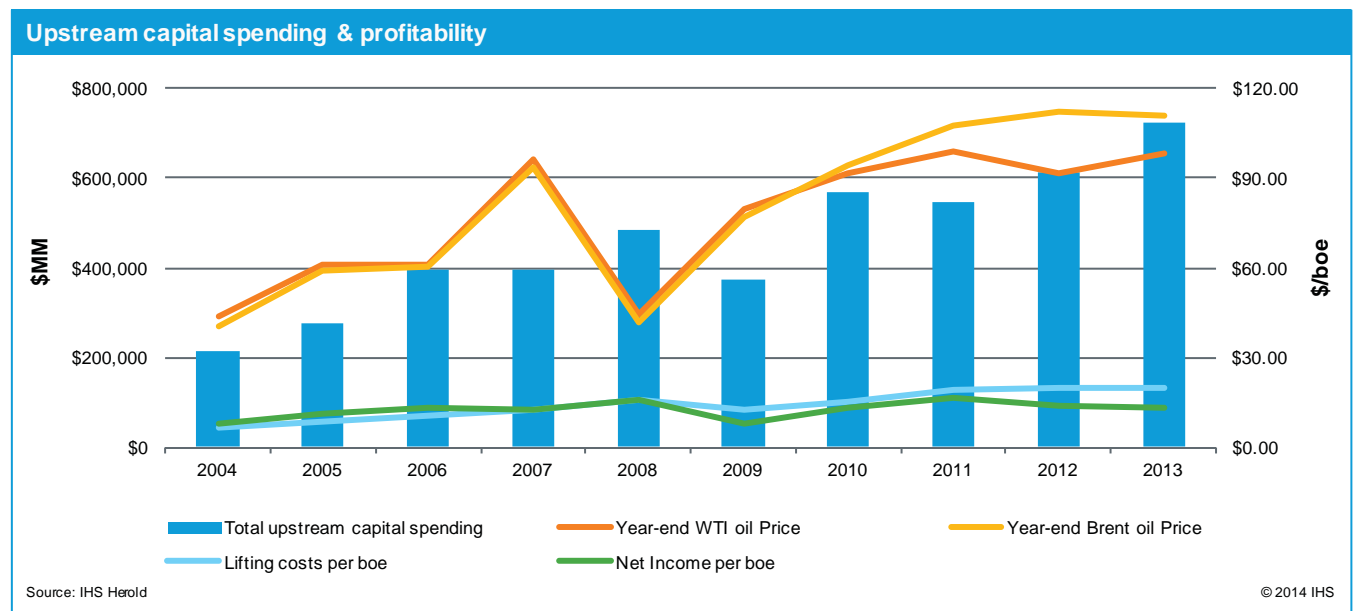
Foreword

Daniel Pratt, CFA

We have restructured the 2014 Global Upstream Performance Review to focus on three key areas of upstream performance: capital investment, reserve replacement rates and costs, and profitability. The results and trends in each of these fundamental pillars of oil and gas operations are discussed from a peer group, individual company, and regional perspective. We believe the new structure provides a better overview of global upstream performance than the previous system that was organized by region, while adding more comprehensive analysis of important trends and developments. All the regional data that has been a hallmark of the report are in the appendices of each of the sections.

From this analysis several significant challenges have emerged that the industry must contend with in the years ahead.

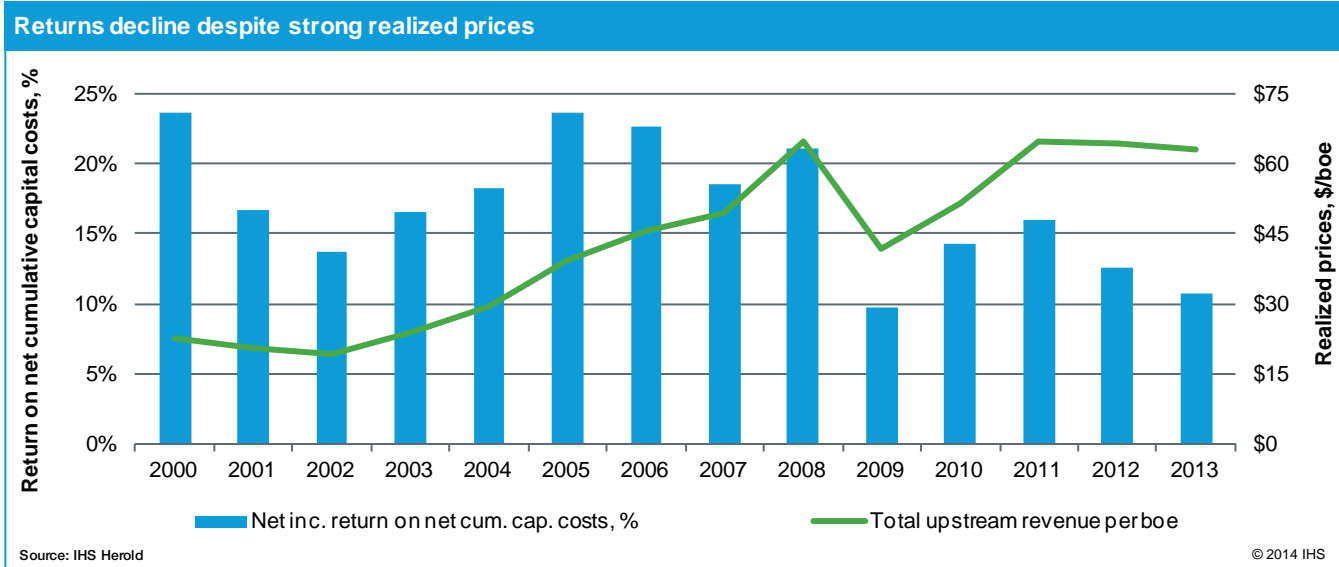
- **Margin squeeze remains a significant challenge because capital spending continues to rise rapidly despite the recent weakening in per-unit profitability and the longer-term trend of deteriorating returns.**
- **Viable growth opportunities appear to be shrinking because Russia was the only region outside of the highly competitive landscape of North America to show any meaningful reserve growth during the last decade.**
- **Organic finding and development activities generated essentially no free cash flow in 2013, which could have a longer-term impact on the reserve outlook because less capital is available for future growth investments.**



Capital spending for our universe of 207 companies continues to rise rapidly despite the recent weakening in per-unit profitability and the longer-term trend of deteriorating returns.

Global capital investment set yet another record in 2013 at over \$720 billion, increasing 18% from 2012 and growing 14% annually over the last decade. Global oil prices have grown at a slower annual rate of 10% since 2004, and have plateaued the past three years. Lifting costs, underpinned by rising spending, have also grown 14% annually and faster than prices. All this resulted in 2013 net income dipping below \$13 per boe, 7% lower than 2012, a second straight year of decline. Net income has only grown 6% over the past decade.

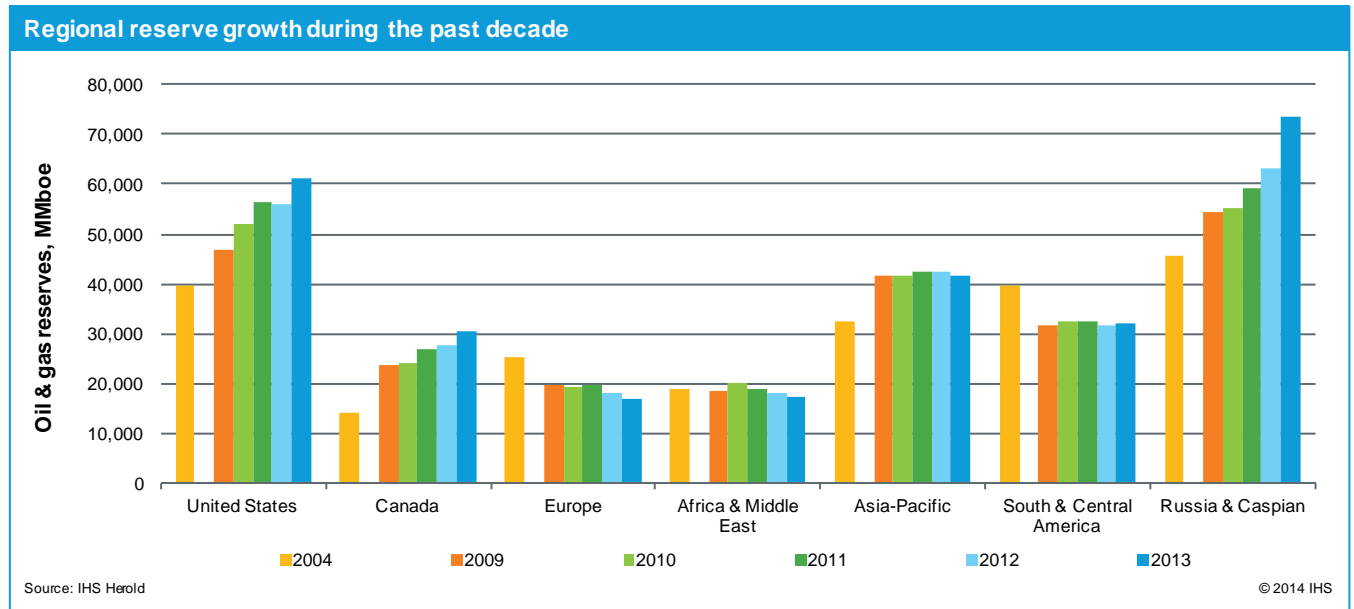
The accelerated spending has caused the underlying net capitalized costs of upstream assets to more than triple over the decade. This increase, coupled with lower per-unit profitability, has caused return on net cumulative capitalized costs to decline since 2005. In fact, returns over the past five years have been markedly lower than what the industry achieved for much of the previous decade. In 2000, the study universe earned a 23% net income return on net cumulative capital cost when realized prices were just over \$22/boe. Since then, realized prices have nearly tripled to \$63/boe in 2013, yet our results indicate the study universe earned only a 11% return on net cumulative capital cost.



History shows that it will take a significant reduction in organic capital spending before costs are meaningfully reduced, a situation which is not likely to occur in the near future unless oil prices drop unexpectedly. Although exploration and development costs ballooned to over \$560 billion in 2013, our recent survey of 50 of the largest global upstream companies indicates their exploration and development investment will decline 2% in 2014, which seems a reasonable assumption for 2015 as well. This will fall short of the significant reduction needed to move costs lower.

Viable growth opportunities appear to be shrinking because Russia was the only region outside of the highly competitive landscape of North America to show any meaningful reserve growth the past decade.

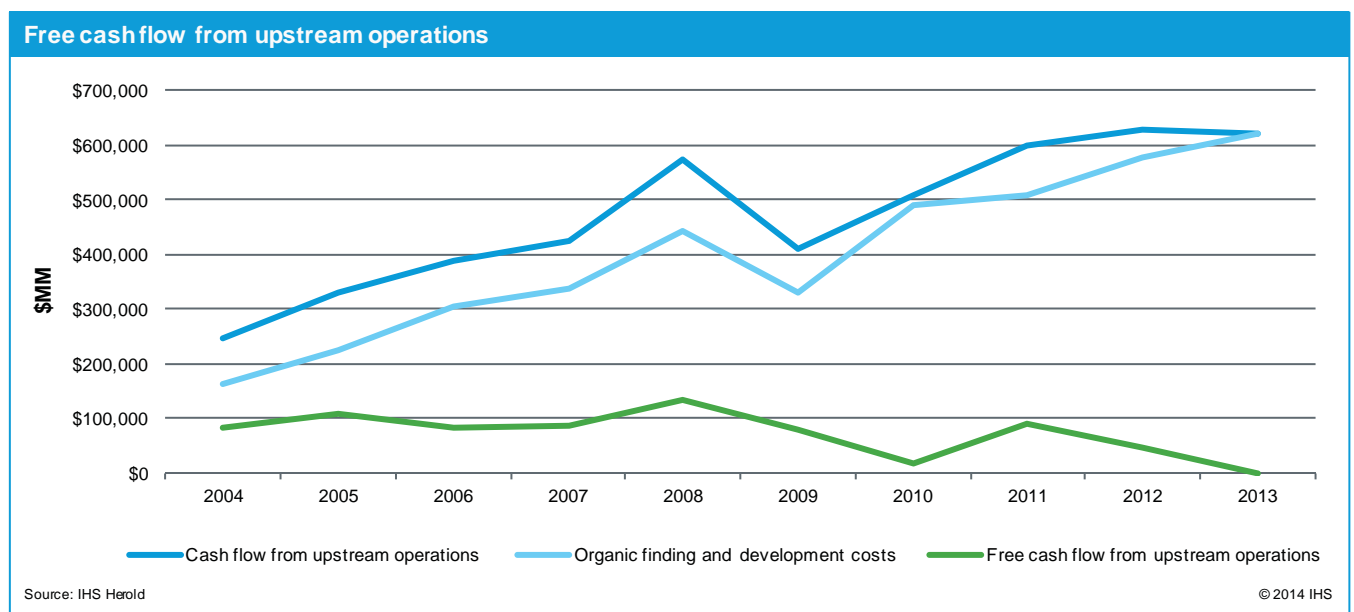
From 2004 to 2013, our universe of companies was only able to grow reserves in Canada, the United States, Russia, and Asia-Pacific, where compound annual growth rates the past decade totaled 9%, 5%, 5%, and 3%, respectively. North America has in recent years accounted for approximately 25% of total spending and 50% of acquisition dollars. The unconventional revolution, coupled with the large resource associated with oil sands, has made North America a growth region once again. This improved growth outlook makes North America an attractive place to do business because of its relatively stable fiscal regimes, secure free-market enterprise, ease of doing business, and general support of oil and gas development. Because aboveground risk and geopolitical uncertainties are increasing in many of the oil and gas producing nations, more companies are considering expanding operations in North America to reduce the overall risk of their portfolios.



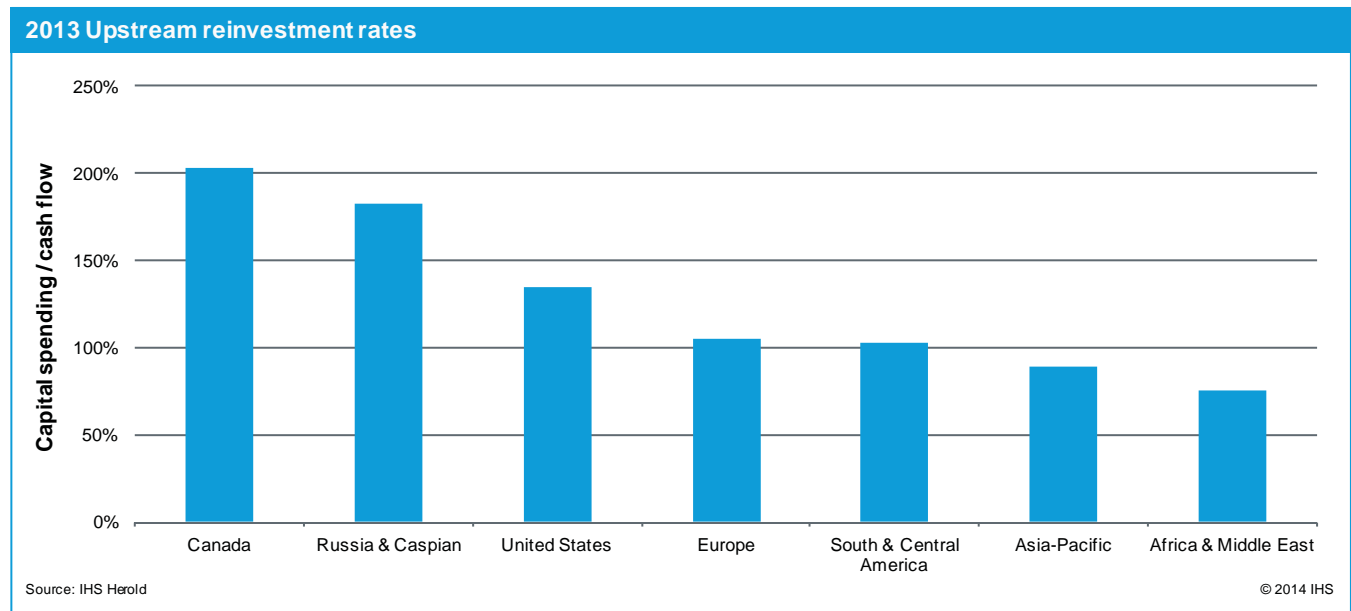
But companies looking to North America for the first time should be wary because it is a highly competitive market in which existing operators already possess the specialized technical skills to successfully develop unconventional resources. Many internationally diverse operators have established competitive advantages in specific regions and play types around the world, and investing in North America would mean allocating capital to a highly competitive region without having a competitive edge.

Organic finding and development activities generated essentially no free cash flow in 2013, which will have an immediate impact on broader capital strategies and could have a longer-term impact on the regional growth outlooks as less capital is available for future growth investments.

One of consequences of the current margin squeeze, and more specifically the higher organic replacement cost contributing to this trend (finding and development cost has topped \$20 per boe each of the last two years), is the declining proportion of capital available for investment in new growth opportunities.



Since reaching a peak of more than \$136 billion in 2008, the free cash flow available to the industry, after investing in organic growth, has been generally declining. During the first half of the past decade, operators were remarkably consistent in investing approximately 75% of their cash from upstream operations back into organic finding and development activities that include non-proven reserve acquisitions as well as exploration and development drilling. However, during the latter half of the decade, that allocation has ballooned to an average of 91% of cash flow, and nearly 100% in 2013. This could ultimately lead to a period of higher spending without the commensurate reserve growth, which could further reduce the already low reinvestment rates we’re seeing in the low growth regions.



The decline in free cash flow also has implications on non-upstream uses of capital such as share repurchases and dividend distributions to shareholders, which are often major elements of a company’s capital strategy and its ability to return value to shareholders.

Capital spending overview

Nicholas D. Cacchione, CFA

Key implications

- Total capital spending grew 18% in 2013 to \$724 billion on a surge in proved acquisition spending.
- Finding & development (F&D) spending rose 7% as a 9% increase in exploration and development investment was partially offset by a 4% decline in acreage purchases.
- The study universe spent \$96 billion more than cash flow in 2013, approximately equal to proved acquisition outlays.
- Rosneft led all companies by investing \$86 billion in 2013, including \$74 billion in proved and unproved acquisition spending, primarily for TNK-BP.

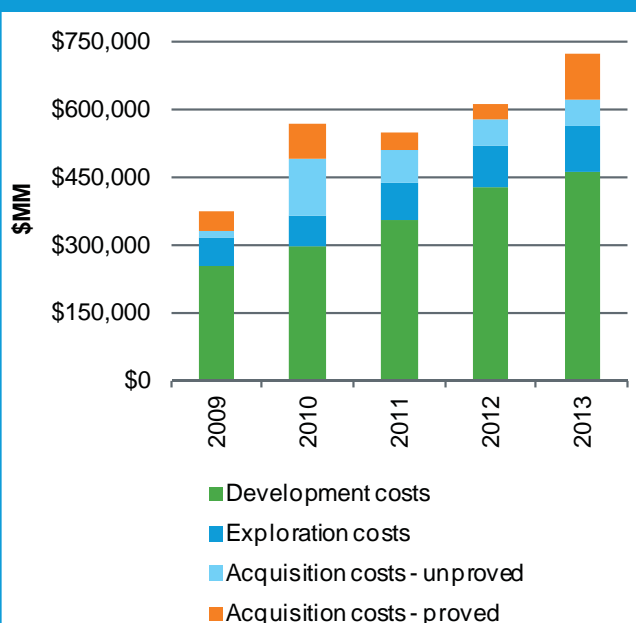
Capital spending, \$MM

	2009	2010	2011	2012	2013	3-year average	'12 - '13 % Δ
Acquisition costs - proved	\$43,670	\$78,065	\$37,242	\$34,629	\$102,988	\$58,286	197%
Finding & development costs							
Acquisition costs - unproved	\$16,960	\$125,447	\$70,696	\$58,514	\$56,032	\$61,748	(4%)
Exploration costs	\$60,648	\$68,172	\$82,692	\$93,401	\$100,881	\$92,325	8%
Development costs	\$252,098	\$294,941	\$354,475	\$423,465	\$461,763	\$413,234	9%
Other/unspec. and/or (credits)	\$1,471	\$3,196	\$2,185	\$3,865	\$2,081	\$2,711	(46%)
F&D costs incurred	\$331,177	\$491,756	\$510,048	\$579,246	\$620,757	\$570,017	7%
Total costs incurred	\$374,847	\$569,821	\$547,290	\$613,875	\$723,745	\$628,303	18%

Source: IHS Herold

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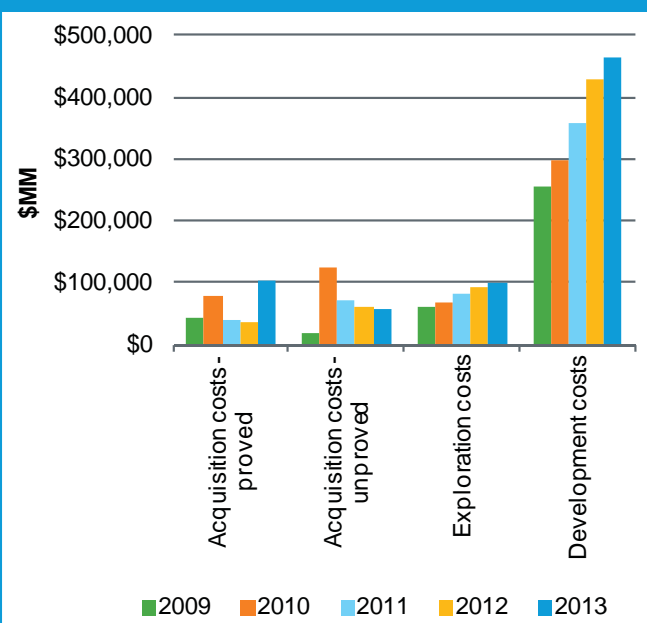
Proved acquisitions push capital spending higher



Source: IHS Herold

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Development spending steadily increases



Source: IHS Herold

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Capital spending: Peer group analysis

Key implications

- The Integrated Oils, which includes both Global and Regional Integrated Oils, increased global capital investment by 26% to \$450 billion, 62% of the worldwide total.
- Capital investment by the E&P companies grew 7% as a 15% gain in outlays by the Large E&P peer group was offset by lower spending by other E&P peers.
- The Oil-Weighted peers increased total capital spending by 55%, compared with a minimal increase by the Gas-Weighted firms.

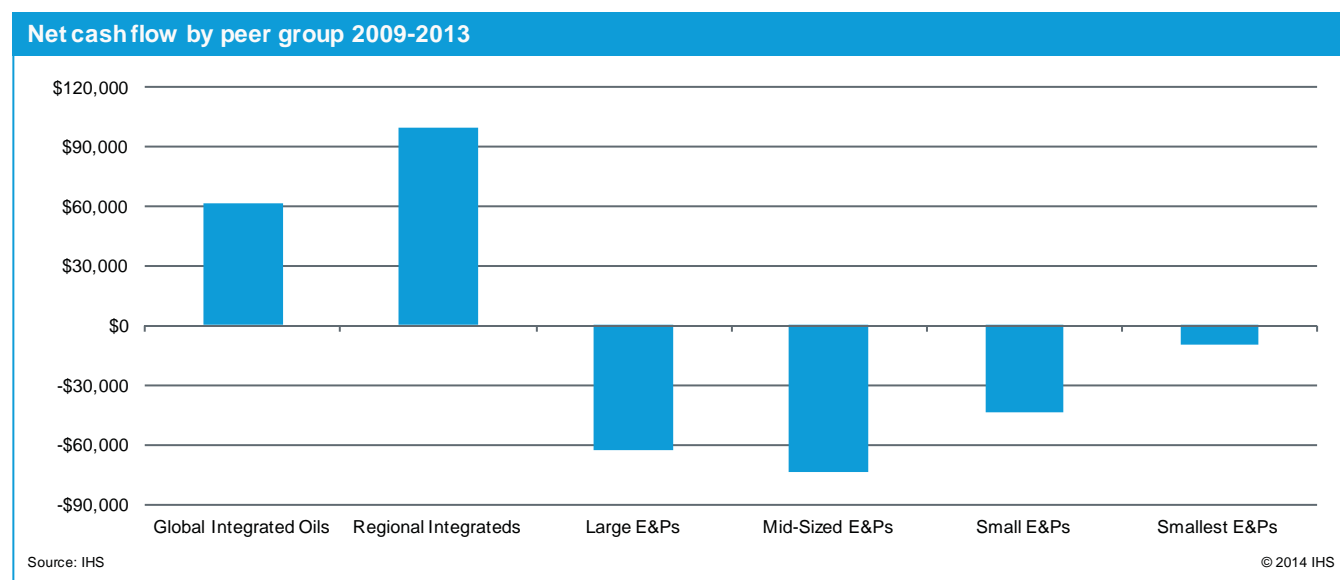
Capital spending by peer group, \$MM							
	2009	2010	2011	2012	2013	1 year % chg	5 year % chg
All Integrated & Diversified Oils	\$240,424	\$343,933	\$316,860	\$357,996	\$449,775	26%	17%
All E&Ps	\$120,106	\$204,067	\$223,973	\$255,783	\$273,609	7%	23%
Global Integrated Oils	\$93,517	\$155,480	\$138,915	\$140,557	\$164,040	17%	15%
Regional Integrations	\$152,518	\$194,950	\$184,602	\$224,967	\$313,368	39%	20%
Large E&Ps	\$82,981	\$137,588	\$147,198	\$158,116	\$181,628	15%	22%
Mid-Sized E&Ps	\$23,199	\$42,623	\$47,149	\$59,194	\$54,804	(7%)	24%
Small E&Ps	\$12,161	\$17,003	\$21,895	\$30,455	\$27,746	(9%)	23%
Smallest E&Ps	\$2,864	\$5,261	\$8,062	\$7,690	\$9,053	18%	33%
Oil-Weighted companies	\$127,907	\$190,209	\$172,716	\$206,110	\$319,702	55%	26%
Gas-Weighted companies	\$40,743	\$63,109	\$64,096	\$58,612	\$58,628	0%	10%
Balanced companies	\$197,712	\$302,204	\$311,642	\$356,596	\$372,176	4%	17%

Source: IHS Herold

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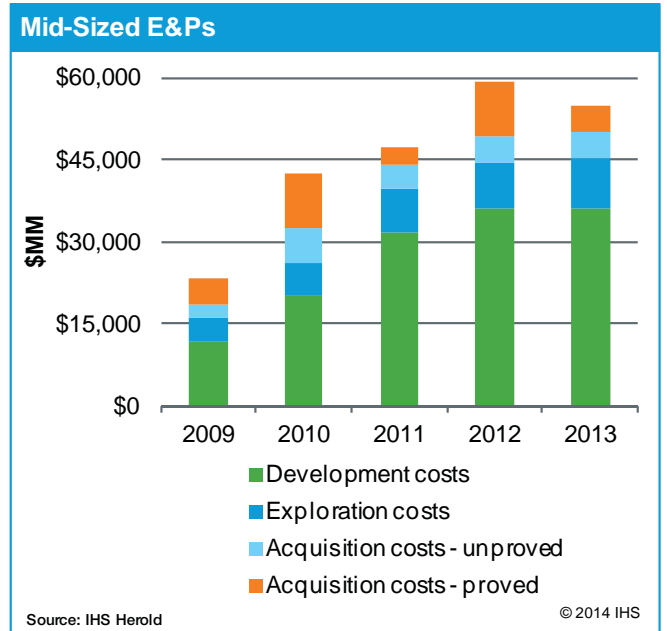
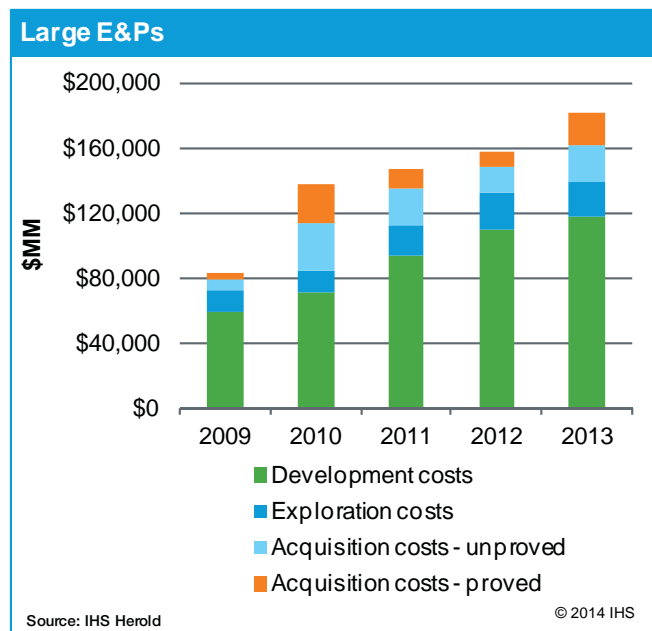
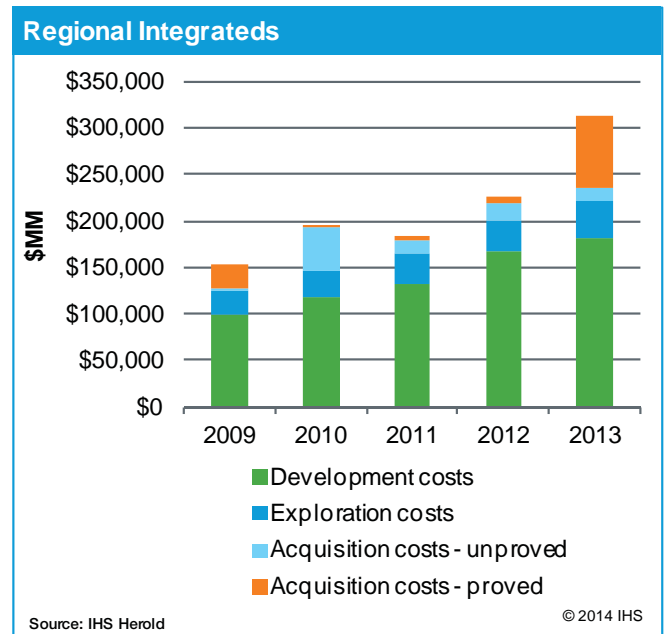
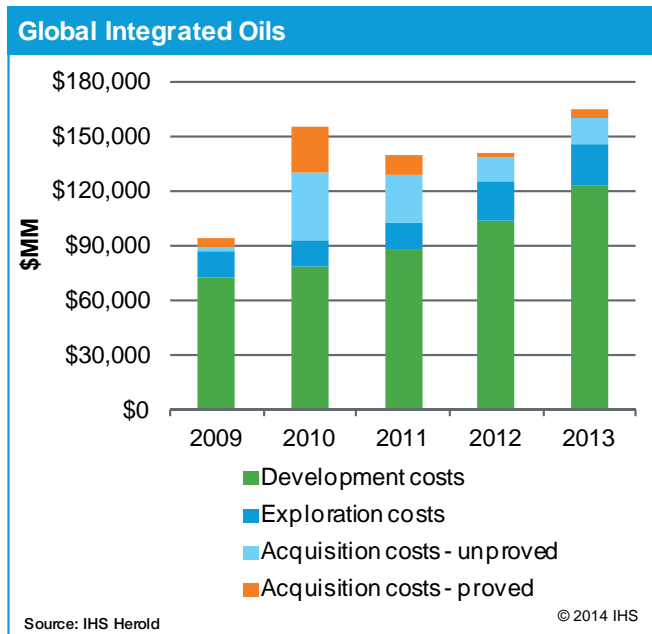
Peer group analysis

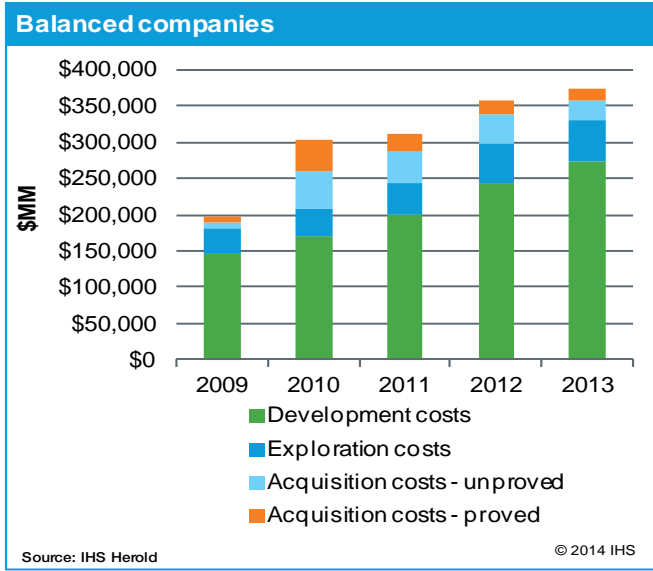
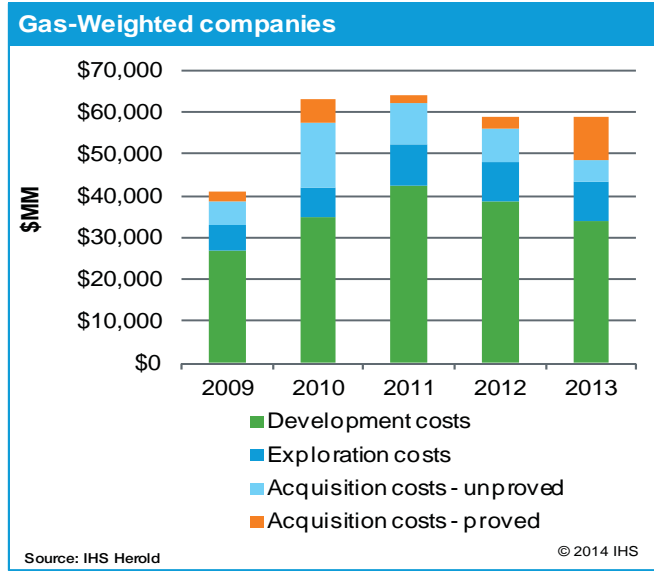
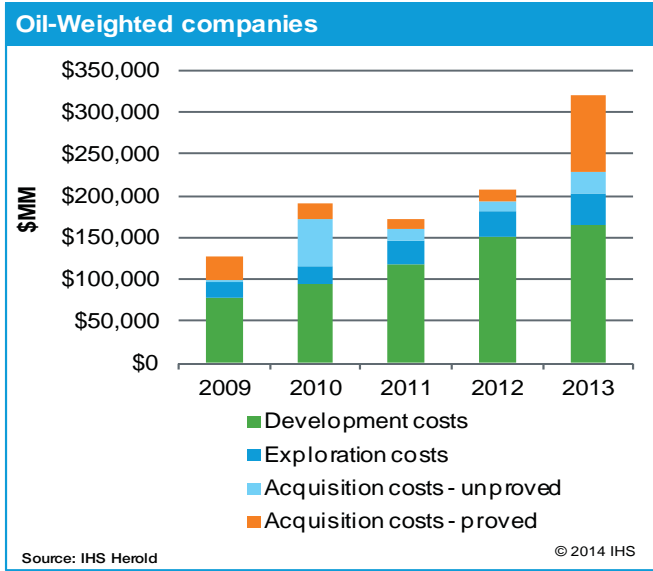
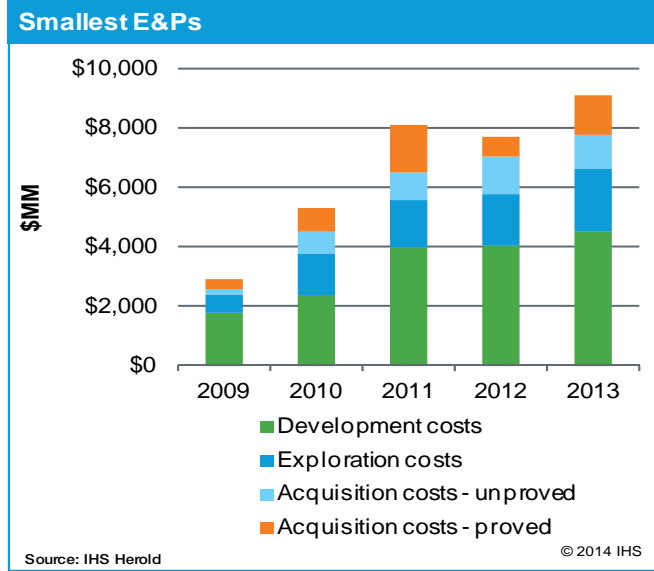
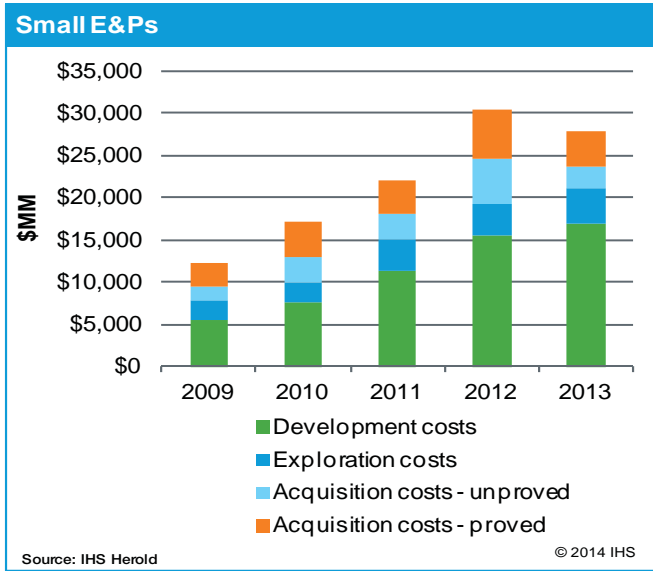
Since 2009 the study universe has generated cash flow of \$2,769 billion from upstream operations and invested \$2,830 billion, leaving a cash shortfall of \$61 billion to be made up through external financing and asset sales. The Integrated Oils generated a cash surplus of \$165 billion over that period, E&Ps outspent cash flow by roughly \$192 billion, and the companies no longer in business but still part of the study universe accounted for the balance. This investment



pattern highlights the difference in strategy among the peer groups. The Integrated Oils invest more conservatively because their upstream cash flow also funds non-upstream capital spending, dividends, and share repurchases. The E&Ps invest much more aggressively, principally because reserve and production growth drives the appreciation of their shares. This is particularly true of the Mid-Sized, Small, and Smallest E&P peer groups.

The Regional Integrated Oils produced nearly \$100 billion of free cash flow, \$62 billion more than the Global Integrated Oils. Each of the E&P peer groups outspent their cash flows. The Mid-Sized E&P and the Large E&P peer groups had deficits of \$74 billion and \$63 billion, respectively, while the Small and Smallest E&P groups collectively outspent cash flow by over \$54 billion.





Capital spending: Company analysis

- Rosneft topped the 2013 list, investing nearly \$86 billion, including almost \$75 billion in acquisitions, primarily for the purchase of TNK-BP.
- CNOOC Ltd's investment included \$25 billion in acquisition outlays, primarily for Nexen.
- Chevron increased spending by \$8 billion to \$33.5 billion, virtually all of it development spending. The biggest increase was in the Asia-Pacific, where Chevron is developing the Gorgon and Wheatstone LNG projects.

Acquisition spending leaders, \$MM	
Rosneft Oil	74,397
CNOOC	25,158
Linn Energy	5,379
Exxon Mobil	5,186
Lukoil	4,139
Total	3,883
Royal Dutch Shell	3,387
OMV AG	3,026
BP	2,960
PetroChina	2,879

Source: IHS © 2014 IHS

Upstream capital spending leaders, \$MM	
Rosneft Oil	85,976
CNOOC	40,069
Royal Dutch Shell	39,183
PetroChina	36,981
Exxon Mobil	35,965
Chevron	33,505
Total	30,799
Petrobras	29,251
BP	24,588
Statoil ASA	21,249

Source: IHS © 2014 IHS

Company analysis

Proved and unproved acquisitions surged in 2013 to \$159 billion and boosted several companies to the list of largest investors. Rosneft accounted for over 40% of the total transaction value in our study universe primarily by purchasing TNK-BP in 2 separate transactions. CNOOC Ltd's corporation acquisition of Nexen accounted for approximately 80% of its total transaction spending.

Within the Integrated Oils, Chevron and Total S.A. increased spending over 30% to \$33.5 billion and \$30.8 billion, respectively. Chevron's increased investment in 2013 was from development of the Australian Gorgon and Wheatstone LNG projects. Total's increased investment was for projects in Europe, Africa & Middle East, and Asia-Pacific, with the latter including the Inpex-operated Ichthys LNG project and the Santos-operated Gladstone LNG project, both in Australia.

Among the E&Ps, Inpex more than doubled its capital spending to \$6.4 billion by investing \$2 billion in unproved property purchases. Novatek doubled capital outlays by buying proved reserves, including a 49% equity stake in ZAO Nortgas. US E&Ps Oasis Petroleum and Rosetta Resources more than doubled their capital investment in 2013. Rosetta Resources spent nearly \$1 billion in acquisitions, much of that for Comstock Resources's West Texas assets. Oasis Petroleum invested nearly \$2 billion in acquisitions, including Zenergy's Williston Basin assets for \$1.45 billion.

Capital spending: Regional analysis

- Capital spending increased in all regions except the United States, where investment decreased 15%, solely because of lower acquisition outlays.
- Investment in Europe rose for the third consecutive year, gaining 24% to \$57 billion from a surge in acquisitions.
- Capital spending increased only 7% in the Africa & Middle East because of political instability in such key producing countries as Egypt, Libya, and Yemen.

Total cost incurred by region							
	2009	2010	2011	2012	2013	1 yr. avg.	5 yr. avg.
United States	\$83,545	\$208,488	\$172,237	\$208,831	\$177,120	(15%)	21%
Canada	\$48,097	\$54,543	\$55,548	\$60,748	\$72,173	19%	11%
Europe	\$35,024	\$30,286	\$40,608	\$45,938	\$56,777	24%	13%
Africa & Middle East	\$39,157	\$40,517	\$42,198	\$46,482	\$49,712	7%	6%
Asia-Pacific	\$56,688	\$65,293	\$73,348	\$97,322	\$103,219	6%	16%
South & Central America	\$40,543	\$93,065	\$53,727	\$54,398	\$69,003	27%	14%
Russia & Caspian	\$20,587	\$23,036	\$24,417	\$30,950	\$103,023	233%	50%

Source: IHS Herold © 2014 IHS

Regional analysis

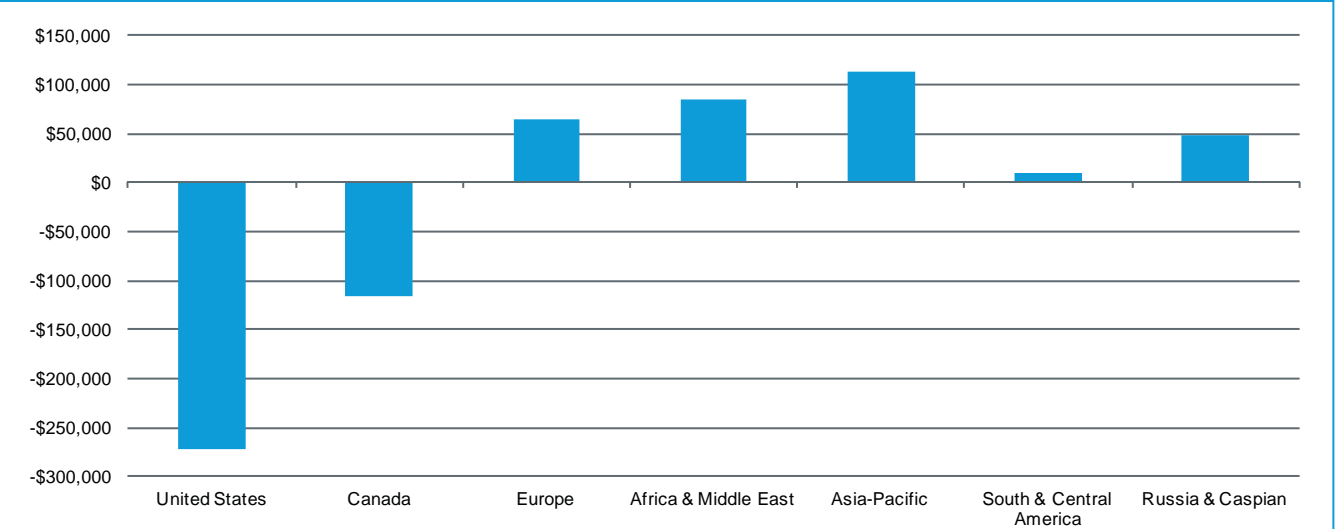
US capital spending declined to \$177 billion because acquisition expenditures were \$33 billion lower than 2012. Exploration and development spending was essentially flat at \$146 billion. Without CNOOC Ltd.'s acquisition of Nexen, Canadian investment would have decreased because exploration and development spending was down and the overall M&A market was weak.

Africa & Middle East development spending in 2013 was the highest in recent years, but the gain was nearly offset by lower acquisition and exploration outlays. Asia-Pacific capital spending rose 6% because a 9% increase in development spending offset a decline in unproved property purchases and a modest 4% gain in exploration outlays.

South & Central America capital spending grew a robust 27% on increases in all categories. Acquisition spending nearly tripled to \$5.3 billion on purchases by Royal Dutch Shell and Pacific Rubiales. Exploration spending was up 37% to \$17.3 billion and development spending was up 16% to \$46.4 billion. Europe is experiencing a renaissance of upstream investment, with companies reporting a sixfold gain in acquisition spending and a 26% gain in exploration outlays. Capital outlays in the Russia & Caspian surged from the lowest of all regions in 2012 to the second highest in 2013. Rosneft's purchase of TNK-BP was the main factor, but development spending also increased 23% to \$31.3 billion.

Since 2009, the United States and Canada have been the only regions to be net consumers of capital in the upstream. The remaining regions have been, to varying degrees, suppliers of capital, with the balance of total investment supplied through asset sales and external financings. The companies in the United States outspent cash flow by \$272 billion, while Canadian companies have invested \$117 billion more than their cash inflow. The Asia Pacific has been the largest net provider of capital, generating \$113 billion in excess of capital spending requirements. Africa & Middle East and Europe have \$85 billion and \$64 billion in excess cash, respectively. Russia & Caspian generated over \$48 billion in free cash flow while South & Central America has only been slightly cash flow positive.

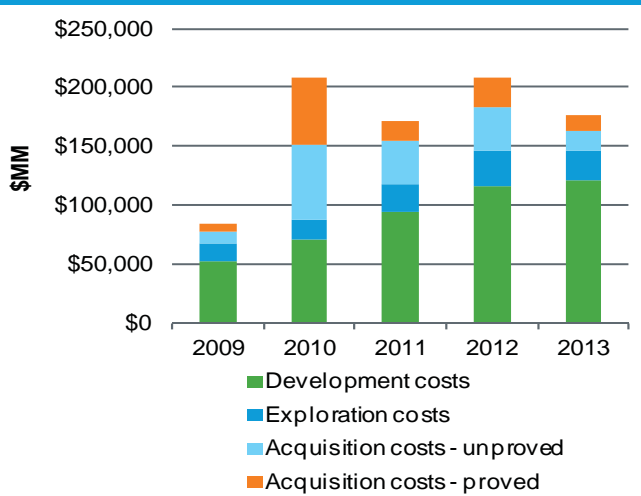
Net cash flow by region 2009-2013



Source: IHS Herold

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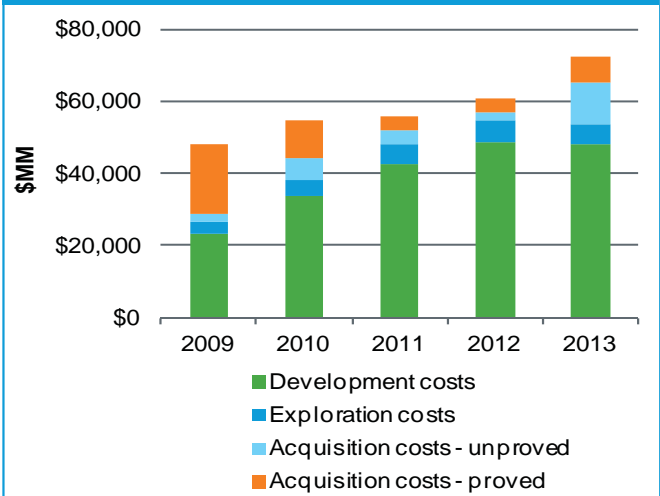
United States



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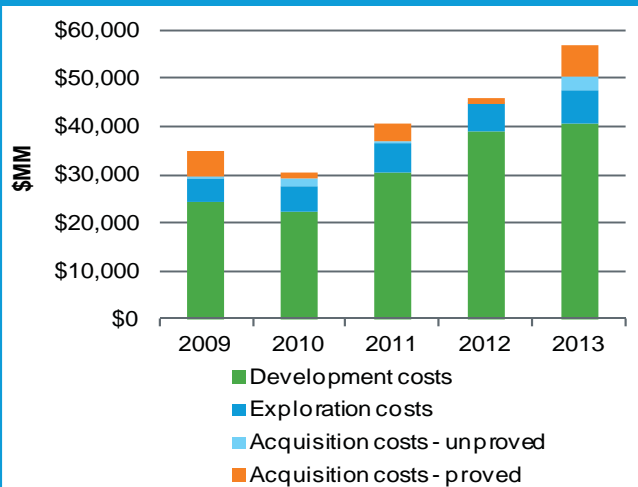
Canada



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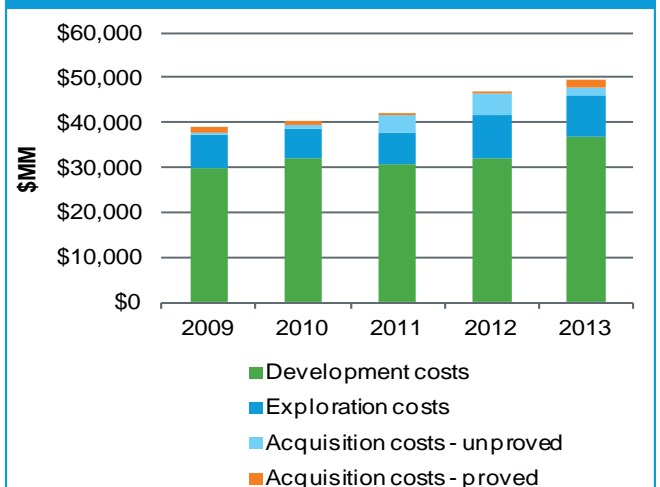
Europe



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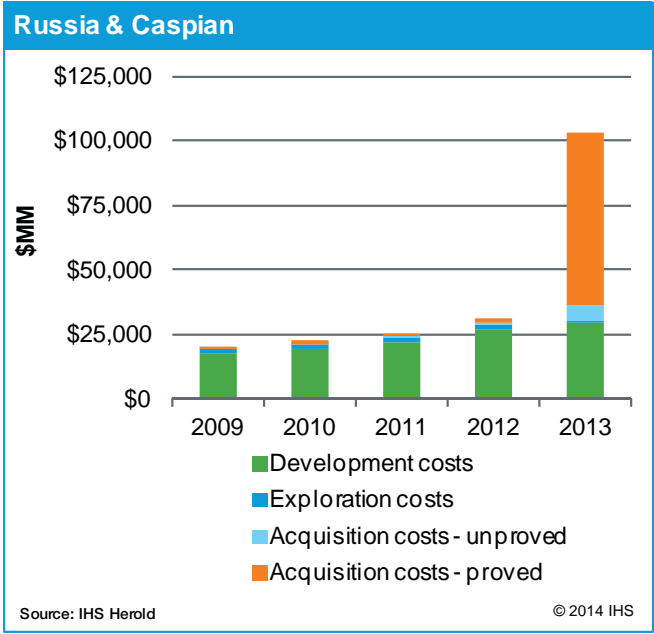
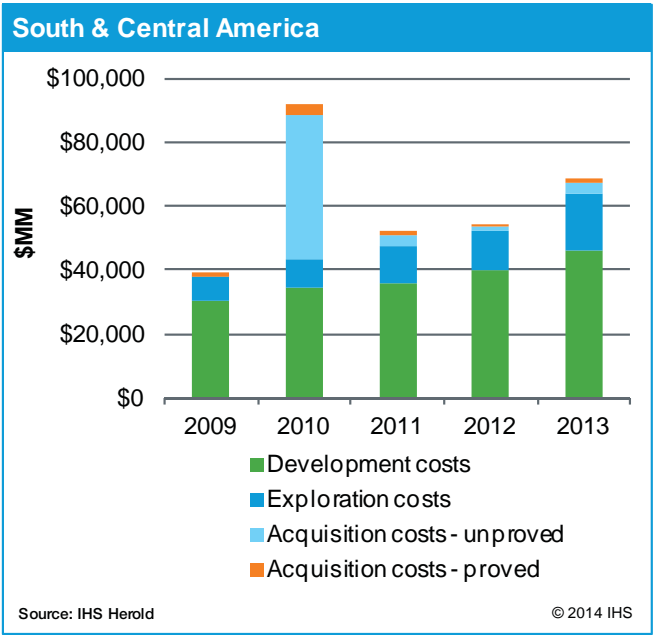
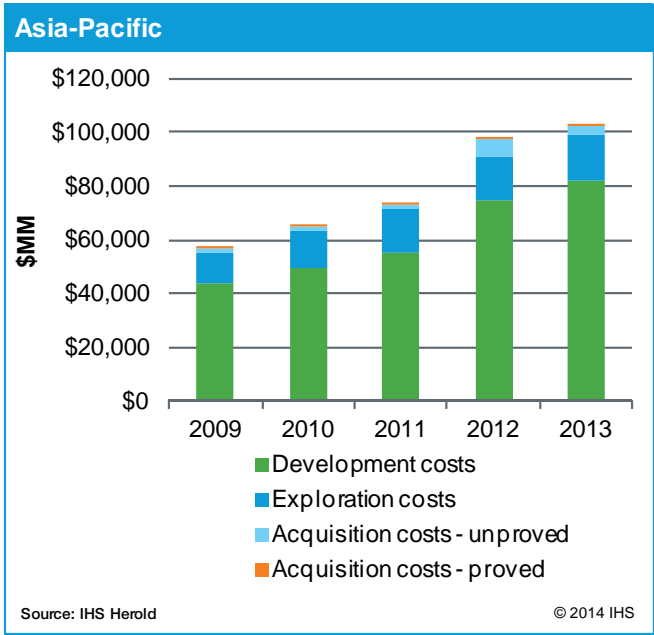
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Africa & Middle East



Source: IHS Herold

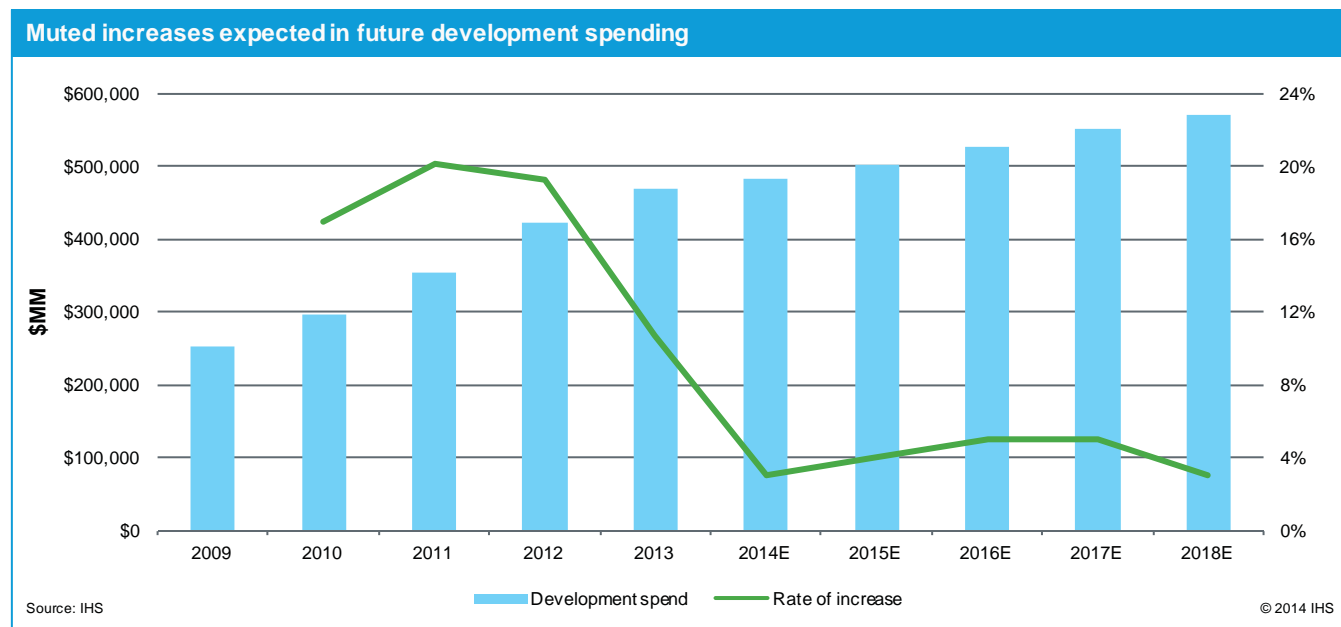
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Capital spending: What to watch for

Global exploration and development spending was up 9% in 2013 after much stronger increases in the wake of the 2008 financial collapse. The “**IHS Upstream Spend Report**” expects future development outlays to grow annually in the low-to-mid-single digits through 2018. The report analyzes 15,000 projects to model overall development spending. Globally, capital spending in the Africa & Middle East is expected to grow 6% annually through 2018. At the other end of the spectrum, investment in the Europe and Russia & Caspian is expected to grow at the slowest rate, about 3% annually. Capital expenditures in Asia Pacific, Canada, United States, and South & Central America are all expected to grow at about 4% annually.

IHS Herold is expecting lower exploration and development outlays for 2014 based on a capital spending survey of 50 of the largest global upstream companies. IHS Herold found that that exploration and development spending is expected to fall 2% in 2014, primarily due to a pullback in spending by the Integrated Oils, which invested aggressively in 2013.



Capital spending tables: Worldwide

Capital spending: Worldwide										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
UNIVERSE*	102,988	56,032	-	100,881	-	461,763	-	2,081	723,745	-
Rosneft Oil	70,381	4,016	1	753	30	10,825	15	-	85,976	1
CNOOC	12,372	12,785	2	3,049	8	11,862	13	-	40,069	2
Royal Dutch Shell	1,046	2,341	7	9,333	2	26,463	4	-	39,183	3
PetroChina	-	2,879	10	7,041	3	26,567	3	494	36,981	4
Exxon Mobil	209	4,977	4	2,972	9	27,807	1	-	35,965	5
Chevron	162	2,710	11	3,186	6	27,447	2	-	33,505	6
Total	938	2,945	6	2,927	10	23,989	5	-	30,799	7
Petrobras	990	-	23	10,187	1	18,074	6	-	29,251	8
BP	1,824	1,136	9	4,964	4	16,664	9	-	24,588	9
Statoil ASA	374	374	28	3,709	5	16,791	8	-	21,249	10
ConocoPhillips	14	759	26	2,546	12	17,500	7	-	20,819	11
PEMEX	-	-	NA	2,864	11	14,237	10	-	17,101	12
Sinopec	-	-	NA	3,116	7	13,332	11	5	16,453	13
Lukoil	2,200	1,939	5	795	29	11,178	14	-	16,112	14
Eni S.p.A.	85	60	69	2,337	13	12,178	12	-	14,660	15
Apache	177	165	42	1,892	15	8,548	16	-	10,782	16
BG Group	-	9	131	1,649	16	8,210	17	-	9,868	17
BHP Billiton Group	-	123	75	719	31	7,174	18	-	8,016	18
Imperial Oil	33	1,954	13	120	81	5,677	22	-	7,784	19
Occidental Petroleum	363	184	36	515	44	6,649	19	-	7,711	20
Anadarko Petroleum	324	327	31	1,970	14	4,865	29	-	7,486	21
Novatek	1,863	100	14	58	96	1,252	55	4,207	7,481	22
EOG Resources	120	414	37	377	51	5,977	21	109	6,998	23
Hess	-	56	92	1,044	25	5,666	23	-	6,766	24
Canadian Natural Resources	245	93	44	24	128	6,355	20	-	6,717	25
Ecopetrol	180	-	63	1,330	18	5,202	25	0	6,713	26
Chesapeake Energy	22	997	21	699	33	4,888	28	-	6,606	27
Linn Energy	3,740	1,638	3	13	140	1,154	59	7	6,553	28
OMV AG	2,164	861	8	688	35	2,611	38	139	6,463	29
INPEX	-	2,136	12	650	37	3,565	35	-	6,351	30
Devon Energy	22	216	52	595	39	5,089	26	-	5,922	31
Gazprom Neft	-	-	NA	132	77	5,524	24	-	5,656	32
Suncor Energy	2	-	152	489	47	5,024	27	35	5,550	33
Marathon Oil	90	222	46	1,271	21	3,868	31	-	5,451	34
YPF	14	-	124	307	55	4,778	30	-	5,099	35
Noble Energy	-	209	56	1,010	27	3,352	36	-	4,571	36
Murphy Oil	13	36	95	494	46	3,768	32	172	4,482	37
Santos	42	144	61	516	43	3,641	33	-	4,343	38
Husky Energy	36	1	103	583	40	3,614	34	-	4,234	39
Talisman Energy	111	19	72	700	32	2,518	40	616	3,964	40
Mitsui	372	1,061	17	1,160	23	1,324	52	-	3,918	41
Continental Resources	17	547	35	688	34	2,549	39	-	3,800	42
PTT E&P Public	828	-	25	475	48	2,470	41	-	3,773	43
Repsol	76	596	29	1,306	19	1,792	45	-	3,770	44
Pacific Rubiales Energy	756	1,048	15	619	38	1,273	54	-	3,696	45
Cenovus Energy	-	31	107	256	60	2,683	37	-	2,970	46

Capital spending: Worldwide										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved	Unproved	Total	Costs	Rank	Costs	Rank	Costs	Incurred	Rank
	\$MM	\$MM	Rank	\$MM	Rank	\$MM	Rank	\$MM	\$MM	Rank
Whiting Petroleum	233	174	41	363	53	2,133	43	-	2,903	47
Pioneer Natural Resources	13	63	85	1,290	20	1,481	48	-	2,848	48
EnCana	47	137	62	434	50	2,214	42	-	2,832	49
BASF SE	1,133	-	18	511	45	1,143	60	-	2,787	50
Tullow Oil	-	-	NA	1,503	17	1,043	65	-	2,546	51
Oasis Petroleum	752	837	16	2	162	890	72	12	2,494	52
Halcon Resources	71	436	38	1,182	22	749	76	-	2,439	53
Newfield Exploration	9	154	66	1,100	24	1,042	66	-	2,305	54
Antero Resources	15	441	40	835	28	781	74	-	2,072	55
TengizChevrOil	-	-	NA	-	NA	2,054	44	-	2,054	56
Southwestern Energy	1	168	64	192	67	1,662	47	-	2,023	57
Denbury Resources	804	221	20	2	164	913	71	-	1,940	58
EP Energy	2	20	113	95	85	1,783	46	7	1,907	59
Concho Resources	11	86	82	1,027	26	729	78	12	1,865	60
Rosetta Resources	290	673	24	535	42	339	113	-	1,837	61
Kodiak Oil & Gas	456	301	27	-	NA	1,061	64	7	1,825	62
Crescent Point Energy	114	6	78	246	62	1,428	50	-	1,794	63
SM Energy Company	30	173	57	169	70	1,323	53	27	1,721	64
Lundin Petroleum AB	-	-	NA	570	41	1,134	61	-	1,704	65
Cimarex Energy	1	195	58	53	101	1,354	51	4	1,607	66
Oil Search	-	-	NA	294	58	1,215	57	-	1,509	67
QEP Resources	32	9	101	15	137	1,441	49	-	1,496	68
Range Resources	-	138	70	254	61	986	69	76	1,454	69
EQT	90	96	60	4	156	1,230	56	-	1,421	70
Breitbart Energy Partners	972	88	19	-	NA	295	119	19	1,374	71
SandRidge Energy	21	100	77	83	90	1,131	62	-	1,335	72
EXCO Resources	754	247	22	39	113	231	129	1	1,272	73
Tourmaline Oil	190	-	59	667	36	375	109	15	1,247	74
Midstates Petroleum	413	206	33	10	145	583	87	13	1,225	75
Canadian Oil Sands	-	-	NA	-	NA	1,199	58	-	1,199	76
WPX Energy	-	57	91	123	80	1,009	67	-	1,189	77
Cabot Oil & Gas	-	71	86	45	110	1,070	63	-	1,186	78
Sanchez Energy	412	245	30	22	130	492	94	-	1,171	79
MEG Energy	0	61	89	90	87	1,007	68	0	1,158	80
Energen	5	27	106	436	49	655	79	-	1,122	81
Sasol	16	-	122	96	83	966	70	-	1,078	82
Ultra Petroleum	224	425	32	184	69	187	136	-	1,020	83
Premier Oil	-	-	NA	267	59	743	77	-	1,010	84
CONSOL Energy	-	260	50	95	84	629	84	-	985	85
Energy XXI (Bermuda)	109	52	67	169	71	636	82	9	975	86
Diamondback Energy	339	279	34	243	63	88	151	1	951	87
Afren	-	-	NA	299	56	610	85	-	910	88
Penn Virginia	278	188	39	17	135	423	104	-	905	89
Enerplus	161	76	53	31	119	631	83	-	899	90
Penn West Petroleum	-	4	146	88	88	771	75	10	873	91
Stone Energy	71	9	83	299	57	324	115	134	836	92
ARC Resources	-	2	150	15	138	817	73	-	834	93
Gulfport Energy	-	338	43	26	124	453	99	4	821	94
Carrizo Oil & Gas	-	254	51	106	82	424	103	-	784	95
Kinder Morgan Energy Partners	285	-	47	11	143	471	96	-	767	96
W&T Offshore	97	26	74	215	66	353	110	51	742	97
Laredo Petroleum	10	27	104	49	106	654	80	-	740	98
Lightstream Resources	21	38	90	33	117	645	81	-	737	99
Athabasca Oil	-	3	147	126	79	579	88	-	709	100

Capital spending: Worldwide										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved	Unproved	Total	Costs	Rank	Costs	Rank	Costs	Incurring	Rank
	\$MM	\$MM	Rank	\$MM	Rank	\$MM	Rank	\$MM	\$MM	Rank
Paramount Resources	3	17	116	160	73	510	92	-	690	101
Chaparral Energy	70	146	54	78	91	376	108	-	670	102
MOL	6	-	140	340	54	322	116	-	669	103
Berry Petroleum	3	0	145	1	172	600	86	16	621	104
Aurora Oil and Gas	38	66	81	-	NA	505	93	-	608	105
Woodside Petroleum	-	-	NA	166	72	420	105	-	586	106
National Fuel Gas	8	9	119	49	105	461	97	38	564	107
Peyto Expl. & Dev.	2	6	132	28	120	525	90	-	561	108
Vermilion Energy	23	-	110	22	131	514	91	-	559	109
Baytex Energy	4	3	138	8	147	527	89	-	541	110
Swift Energy	-	47	97	5	152	487	95	-	539	111
Resolute Energy	156	121	48	150	75	97	146	-	525	112
Unit Corp.	-	76	84	33	116	424	102	(18)	516	113
Comstock Resources	6	130	71	0	173	342	112	-	479	114
Bill Barrett	0	14	125	2	161	456	98	3	476	115
Bonanza Creek Energy	10	3	126	3	160	452	100	-	469	116
Bonavista Energy	20	24	98	25	127	382	107	6	457	117
Pengrowth Energy	16	-	123	4	155	426	101	7	453	118
Kosmos Energy	-	14	127	367	52	61	161	-	442	119
Northern Oil & Gas	29	20	94	0	NA	389	106	0	439	120
Magnum Hunter Resources	150	1	68	12	142	274	122	-	436	121
PDC Energy	29	3	105	60	95	332	114	-	424	122
EPL Oil & Gas	46	2	96	46	107	303	118	-	398	123
Long Run Exploration	117	5	76	7	149	260	125	1	391	124
Vanguard Natural Res.	333	-	45	-	NA	57	162	-	390	125
MDU Resources Group	2	5	139	27	121	345	111	11	389	126
Trilogy Energy	-	-	NA	69	93	318	117	-	387	127
Salamander Energy	-	-	NA	188	68	192	135	-	381	128
Alta Mesa Holdings	36	35	87	55	99	242	127	1	369	129
Maurel & Prom SA	-	-	NA	94	86	259	126	-	353	130
Gastar Exploration	190	71	49	37	115	53	165	-	351	131
Forest Oil	-	7	134	130	78	213	133	-	350	132
Rex Energy	2	39	100	231	64	67	159	3	342	133
Dragon Oil	-	-	NA	58	97	272	123	-	330	134
PetroQuest Energy	178	35	55	54	100	41	171	20	329	135
Gran Tierra Energy	-	(4)	168	150	74	163	138	-	310	136
Approach Resources	1	6	135	2	163	288	120	-	297	137
DNO ASA	-	-	NA	10	144	287	121	-	297	138
Bellatrix Exploration	13	11	109	0	177	262	124	9	295	139
Clayton Williams Energy	-	50	93	4	157	218	132	-	272	140
Birchcliff Energy	0	0	161	24	129	237	128	-	261	141
Goodrich Petroleum	16	23	102	85	89	134	141	2	260	142
Loews	-	18	118	16	136	222	131	-	256	143
Niko Resources	-	19	117	218	65	10	189	-	247	144
Canacol Energy	162	7	65	25	126	53	166	-	246	145
Questar	106	0	80	-	NA	133	142	-	240	146
Parex Resources	12	-	128	63	94	157	139	-	233	147
Bankers Petroleum	2	-	151	-	NA	228	130	-	230	148
QR Energy LP	128	-	73	-	NA	98	145	-	226	149
NuVista Energy	8	2	129	14	139	195	134	1	220	150
Legacy Reserves LP	114	5	79	1	170	93	148	-	214	151
Callon Petroleum Company	21	2	111	147	76	37	173	-	207	152
Endeavour International	-	3	149	51	103	150	140	-	203	153
Advantage Oil & Gas	-	7	136	-	NA	183	137	-	190	154
EV Energy Partners	60	6	88	2	165	108	144	-	176	155

Capital spending: Worldwide

	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved	Unproved	Total	Costs	Rank	Costs	Rank	Costs	Incurred	Rank
	\$MM	\$MM	Rank	\$MM	Rank	\$MM	Rank	\$MM	\$MM	Rank
Triangle Petroleum	1	21	114	56	98	92	149	-	168	156
TransGlobe Energy	-	43	99	19	133	67	158	-	128	157
Bonterra Energy	-	0	164	-	NA	118	143	-	118	158
Harvest Natural Resources	-	-	NA	26	123	84	152	-	110	159
Perpetual Energy	1	7	133	5	151	90	150	0	104	160
SOCO International	-	-	NA	72	92	29	178	-	101	161
Venoco	0	1	160	42	112	55	164	-	97	162
TransAtlantic Petroleum	-	7	137	43	111	47	169	-	97	163
Abraxas Petroleum	-	-	NA	-	NA	94	147	-	94	164
Tap Oil	-	-	NA	50	104	43	170	-	93	165
Quicksilver Resources	-	22	112	-	NA	67	157	-	89	166
Apco Oil & Gas Int'l	-	-	NA	19	134	69	155	1	89	167
VAALCO Energy	-	-	NA	27	122	55	163	-	81	168
Chinook Energy	3	0	148	5	153	72	154	-	81	169
Serinus Energy	-	-	NA	46	108	30	177	-	76	170
Warren Resources	2	-	153	0	175	73	153	-	75	171
Zargon Oil & Gas	-	4	143	2	166	68	156	-	74	172
Black Hills	0	6	141	13	141	49	168	0	68	173
JKX Oil & Gas	-	-	NA	0	174	62	160	-	63	174
PostRock Energy	8	9	120	-	NA	40	172	-	57	175
Heritage Oil	-	-	NA	52	102	-	NA	-	52	176
Mid-Con Energy Partners	28	-	108	-	NA	22	183	1	51	177
Dune Energy	-	-	NA	-	NA	49	167	2	51	178
FX Energy	-	1	158	38	114	10	190	-	49	179
Gulfsands Petroleum	-	-	NA	46	109	2	198	-	49	180
Max Petroleum	-	-	NA	31	118	14	186	-	45	181
Santonia Energy	-	5	142	10	146	29	179	-	44	182
ZaZa Energy	3	13	121	25	125	1	202	-	42	183
Freehold Royalties	9	1	130	-	NA	28	180	-	38	184
LRR Energy	0	-	165	-	NA	36	174	-	36	185
Constellation Energy Partners	20	0	115	-	NA	16	184	-	36	186
Equal Energy	-	-	NA	4	159	31	175	-	35	187
Saratoga Resources	1	-	155	1	171	30	176	-	32	188
Panhandle Oil and Gas	1	-	156	-	NA	28	181	-	29	189
Valeura Energy	-	-	NA	21	132	5	195	-	26	190
PrimeEnergy	-	0	167	0	178	26	182	-	26	191
Anderson Energy	-	0	163	-	NA	16	185	-	16	192
Carnarvon Petroleum	-	-	NA	1	169	14	187	-	15	193
Magellan Petroleum	3	1	144	8	148	2	199	-	14	194
Sonde Resources	-	1	157	4	158	9	193	-	14	195
Adams Resources and Energy	-	1	154	2	167	10	188	-	13	196
Escalera Resources	-	-	NA	-	NA	10	191	-	10	197
Calvalley Petroleum	-	-	NA	-	NA	10	192	-	10	198
Barnwell Industries	-	0	162	1	168	4	196	2	8	199
BPZ Resources	0	0	NA	6	150	1	203	0	6	200
Dorchester Minerals	-	-	NA	-	NA	6	194	-	6	201
Royale Energy	0	-	166	5	154	1	201	-	6	202
FieldPoint Petroleum	-	-	NA	0	176	3	197	-	4	203
Global Energy Development	-	-	NA	-	NA	2	200	-	2	204
GeoMet	0	1	159	-	NA	-	NA	-	1	205
Corridor Resources	-	-	NA	0	179	0	204	-	0	206
All Integrated & Diversified Oils	68,133	25,258	-	63,599	-	292,112	-	673	449,775	-
All E&Ps	34,855	30,774	-	36,922	-	169,649	-	1,409	273,609	-
Regional Integrations	78,063	13,906	1	40,726	1	180,000	1	673	313,368	1
Large E&Ps	20,474	22,360	2	21,107	3	112,671	3	5,016	181,628	2

Capital spending: Worldwide										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
Global Integrated Oils	4,179	14,109	3	23,382	2	122,370	2	-	164,040	3
Mid-Sized E&Ps	4,749	4,591	4	9,385	4	35,735	4	344	54,804	4
Small E&Ps	4,100	2,632	5	4,224	5	16,564	5	226	27,746	5
Smallest E&Ps	1,324	1,128	6	2,105	6	4,469	6	31	9,056	6
Balanced companies	14,833	27,288	2	55,947	1	272,999	1	1,109	372,176	1
Oil-Weighted companies	91,933	26,381	1	35,634	2	165,473	2	280	319,702	2
Gas-Weighted companies	10,331	5,132	3	9,269	3	33,205	3	692	58,628	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Special Note: Adjustments have been made to the universe and peer group totals to account for BP's consolidation of its 20% ownership in Rosneft. Also in the universe totals, Novatek's other costs incurred have been reclassified as proved acquisition spending.

Source: IHS Herold

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Capital spending tables: United States

Capital spending: United States										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
UNIVERSE*	14,691	15,452	-	26,193	-	120,169	-	615	177,120	-
Royal Dutch Shell	51	416	21	3,496	1	5,314	6	-	9,277	1
Exxon Mobil	95	533	12	617	15	7,639	1	-	8,884	2
Chevron	71	331	25	894	9	7,457	2	-	8,753	3
ConocoPhillips	4	314	28	1,315	2	4,992	7	-	6,625	4
Chesapeake Energy	22	997	5	699	13	4,888	8	-	6,606	5
Linn Energy	3,740	1,638	1	13	70	1,154	26	7	6,553	6
EOG Resources	120	412	18	274	28	5,489	4	84	6,379	7
BP	1	158	46	1,291	3	4,877	9	-	6,327	8
Apache	17	-	84	757	12	5,435	5	-	6,209	9
BHP Billiton Group	-	123	53	373	24	5,698	3	-	6,194	10
Anadarko Petroleum	324	282	15	1,031	6	4,421	10	-	6,058	11
Occidental Petroleum	363	184	17	425	20	4,203	11	-	5,175	12
Devon Energy	19	213	34	443	18	3,838	12	-	4,513	13
Marathon Oil	51	157	38	885	10	2,876	15	-	3,969	14
Hess	-	55	66	592	16	3,259	13	-	3,906	15
Continental Resources	17	547	16	688	14	2,549	16	-	3,800	16
Noble Energy	-	209	37	340	26	2,904	14	-	3,453	17
Whiting Petroleum	233	174	24	363	25	2,133	17	-	2,903	18
Pioneer Natural Resources	13	63	61	1,290	4	1,481	21	-	2,848	19
Oasis Petroleum	752	837	2	2	85	890	34	12	2,494	20
Halcon Resources	71	436	20	1,182	5	749	37	-	2,439	21
Antero Resources	15	441	23	835	11	781	36	-	2,072	22
Southwestern Energy	1	168	43	192	33	1,662	20	-	2,023	23
Denbury Resources	804	221	4	2	87	913	33	-	1,940	24
Murphy Oil	13	32	71	112	40	1,703	19	70	1,931	25
EP Energy	2	20	80	95	44	1,783	18	7	1,907	26
Concho Resources	11	86	58	1,027	7	729	38	12	1,865	27
Rosetta Resources	290	673	8	535	17	339	64	-	1,837	28
Kodiak Oil & Gas	456	301	9	-	NA	1,061	29	7	1,825	29
Newfield Exploration	8	154	44	966	8	691	39	-	1,819	30
SM Energy Company	30	173	39	169	35	1,323	24	27	1,721	31
Cimarex Energy	1	195	40	53	53	1,354	23	4	1,607	32
Petrobras	973	-	7	397	23	165	78	-	1,535	33
QEP Resources	32	9	73	15	69	1,441	22	-	1,496	34
Range Resources	-	138	49	254	29	986	30	76	1,454	35
EnCana	45	111	47	412	21	871	35	-	1,439	36
EQT	90	96	42	4	80	1,230	25	-	1,421	37
Breitburn Energy Partners	972	88	3	-	NA	295	69	19	1,374	38
SandRidge Energy	21	100	54	83	46	1,131	27	-	1,335	39
Repsol	37	493	19	397	22	385	58	0	1,313	40
EXCO Resources	754	247	6	39	59	231	73	1	1,272	41
Midstates Petroleum	413	206	13	10	76	583	45	13	1,225	42
Cabot Oil & Gas	-	71	62	45	57	1,070	28	-	1,186	43
Sanchez Energy	412	245	10	22	66	492	47	-	1,171	44
Energen	5	27	77	436	19	655	40	-	1,122	45

Capital spending: United States										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
WPX Energy	-	57	65	104	42	939	31	-	1,100	46
Ultra Petroleum	224	425	11	184	34	187	77	-	1,020	47
CONSOL Energy	-	260	32	95	43	629	43	-	985	48
Energy XXI (Bermuda)	109	52	45	169	36	636	42	9	975	49
Talisman Energy	-	17	84	26	64	925	32	-	968	50
Diamondback Energy	339	279	14	243	30	88	87	1	951	51
Penn Virginia	278	188	22	17	67	423	56	-	905	52
Stone Energy	71	9	59	299	27	324	66	134	836	53
Gulfport Energy	-	338	26	26	63	453	52	4	821	54
Carrizo Oil & Gas	-	254	33	106	41	424	55	-	784	55
Kinder Morgan Energy Partners	285	-	29	11	75	471	49	-	767	56
W&T Offshore	97	26	52	215	32	353	61	51	742	57
Laredo Petroleum	10	27	75	49	55	654	41	-	740	58
Chaparral Energy	70	146	35	78	47	376	60	-	670	59
Berry Petroleum	3	0	96	1	93	600	44	16	621	60
Aurora Oil and Gas	38	66	57	-	NA	505	46	-	608	61
Enerplus	128	67	41	4	79	379	59	-	578	62
National Fuel Gas	8	9	86	49	54	461	50	38	564	63
Swift Energy	-	47	70	5	77	487	48	-	539	64
Resolute Energy	156	121	30	150	37	97	83	-	525	65
Unit	-	76	60	33	61	424	54	(18)	516	66
Comstock Resources	6	130	50	0	94	342	63	-	479	67
Bill Barrett	0	14	90	2	84	456	51	3	476	68
Bonanza Creek Energy	10	3	91	3	83	452	53	-	469	69
Northern Oil & Gas	29	20	68	-	NA	389	57	-	439	70
Magnum Hunter Resources	150	1	48	12	73	274	71	-	436	71
PDC Energy	29	3	76	60	49	332	65	-	424	72
EPL Oil & Gas	46	2	69	46	56	303	67	-	398	73
Vanguard Natural Res.	333	-	27	-	NA	57	91	-	390	74
MDU Resources Group	2	5	94	27	62	345	62	11	389	75
Crescent Point Energy	-	-	NA	71	48	302	68	-	373	76
Alta Mesa Holdings	36	35	63	55	51	242	72	1	369	77
Gastar Exploration	190	71	31	37	60	53	93	-	351	78
Forest Oil	-	7	92	130	39	213	76	-	350	79
Rex Energy	2	39	72	231	31	67	90	3	342	80
PetroQuest Energy	178	35	36	54	52	41	97	20	329	81
Approach Resources	1	6	93	2	86	288	70	-	297	82
Clayton Williams Energy	-	50	67	4	81	218	75	-	272	83
Goodrich Petroleum	16	23	74	85	45	134	79	2	260	84
Loews	-	18	83	16	68	222	74	-	256	85
Questar	106	0	56	-	NA	133	80	-	240	86
QR Energy LP	128	-	51	-	NA	98	82	-	226	87
Legacy Reserves LP	114	5	55	1	91	93	84	-	214	88
Callon Petroleum Company	21	2	79	147	38	37	99	-	207	89
EV Energy Partners	60	6	64	2	88	108	81	-	176	90
Triangle Petroleum	1	21	81	56	50	92	85	-	168	91
Venoco	0	1	104	42	58	55	92	-	97	92
Abraxas Petroleum	-	-	NA	-	NA	91	86	-	91	93
Baytex Energy	0	2	98	1	90	73	89	-	77	94
Warren Resources	2	-	99	0	97	73	88	-	75	95
Black Hills	0	6	95	13	71	49	96	0	68	96
Quicksilver Resources	-	16	89	-	NA	49	95	-	65	97
PostRock Energy	8	9	87	-	NA	40	98	-	57	98
Mid-Con Energy Partners	28	-	78	-	NA	22	105	1	51	99
Dune Energy	-	-	NA	-	NA	49	94	2	51	100

Capital spending: United States

	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved	Unproved	Total	Costs	Rank	Costs	Rank	Costs	Incurred	Rank
	\$MM	\$MM	Rank	\$MM	Rank	\$MM	Rank	\$MM	\$MM	Rank
ZaZa Energy	3	13	88	25	65	1	116	-	42	101
LRR Energy	0	-	107	-	NA	36	100	-	36	102
Constellation Energy Partners	20	0	82	-	NA	16	106	-	36	103
Equal Energy	-	-	NA	4	82	31	101	-	35	104
Saratoga Resources	1	-	101	1	92	30	102	-	32	105
Panhandle Oil and Gas	1	-	102	-	NA	28	103	-	29	106
PrimeEnergy	-	0	109	0	100	26	104	-	26	107
Endeavour International	-	0	105	12	72	3	112	-	15	108
Adams Resources and Energy	-	1	100	2	89	10	107	-	13	109
VAALCO Energy	-	-	NA	11	74	0	117	-	12	110
Escalera Resources	-	-	NA	-	NA	10	108	-	10	111
Magellan Petroleum	3	0	97	0	95	2	113	-	6	112
Dorchester Minerals	-	-	NA	-	NA	6	109	-	6	113
Royale Energy	0	-	108	5	78	1	114	-	6	114
FieldPoint Petroleum	-	-	NA	0	98	3	110	-	4	115
Zargon Oil & Gas	-	0	106	0	99	3	111	-	3	116
FX Energy	-	-	NA	0	96	1	115	-	1	117
GeoMet	0	1	103	-	NA	-	NA	-	1	118
All Integrated & Diversified Oils	1,228	2,054	-	7,465	-	31,535	-	-	42,283	-
All E&Ps	13,463	13,398	-	18,727	-	88,632	-	615	134,836	-
Large E&Ps	4,841	6,430	1	10,720	1	56,582	1	168	78,742	1
Global Integrated Oils	218	1,438	5	6,298	2	25,287	2	-	33,241	2
Mid-Sized E&Ps	3,575	3,337	2	4,276	3	18,344	3	205	29,737	3
Small E&Ps	4,029	2,570	3	3,005	4	11,273	4	216	21,092	4
Regional Integrations	1,010	616	6	1,167	5	6,248	5	-	9,042	5
Smallest E&Ps	1,018	997	4	627	6	2,222	6	27	4,890	6
Balanced companies	7,670	7,546	1	16,506	1	75,743	1	433	107,899	1
Oil-Weighted companies	5,488	4,267	2	6,298	2	28,876	2	122	45,051	2
Gas-Weighted companies	1,533	3,639	3	3,388	3	15,548	3	60	24,168	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Capital spending tables: Canada

Capital spending: Canada										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
UNIVERSE*	6,770	11,668	-	5,644	-	47,974	-	116	72,173	-
CNOOC	5,818	6,499	1	207	7	1,424	9	-	13,948	1
Exxon Mobil	67	4,270	2	485	4	8,527	1	-	13,349	2
Imperial Oil	33	1,954	3	120	14	5,677	3	-	7,784	3
Canadian Natural Resources	243	89	4	-	NA	5,973	2	-	6,305	4
Suncor Energy	2	-	38	204	8	4,718	4	35	4,959	5
ConocoPhillips	10	91	10	353	5	3,484	5	-	3,938	6
Husky Energy	36	1	15	563	3	2,968	6	-	3,568	7
Royal Dutch Shell	-	293	5	1,400	1	1,742	8	-	3,435	8
Cenovus Energy	-	31	16	256	6	2,683	7	-	2,970	9
Crescent Point Energy	114	6	9	175	10	1,127	13	-	1,421	10
Devon Energy	3	3	29	152	12	1,251	11	-	1,409	11
EnCana	2	26	18	22	25	1,343	10	-	1,393	12
Tourmaline Oil	190	-	6	667	2	375	26	15	1,247	13
Canadian Oil Sands	-	-	NA	-	NA	1,199	12	-	1,199	14
MEG Energy	-	61	11	90	16	1,007	14	-	1,158	15
Apache	-	137	7	50	19	722	17	-	909	16
Penn West Petroleum	-	4	33	88	17	771	16	10	873	17
ARC Resources	-	2	37	15	29	817	15	-	834	18
BP	-	-	NA	194	9	569	20	-	763	19
Lightstream Resources	21	38	12	33	20	645	18	-	737	20
Athabasca Oil	-	3	34	126	13	579	19	-	709	21
Paramount Resources	3	17	20	160	11	510	22	-	690	22
Peyto Expl. & Dev.	2	6	24	28	21	525	21	-	561	23
Baytex Energy	3	1	32	7	33	454	23	-	465	24
Bonavista Energy	20	24	13	25	23	382	25	6	457	25
Pengrowth Energy	16	-	21	4	37	426	24	7	453	26
Talisman Energy	6	2	25	99	15	283	30	12	402	27
Long Run Exploration	117	5	8	7	34	260	33	1	391	28
Trilogy Energy	-	-	NA	69	18	318	29	-	387	29
Murphy Oil	-	-	NA	22	26	346	28	6	373	30
Sasol	-	-	NA	-	NA	359	27	-	359	31
Enerplus	34	9	14	27	22	252	34	-	321	32
Marathon Oil	30	-	17	9	32	280	31	-	319	33
Bellatrix Exploration	13	11	19	0	43	262	32	9	295	34
Birchcliff Energy	0	0	40	24	24	237	35	-	261	35
Vermilion Energy	-	-	NA	19	28	228	36	-	247	36
NuVista Energy	8	2	22	14	30	195	37	1	220	37
Advantage Oil & Gas	-	7	27	-	NA	183	38	-	190	38
EOG Resources	-	3	36	20	27	136	39	13	172	39
Bonterra Energy	0	0	43	0	NA	118	40	0	118	40
Perpetual Energy	1	7	26	5	35	90	41	-	104	41
Zargon Oil & Gas	-	4	31	2	41	65	42	-	71	42
Santonia Energy	-	5	30	10	31	29	44	-	44	43
Chinook Energy	3	0	35	5	36	33	43	-	41	44
Freehold Royalties	9	1	23	-	NA	28	45	-	38	45

Capital spending: Canada

	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved	Unproved	Total	Costs	Rank	Costs	Rank	Costs	Incurred	Rank
	\$MM	\$MM	Rank	\$MM	Rank	\$MM	Rank	\$MM	\$MM	Rank
Quicksilver Resources	-	6	28	-	NA	17	46	-	24	46
Anderson Energy	-	0	42	-	NA	16	47	-	16	47
Sonde Resources	-	1	39	4	39	9	48	-	14	48
Barnwell Industries	-	0	41	1	42	4	49	2	8	49
Maurel & Prom SA	-	-	NA	4	38	-	NA	-	4	50
Corridor Resources	-	-	NA	2	40	1	51	-	3	51
Abraxas Petroleum	-	-	NA	-	NA	3	50	-	3	52
Valeura Energy	-	-	NA	-	NA	0	52	-	0	53
All Integrated & Diversified Oils	105	4,595	-	3,102	-	21,566	-	35	29,403	-
All E&Ps	6,665	7,073	-	2,542	-	26,407	-	81	42,769	-
Large E&Ps	6,112	6,911	1	1,002	4	15,903	2	25	29,953	1
Regional Integrated	71	1,986	3	1,144	2	16,405	1	35	19,641	2
Global Integrated Oils	67	4,563	2	2,079	1	10,838	3	-	17,547	3
Mid-Sized E&Ps	376	58	4	1,050	3	6,236	4	43	7,763	4
Small E&Ps	45	62	6	295	5	3,101	5	10	3,514	5
Smallest E&Ps	132	42	5	196	6	1,167	6	3	1,540	6
Oil-Weighted companies	6,316	8,692	1	1,911	2	30,820	1	57	47,795	1
Balanced companies	278	4,868	2	2,980	1	19,542	2	31	27,699	2
Gas-Weighted companies	209	64	3	874	3	3,288	3	28	4,463	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Capital spending: Europe

Capital spending: Europe										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
UNIVERSE*	6,325	3,002	-	7,075	-	40,024	-	351	56,777	-
Statoil ASA	374	-	3	1,344	1	8,813	1	-	10,531	1
CNOOC	4,374	2,924	1	146	15	479	15	-	7,923	2
Total	-	17	7	679	3	5,241	2	-	5,937	3
Royal Dutch Shell	290	29	4	794	2	4,478	3	-	5,591	4
ConocoPhillips	-	-	NA	271	10	3,999	4	-	4,270	5
Eni S.p.A.	-	-	NA	517	4	3,390	5	-	3,907	6
Exxon Mobil	-	-	NA	306	8	2,309	7	-	2,615	7
BP	-	-	NA	192	12	2,397	6	-	2,589	8
BASF SE	1,133	-	2	361	6	800	12	-	2,294	9
OMV AG	-	1	13	150	14	1,499	8	41	1,692	10
Lundin Petroleum AB	-	-	NA	509	5	1,118	9	-	1,627	11
Chevron	1	3	9	309	7	1,046	10	-	1,359	12
Hess	-	-	NA	98	18	1,008	11	-	1,106	13
Apache	125	17	5	278	9	635	14	-	1,055	14
BG Group	-	-	NA	108	16	660	13	-	768	15
Talisman Energy	-	-	NA	88	19	337	17	310	735	16
Marathon Oil	-	-	NA	102	17	354	16	-	456	17
Suncor Energy	-	-	NA	184	13	262	19	-	447	18
Canadian Natural Resources	2	-	12	-	NA	288	18	-	290	19
MOL	-	-	NA	87	20	187	22	-	274	20
Vermilion Energy	23	-	6	4	26	210	21	-	237	21
Bankers Petroleum	2	-	11	-	NA	228	20	-	230	22
Repsol	-	-	NA	218	11	1	30	-	219	23
Endeavour International	-	2	10	39	22	147	23	-	188	24
TransAtlantic Petroleum	-	7	8	40	21	47	24	-	94	25
FX Energy	-	1	14	38	23	9	27	-	48	26
JKX Oil & Gas	-	-	NA	0	29	42	25	-	42	27
Serinus Energy	-	-	NA	4	25	27	26	-	31	28
Valeura Energy	-	-	NA	21	24	5	29	-	26	29
Murphy Oil	-	-	NA	-	NA	8	28	-	8	30
Magellan Petroleum	-	0	15	4	27	-	NA	-	4	31
Heritage Oil	-	-	NA	2	28	-	NA	-	2	32
All Integrated & Diversified Oils	1,798	50	-	5,249	-	31,084	-	41	38,223	-
All E&Ps	4,527	2,952	-	1,644	-	8,940	-	310	18,372	-
Regional Integrations	1,507	1	2	2,969	1	15,613	1	41	20,132	1
Global Integrated Oils	291	49	3	2,280	2	15,471	2	-	18,091	2
Large E&Ps	4,501	2,941	1	983	3	7,100	3	310	15,835	3
Small E&Ps	26	-	4	513	4	1,597	4	-	2,136	4
Smallest E&Ps	-	10	5	148	5	235	5	-	393	5
Mid-Sized E&Ps	-	-	NA	-	NA	8	6	-	8	6
Balanced companies	814	70	3	5,077	1	35,011	1	41	41,013	1
Oil-Weighted companies	4,378	2,931	1	1,085	2	3,792	2	-	12,187	2
Gas-Weighted companies	1,133	1	2	730	3	1,221	3	310	3,395	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Capital spending: Africa & Middle East

Capital spending: Africa & Middle East										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
UNIVERSE*	2,027	1,602	-	9,043	-	37,026	-	14	49,712	-
Total	177	598	2	1,120	2	9,011	1	-	10,906	1
Eni S.p.A.	85	60	5	1,132	1	4,493	2	-	5,770	2
Chevron	26	-	11	340	10	3,549	3	-	3,915	3
Exxon Mobil	-	153	4	361	9	3,278	4	-	3,792	4
BP	-	30	10	883	3	2,755	5	-	3,668	5
CNOOC	1,672	388	1	309	12	1,093	9	-	3,462	6
Royal Dutch Shell	1	62	6	504	6	2,293	6	-	2,860	7
Statoil ASA	-	-	NA	459	7	1,973	8	-	2,433	8
Occidental Petroleum	-	-	NA	79	21	2,117	7	-	2,196	9
Tullow Oil	-	-	NA	833	4	879	10	-	1,712	10
Apache	35	11	8	563	5	618	11	-	1,227	11
Afren	-	-	NA	299	13	610	12	-	910	12
Noble Energy	-	-	NA	332	11	386	15	-	718	13
Hess	-	-	NA	119	19	586	13	-	705	14
Sasol	16	-	13	75	22	569	14	-	659	15
Marathon Oil	9	44	7	138	16	357	16	-	548	16
ConocoPhillips	-	177	3	136	17	216	23	-	529	17
OMV AG	-	19	12	215	14	278	21	14	526	18
INPEX	-	-	NA	151	15	355	17	-	506	19
Kosmos Energy	-	14	14	367	8	61	27	-	442	20
Mitsui	-	-	NA	39	24	328	18	-	367	21
Maurel & Prom SA	-	-	NA	64	23	246	22	-	310	22
DNO ASA	-	-	NA	9	31	286	19	-	296	23
Petrobras	-	-	NA	1	32	282	20	-	283	24
Repsol	-	-	NA	124	18	64	26	-	187	25
BASF SE	-	-	NA	80	20	49	29	-	129	26
TransGlobe Energy	-	43	9	19	29	67	25	-	128	27
Canadian Natural Resources	-	4	16	24	27	94	24	-	122	28
VAALCO Energy	-	-	NA	15	30	54	28	-	70	29
MOL	6	-	15	27	25	26	31	-	59	30
Chinook Energy	-	-	NA	-	NA	39	30	-	39	31
Harvest Natural Resources	-	-	NA	26	26	-	NA	-	26	32
Heritage Oil	-	-	NA	22	28	-	NA	-	22	33
Calvalley Petroleum	-	-	NA	-	NA	10	32	-	10	34
Serinus Energy	-	-	NA	-	NA	3	33	-	3	35
Murphy Oil	-	-	NA	0	33	-	NA	-	0	36
All Integrated & Diversified Oils	311	922	-	5,359	-	28,948	-	14	35,553	-
All E&Ps	1,716	680	-	3,506	-	8,078	-	-	13,980	-
Global Integrated Oils	204	843	2	3,208	1	20,886	1	-	25,141	1
Regional Integrated	107	79	3	2,151	2	8,062	2	14	10,413	2
Large E&Ps	1,716	624	1	1,851	3	5,823	3	-	10,013	3
Mid-Sized E&Ps	-	-	NA	1,142	4	1,776	4	-	2,917	4
Smallest E&Ps	-	56	4	450	5	234	6	-	740	5
Small E&Ps	-	-	NA	64	6	246	5	-	310	6

Capital spending: Africa & Middle East

	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved	Unproved	Total	Costs	Rank	Costs	Rank	Costs	Incurred	Rank
	\$MM	\$MM	Rank	\$MM		\$MM		\$MM	\$MM	
Balanced companies	330	1,110	2	6,223	1	29,271	1	14	36,948	1
Oil-Weighted companies	1,697	492	1	2,400	2	7,311	2	-	11,900	2
Gas-Weighted companies	-	-	NA	242	3	443	3	-	686	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Capital spending: Asia-Pacific

Capital spending: Asia-Pacific										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved	Unproved	Total	Costs	Rank	Costs	Rank	Costs	Incurred	Rank
	\$MM	\$MM	Rank	\$MM	Rank	\$MM	Rank	\$MM	\$MM	Rank
UNIVERSE*	1,267	3,360	-	16,948	-	81,548	-	96	103,219	-
PetroChina	-	2,879	1	7,041	1	26,567	1	-	36,487	1
Sinopec	-	-	NA	3,116	2	13,332	2	-	16,448	2
CNOOC	148	4	5	2,101	3	7,506	3	-	9,758	3
Chevron	-	105	7	415	7	6,611	4	-	7,131	4
Total	488	85	2	542	4	5,596	6	-	6,710	5
Royal Dutch Shell	-	9	10	448	6	5,720	5	-	6,177	6
Santos	42	144	4	516	5	3,641	7	-	4,343	7
ConocoPhillips	-	111	6	321	8	2,256	8	-	2,688	8
PTT E&P Public	484	-	3	236	10	1,146	13	-	1,866	9
Exxon Mobil	-	4	11	111	21	1,733	9	-	1,848	10
Murphy Oil	-	-	NA	15	27	1,692	10	96	1,803	11
BHP Billiton Group	-	-	NA	125	19	1,410	11	-	1,535	12
Oil Search	-	-	NA	294	9	1,215	12	-	1,509	13
Apache	-	-	NA	169	14	996	14	-	1,165	14
Talisman Energy	105	-	7	189	12	353	17	-	647	15
Woodside Petroleum	-	-	NA	166	15	420	15	-	586	16
Mitsui	-	-	NA	134	18	391	16	-	525	17
Newfield Exploration	1	-	12	134	17	351	18	-	486	18
BP	-	-	NA	210	11	189	20	-	399	19
Salamander Energy	-	-	NA	188	13	192	19	-	381	20
Eni S.p.A.	-	-	NA	112	20	76	21	-	187	21
Niko Resources	-	19	9	146	16	10	26	-	175	22
Tap Oil	-	-	NA	50	23	43	23	-	93	23
Vermilion Energy	-	-	NA	-	NA	76	22	-	76	24
Lundin Petroleum AB	-	-	NA	55	22	13	25	-	67	25
Serinus Energy	-	-	NA	42	24	-	NA	-	42	26
Repsol	-	-	NA	29	25	-	NA	-	29	27
Heritage Oil	-	-	NA	25	26	-	NA	-	25	28
Carnarvon Petroleum	-	-	NA	1	30	14	24	-	15	29
Maurel & Prom SA	-	-	NA	13	28	-	NA	-	13	30
Magellan Petroleum	-	0	13	4	29	-	NA	-	4	31
All Integrated & Diversified Oils	488	3,082	-	12,282	-	61,625	-	-	77,476	-
All E&Ps	779	278	-	4,665	-	19,924	-	96	25,742	-
Regional Integrations	-	2,879	1	10,556	1	41,776	1	-	55,211	1
Global Integrated Oils	488	203	3	1,726	3	19,849	2	-	22,265	2
Large E&Ps	737	115	2	3,182	2	12,677	3	-	16,710	3
Mid-Sized E&Ps	43	144	4	959	4	6,899	4	96	8,141	4
Small E&Ps	-	-	NA	256	6	281	5	-	537	5
Smallest E&Ps	-	19	5	268	5	67	6	-	354	6
Balanced companies	489	3,193	1	9,816	1	51,773	1	-	65,270	1
Oil-Weighted companies	148	4	3	5,380	2	22,599	2	96	28,226	2
Gas-Weighted companies	631	163	2	1,752	3	7,177	3	-	9,723	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Capital spending: South & Central America

Capital spending: South & Central America										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
UNIVERSE*	1,906	3,361	-	17,313	-	46,422	-	1	69,003	-
Petrobras	17	-	7	9,788	1	17,388	1	-	27,193	1
PEMEX	-	-	NA	2,864	2	14,237	2	-	17,101	2
Ecopetrol	180	-	5	1,330	3	5,202	3	0	6,713	3
YPF	14	-	8	297	8	4,775	4	-	5,086	4
Pacific Rubiales Energy	756	970	2	611	5	1,273	5	-	3,610	5
Royal Dutch Shell	684	1,364	1	592	6	830	7	-	3,470	6
BP	7	284	4	951	4	683	8	-	1,925	7
Repsol	-	-	NA	400	7	1,254	6	-	1,654	8
CNOOC	74	740	3	22	15	3	17	-	839	9
Gran Tierra Energy	-	(4)	10	150	9	163	9	-	310	10
Canacol Energy	162	7	6	25	14	52	14	-	245	11
Parex Resources	12	-	9	63	11	157	10	-	233	12
Apache	-	-	NA	53	12	142	11	-	195	13
EOG Resources	-	-	NA	16	16	124	12	-	140	14
BASF SE	-	-	NA	45	13	92	13	-	137	15
Niko Resources	-	-	NA	72	10	-	NA	-	72	16
Apco Oil & Gas Int'l	-	-	NA	16	17	36	15	1	52	17
Maurel & Prom SA	-	-	NA	12	18	9	16	-	21	18
BPZ Resources	-	-	NA	6	19	1	19	-	6	19
Global Energy Development	-	-	NA	-	NA	2	18	-	2	20
All Integrated & Diversified Oils	903	1,648	-	16,267	-	44,461	-	0	63,279	-
All E&Ps	1,004	1,713	-	1,046	-	1,961	-	1	5,724	-
Regional Integrations	212	-	4	14,724	1	42,948	1	0	57,884	1
Global Integrated Oils	691	1,648	1	1,543	2	1,513	2	-	5,395	2
Mid-Sized E&Ps	756	970	2	611	3	1,273	3	-	3,610	3
Large E&Ps	74	740	3	92	5	269	5	-	1,175	4
Smallest E&Ps	175	2	5	331	4	410	4	1	919	5
Small E&Ps	-	-	NA	12	6	9	6	-	21	6
Oil-Weighted companies	1,039	1,707	1	14,847	1	38,434	1	0	56,027	1
Balanced companies	867	1,665	2	2,007	2	7,028	2	1	11,568	2
Gas-Weighted companies	-	-	NA	517	3	1,346	3	-	1,863	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Capital spending: Russia & Caspian

Capital spending: Russia & Caspian										
	Acquisitions			Exploration		Development		Other	Total Costs	
	Proved \$MM	Unproved \$MM	Total Rank	Costs \$MM	Rank	Costs \$MM	Rank	Costs \$MM	Incurred \$MM	Rank
UNIVERSE*	66,391	5,897	-	1,603	-	29,132	-	-	103,023	-
Rosneft Oil	70,381	4,016	1	753	1	10,825	1	-	85,976	1
Lukoil	2,200	1,914	2	543	2	7,782	2	-	12,439	2
Novatek	1,863	100	4	58	6	1,252	6	4,207	7,481	3
Gazprom Neft	-	-	NA	132	5	5,524	3	-	5,656	4
BP	1,816	657	3	133	4	1,860	5	-	4,466	5
TengizChevrOil	-	-	NA	-	NA	2,054	4	-	2,054	6
Chevron	-	-	NA	-	NA	1,027	7	-	1,027	7
Eni S.p.A.	-	-	NA	1	14	797	8	-	798	8
INPEX	-	12	5	3	12	628	10	-	643	9
Dragon Oil	-	-	NA	58	7	272	11	-	330	10
BASF SE	-	-	NA	25	9	202	12	-	227	11
MOL	-	-	NA	8	10	60	13	-	68	12
Max Petroleum	-	-	NA	31	8	14	15	-	45	13
JKX Oil & Gas	-	-	NA	-	NA	20	14	-	20	14
Lundin Petroleum AB	-	-	NA	6	11	4	16	-	10	15
ConocoPhillips	-	-	NA	-	NA	3	17	-	3	16
Heritage Oil	-	-	NA	2	13	-	NA	-	2	17
All Integrated & Diversified Oils	60,321	5,784	-	1,445	-	24,885	-	-	92,435	-
All E&Ps	6,070	113	-	158	-	4,246	-	-	10,587	-
Regional Integrateds	72,581	5,930	1	1,700	1	25,963	1	-	106,174	1
Large E&Ps	1,863	113	3	61	3	3,937	2	4,207	10,181	2
Global Integrated Oils	1,816	657	2	133	2	2,887	3	-	5,493	3
Mid-Sized E&Ps	-	-	NA	58	4	272	4	-	330	4
Smallest E&Ps	-	-	NA	33	5	14	6	-	47	5
Small E&Ps	-	-	NA	6	6	24	5	-	30	6
Oil-Weighted companies	72,581	5,930	1	1,525	1	26,475	1	-	106,511	1
Gas-Weighted companies	6,070	100	2	84	3	1,474	3	-	7,728	2
Balanced companies	1,816	669	3	146	2	4,375	2	-	7,006	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Special Note: Adjustments have been made to the universe and peer group totals to account for BP's consolidation of its 20% ownership in Rosneft. Also in the universe totals, Novatek's other costs incurred have been reclassified as proved acquisition spending.

Source: IHS Herold

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Reserve changes & performance metrics overview

Nicholas D. Cacchione, CFA

Key implications

- Oil and gas reserves surged 6%, primarily because of a more than fivefold increase in reserve purchases, while oil and gas production grew 3%.
- Organic reserve additions were strong as well, rising 12% as natural gas revisions turned positive.
- Reserve replacement costs fell by 30% to \$14.03/boe because of the increase in lower-cost reserve purchases.
- Reserve replacement rates rose strongly, but finding and development (F&D) replacement rates were only marginally higher due to lackluster organic growth.

Reserve changes										
	2009		2010		2011		2012		2013	
	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas	Oil	Gas
Beginning reserves	151,912	652,030	156,082	678,975	160,206	709,356	167,101	730,287	172,458	716,717
Revisions	7,632	(11,787)	5,961	9,829	7,525	4,954	6,585	(27,159)	3,437	13,210
Extensions & discoveries	7,874	69,923	7,913	57,536	9,879	63,709	11,599	68,918	11,793	65,174
Improved recovery	1,077	2,103	1,649	3,203	1,086	1,907	1,537	2,237	1,599	2,970
Purchases	2,438	20,229	2,812	31,159	2,026	14,382	1,592	12,649	17,695	21,099
(Sales of reserves)	(2,463)	(9,479)	(1,904)	(25,721)	(1,408)	(15,277)	(3,188)	(19,362)	(9,524)	(26,713)
Transfer/reclassify/other	(87)	1,763	381	2,959	223	749	(18)	(457)	1,362	(3,644)
(Production)	(12,303)	(45,807)	(12,686)	(48,583)	(12,435)	(49,494)	(12,750)	(50,395)	(13,274)	(50,600)
Year-end reserves	156,082	678,975	160,206	709,356	167,101	730,287	172,458	716,717	185,546	738,213
Developed reserves	99,862	390,570	100,603	408,041	101,804	415,498	101,963	396,420	107,411	403,491

Source: IHS Herold

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Reserve calculations							
	2009	2010	2011	2012	2013	3-year average	'12 - '13 % Δ
	Total proved acquisitions (MMboe)	5,810	8,005	4,423	3,700	21,211	9,778
Total F&D additions (MMboe)	26,623	27,283	30,251	27,054	30,388	29,231	12%
Total RRC additions (MMboe)	32,433	35,288	34,675	30,754	51,599	39,009	68%
Total production (MMboe)	19,937	20,783	20,684	21,150	21,707	21,180	3%
Total proved reserves (MMboe)	269,244	278,433	288,816	291,911	308,581	296,436	6%
Oil reserves % developed	64.0%	62.8%	60.9%	59.1%	57.9%	59.3%	(2%)
Gas reserves % developed	57.5%	57.5%	56.9%	55.3%	54.7%	55.6%	(1%)
Total % developed	61.3%	60.6%	59.2%	57.6%	56.6%	57.8%	(2%)
Oil R/P ratio (years)	12.7	12.6	13.4	13.5	14.0	13.6	3%
Gas R/P ratio (years)	14.8	14.6	14.8	14.2	14.6	14.5	3%
Total R/P ratio (years)	13.5	13.4	14.0	13.8	14.2	14.0	3%
Developed R/P ratio (years)	8.3	8.1	8.3	7.9	8.0	8.1	1%

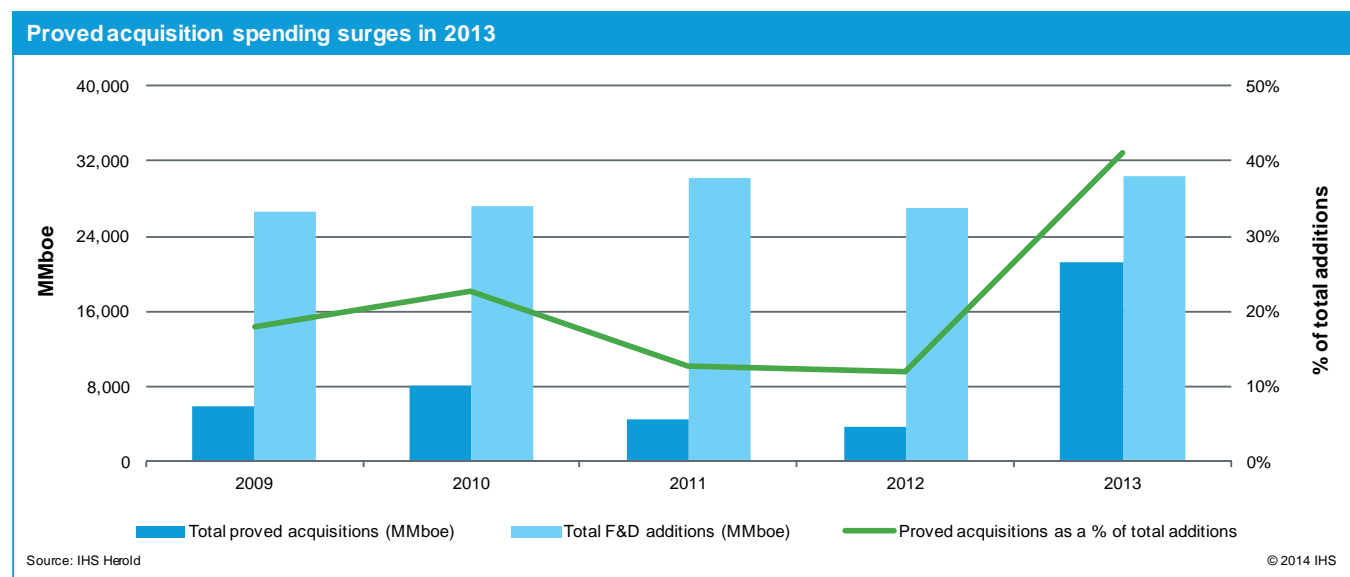
Source: IHS Herold

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Performance metrics							
	2009	2010	2011	2012	2013	3-year average	'12 - '13 % Δ
Proved acquisition cost (\$/boe)	\$7.52	\$9.75	\$8.42	\$9.36	\$4.86	\$5.96	(48%)
Pure finding cost (\$/boe)	\$3.11	\$3.90	\$4.03	\$4.05	\$4.45	\$4.18	10%
Finding cost (\$/boe)	\$3.97	\$11.06	\$7.48	\$6.58	\$6.93	\$6.98	5%
Finding & development cost (\$/boe)	\$12.44	\$18.02	\$16.86	\$21.41	\$20.43	\$19.50	(5%)
Reserve replacement cost (\$/boe)	\$11.56	\$16.15	\$15.78	\$19.96	\$14.03	\$16.11	(30%)
Exten./discov. & imp. recov. cost (\$/boe)	\$15.80	\$24.98	\$23.29	\$23.17	\$25.08	\$23.87	8%
Oil F&D production replacement	135%	122%	149%	155%	127%	143%	(18%)
Gas F&D production replacement	132%	145%	143%	87%	161%	130%	84%
Oil & gas F&D production replacement	134%	131%	146%	128%	140%	138%	9%
Oil RRC production replacement	155%	145%	165%	167%	260%	199%	56%
Gas RRC production replacement	176%	209%	172%	112%	202%	162%	80%
Oil & Gas RRC production replacement	163%	170%	168%	145%	238%	184%	63%

Source: IHS Herold

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Source: IHS Herold

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Reserve changes & performance metrics: Peer group analysis

Key implications

- The Global Integrated Oils have struggled to increase reserves and maintain production since 2009.
- Reserves of both the Regional Integrations and the Oil-Weighted peer groups surged in 2013 because of Rosneft's purchase of TNK-BP.
- The Small and Smallest E&P peer groups also had strong reserve gains on robust drill-bit activity.
- The Regional Integrated Oils and Gas-Weighted peer groups added the least expensive reserves with 5-year reserve replacement costs of \$13.98/boe and \$10.21/boe, respectively.
- The Gas-Weighted peers and the Small E&Ps were the top performers in reserve replacement rates over the past 5 years at 271% and 270% of production, respectively.

Oil and gas production by peer group, MMboe

	2009	2010	2011	2012	2013	1-year chg.	5-year CAGR
All Integrated & Diversified Oils	14,064	14,738	14,599	14,737	14,976	2%	2%
All E&Ps	5,419	5,828	5,966	6,413	6,731	5%	6%
Global Integrated Oils	5,897	6,137	5,946	5,802	5,697	-2%	-1%
Regional Integrations	8,902	9,184	9,070	9,246	9,925	7%	3%
Large E&Ps	4,257	4,465	4,534	4,810	5,034	5%	4%
Mid-Sized E&Ps	730	814	905	1,026	1,082	6%	10%
Small E&Ps	363	345	389	433	465	8%	6%
Smallest E&Ps	103	119	141	151	155	3%	11%
Oil-Weighted companies	6,807	7,292	7,332	7,577	8,427	11%	5%
Gas-Weighted companies	1,920	2,039	2,105	2,089	2,156	3%	3%
Balanced companies	11,479	11,801	11,536	11,789	11,751	0%	1%

Source: IHS

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Oil and gas reserves by peer group, MMboe

	2009	2010	2011	2012	2013	1-year chg.	5-year CAGR
All Integrated & Diversified Oils	187,907	193,910	200,590	200,711	211,940	6%	3%
All E&Ps	75,258	81,522	85,417	89,673	95,113	6%	6%
Global Integrated Oils	76,271	77,466	78,571	77,438	78,768	2%	1%
Regional Integrations	121,181	123,752	129,810	131,718	147,756	12%	5%
Large E&Ps	59,619	63,281	65,182	68,886	73,251	6%	5%
Mid-Sized E&Ps	10,672	12,233	13,446	14,043	14,399	3%	8%
Small E&Ps	4,291	4,677	5,364	5,384	5,853	9%	8%
Smallest E&Ps	1,154	1,371	1,525	1,445	1,644	14%	9%
Oil-Weighted companies	101,278	104,397	110,395	113,988	132,370	16%	7%
Gas-Weighted companies	26,783	30,419	31,483	31,023	32,651	5%	5%
Balanced companies	144,367	147,659	151,711	153,276	156,011	2%	2%

Source: IHS

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Reserve replacement costs, \$/boe						
	2009	2010	2011	2012	2013	5-year avg.
All Integrated & Diversified Oils	\$12.09	\$17.61	\$14.31	\$19.87	\$12.77	\$14.89
All E&Ps	\$10.26	\$13.34	\$18.22	\$20.08	\$16.71	\$15.75
Global Integrated Oils	\$10.66	\$19.35	\$17.37	\$24.49	\$12.87	\$16.00
Regional Integrated	\$13.79	\$16.80	\$12.26	\$16.98	\$12.24	\$13.98
Large E&Ps	\$9.30	\$12.69	\$17.37	\$15.78	\$15.31	\$14.12
Mid-Sized E&Ps	\$11.14	\$15.13	\$19.58	\$32.75	\$21.34	\$19.43
Small E&Ps	\$16.36	\$13.80	\$18.66	\$39.53	\$18.98	\$20.30
Smallest E&Ps	\$40.93	\$17.35	\$31.39	\$59.30	\$20.81	\$27.56
Oil-Weighted companies	\$13.91	\$17.61	\$12.59	\$16.66	\$12.38	\$14.14
Gas-Weighted companies	\$6.09	\$9.73	\$13.66	\$16.20	\$9.08	\$10.21
Balanced companies	\$12.66	\$17.12	\$18.40	\$23.16	\$16.65	\$17.51

Source: IHS Herold

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Reserve replacement rates, %						
	2009	2010	2011	2012	2013	5-year avg.
All Integrated & Diversified Oils	141%	132%	152%	122%	235%	157%
All E&Ps	216%	262%	206%	199%	243%	225%
Global Integrated Oils	149%	131%	135%	99%	224%	147%
Regional Integrated	124%	126%	166%	143%	258%	165%
Large E&Ps	210%	243%	187%	208%	236%	217%
Mid-Sized E&Ps	285%	346%	266%	176%	237%	256%
Small E&Ps	205%	357%	301%	178%	314%	270%
Smallest E&Ps	68%	255%	183%	86%	281%	179%
Oil-Weighted companies	135%	148%	187%	163%	306%	192%
Gas-Weighted companies	348%	318%	223%	173%	300%	271%
Balanced companies	136%	150%	147%	131%	190%	151%

Source: IHS Herold

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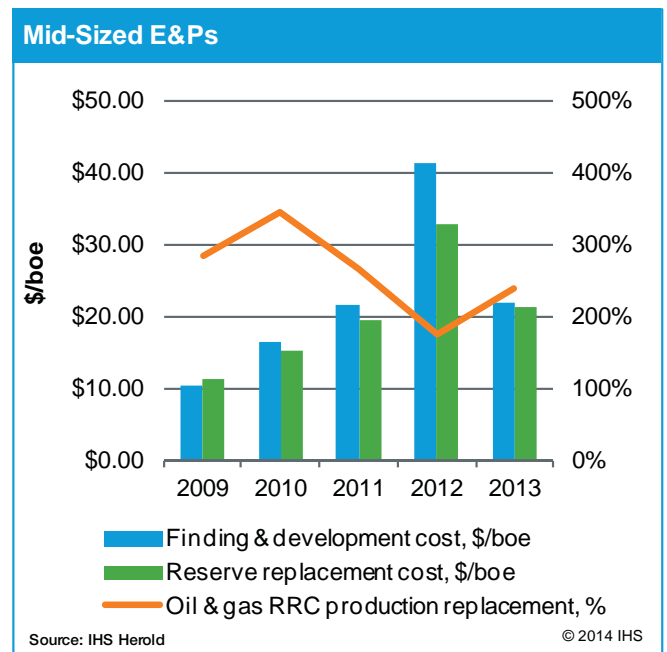
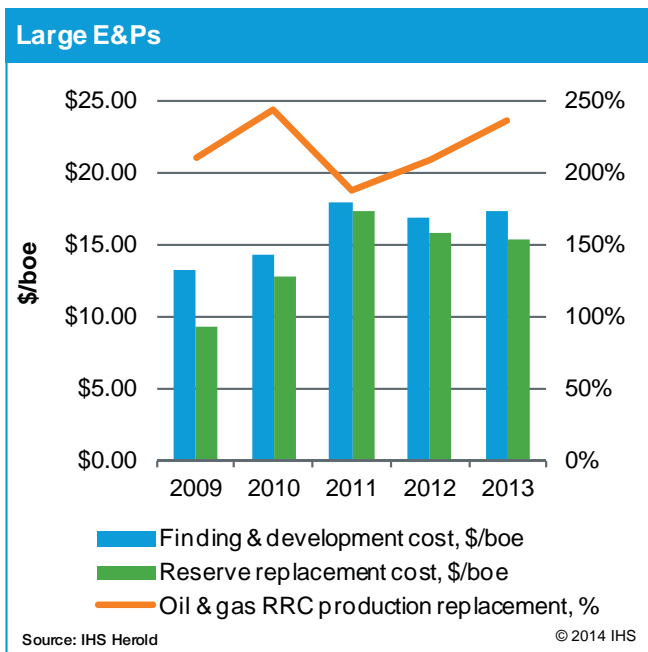
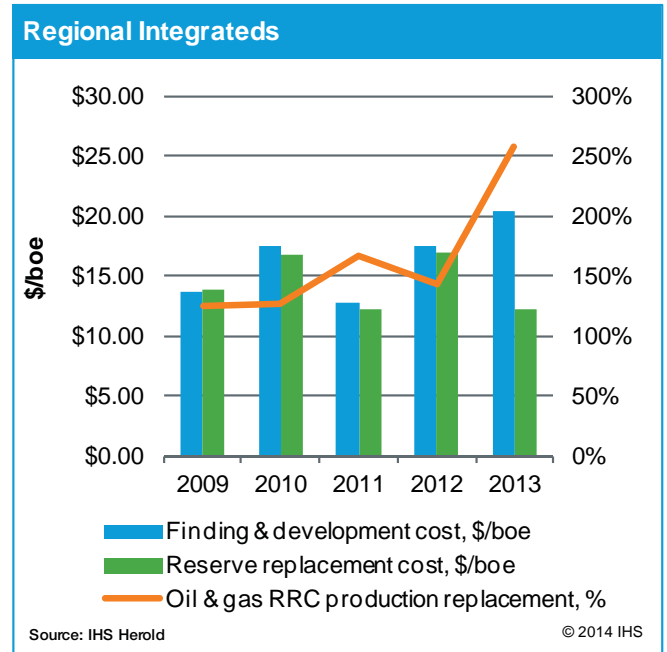
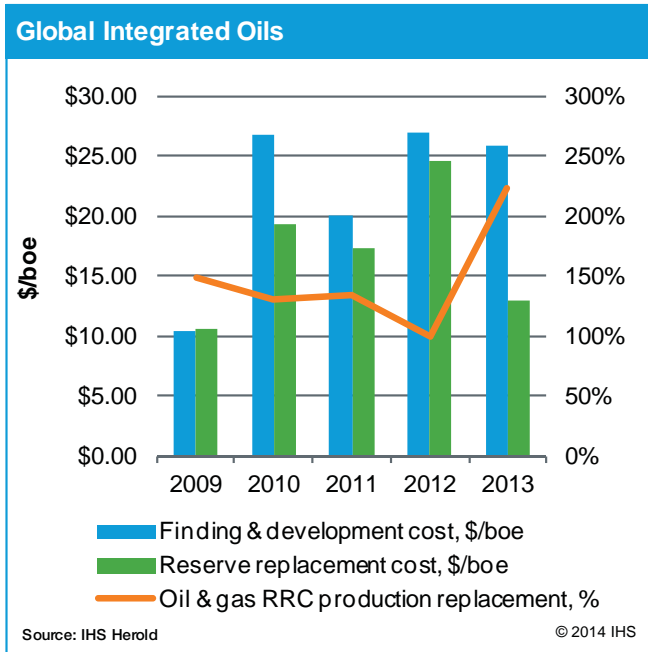
Peer group analysis

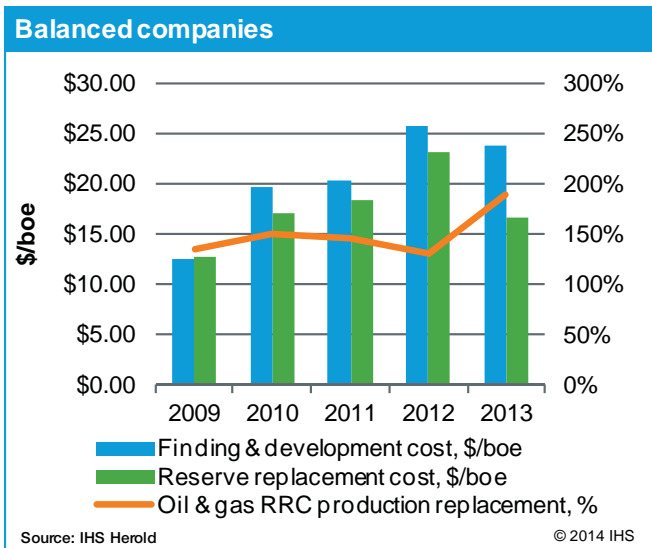
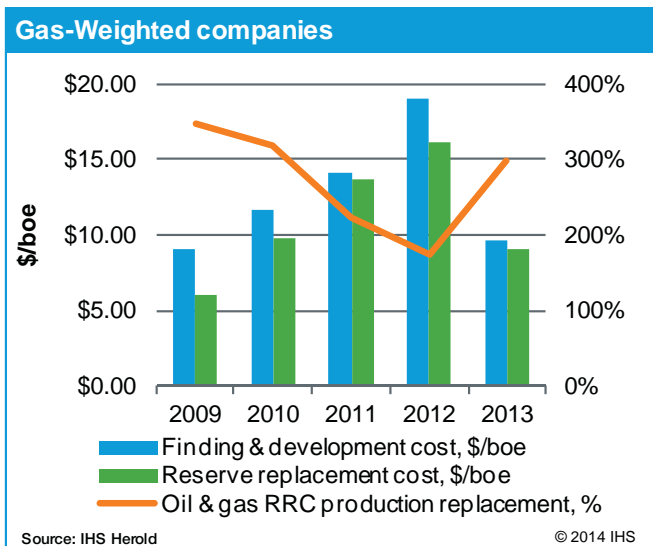
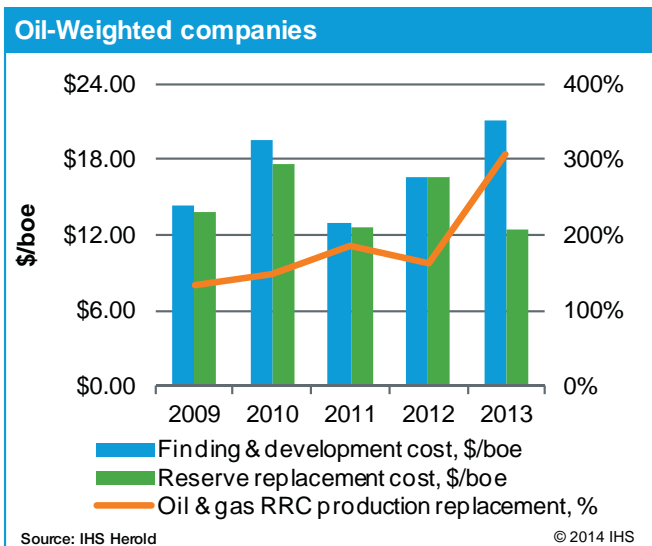
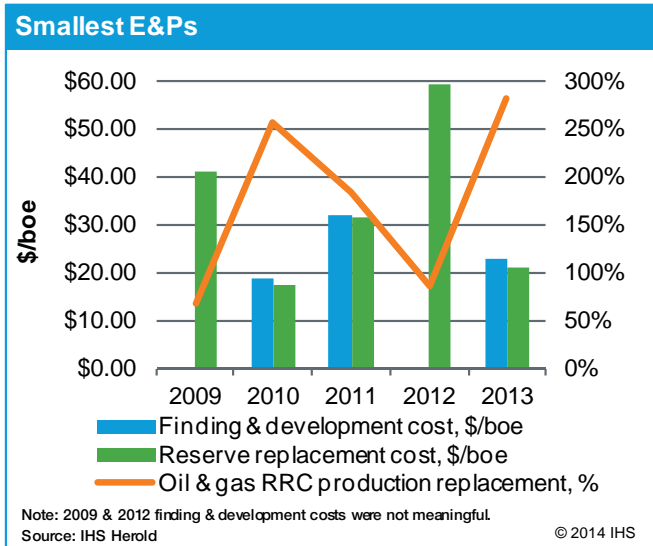
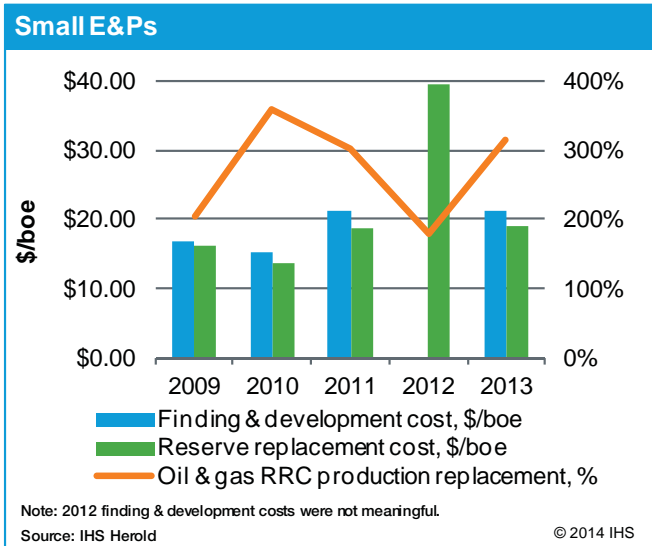
Oil and gas reserves grew 6% globally in 2013, while oil and gas production increased at half that rate. The Integrated Oils grew reserves and production 6% and 2%, respectively, driven by results from the Regional Integrated Oils. Rosneft's purchase of TNK-BP was primarily responsible for the 12% reserve growth and 5% growth for the Regional Integrated Oils. However, Suncor, Repsol, and Gazprom Neft also posted double-digit reserve gains. The Global Integrated Oils managed to grow reserves by 2% while oil and gas production slipped 2%. BP increased its reserves by 6% as a result of strong drill-bit additions and reserve gains from its Rosneft stake that more than offset reserves lost in the TNK-BP divestiture. All of the other Global Integrated Oils had lower production in 2013 as well.

The E&P peer groups' reserves and production grew 5% and 6%, respectively, in 2013. The best performing groups were the Smallest E&Ps and the Small E&P peer groups, which reported reserve increases of 14% and 9%, respectively. Both peer groups benefited from strong drill-bit additions. Small E&Ps' production rose 8%, and that of the Smallest E&Ps rose 3%. The Large and Mid-Sized E&Ps grew reserves 6% and 3%, respectively. The Large E&Ps managed to grow production 5%, slightly above the worldwide average.

Global reserve replacement costs fell by 30% to \$14.03/boe in 2013. Reserve replacement costs decreased by more than 10% for all peer groups with the exception of the Large E&P peer group, whose reserve replacement costs fell only 3% to \$15.31/boe. The Smallest E&P peer group reported the sharpest decline, with reserve replacement costs falling by two-thirds to \$20.81/boe.

Reserve replacement rates surged to 238% of production, the highest in five years, with all peer groups reporting substantial gains. The best performing peer groups were the Oil-Weighted, Gas-Weighted, and Small E&P peer groups, all replacing over 300% of production. The Mid-Sized peer group had strong organic growth, generating a finding and development (F&D) replacement rate of 211% of production. The Large E&Ps needed a little help from acquisitions to grow reserves, but still had a respectable F&D replacement rate of 185% of production.





Reserve changes & performance metrics: Company analysis

Total reserve leaders, MMboe		Total production leaders, MMboe	
Rosneft Oil	30,788	Exxon Mobil	1,569
Exxon Mobil	25,216	Rosneft Oil	1,530
PetroChina	22,937	PetroChina	1,400
BP	17,733	PEMEX	1,294
Lukoil	17,401	BP	1,194
Royal Dutch Shell	13,700	Royal Dutch Shell	1,186
Petrobras	13,134	Chevron	948
PEMEX	13,125	Petrobras	862
Novatek	11,437	Lukoil	833
Chevron	11,203	Total	801

Source: IHS © 2014 IHS

- Rosneft overtook ExxonMobil as the study's largest reserve holder after purchasing TNK-BP.
- BP increased reserves by 6% on a 14% gain in gas reserves, primarily from acquiring an 18.5% stake in Rosneft in the TNK-BP divestiture.
- Suncor increased oil and gas reserves by 20%, primarily because of the sanctioning of the Fort Hills oil sands project.

Total reserves gainers, % change		Total production gainers, % change	
Triangle Petroleum	991%	Sanchez Energy	725%
Gulfport Energy	177%	Triangle Petroleum	409%
Bellatrix Exploration	130%	Athabasca Oil	308%
Niko Resources	111%	Halcon Resources	253%
Sanchez Energy	90%	Magellan Petroleum	163%
Rosneft Oil	84%	Diamondback Energy	148%
Gastar Exploration	81%	Midstates Petroleum	138%
Kodiak Oil & Gas	76%	Antero Resources	117%
Aurora Oil & Gas	74%	Kodiak Oil & Gas	103%
Parex Resources	74%	Aurora Oil and Gas	99%

Source: IHS © 2014 IHS

Most of the strongest reserve and production growth was reported by companies exploiting US unconventional plays. Triangle Petroleum increased its reserves nearly ninefold and its production more than threefold in the Bakken and Three Forks formations. Kodiak increased its reserves by 76% in 2014 in the Williston Basin through a combination of reserve purchases and organic additions and subsequently received a takeover bid from Whiting Petroleum. Gulfport Energy more than doubled its reserves by recognizing 124 Tcf in gas reserves, primarily in the Utica Shale. Matador Resources's reserves surged from positive revisions and extensions and discoveries in the Haynesville Shale. Sanchez Energy nearly doubled its reserves and increased its production more than 600% through a combination of drill-bit additions and several acquisitions in the Eagle Ford Shale. The company further increased its Eagle Ford stake in 2014 by acquiring 60 MMboe in reserves from Shell. In Canada, Bellatrix Energy substantially increased its reserves by purchasing Angle Energy, a company focusing on the Cardium light oil resource play in Canada. Niko Petroleum increased reserves through its share of significant discoveries in India and Trinidad and Tobago as well as positive revisions in Bangladesh.

3-year reserve replacement cost leaders, \$/boe	
Novatek	\$2.14
Dorchester Minerals	\$2.26
DNO ASA	\$3.07
Gazprom Neft	\$3.65
CONSOL Energy	\$3.83
Antero Resources	\$3.84
Cabot Oil & Gas	\$4.56
MEG Energy	\$4.63
Range Resources	\$4.97
EQT	\$5.29

Source: IHS Herold © 2014 IHS

3-year RRC production replacement leaders, %	
Athabasca Oil	3238%
Triangle Petroleum	2657%
MEG Energy	2639%
ZaZa Energy	2071%
Antero Resources	1898%
Sanchez Energy	1333%
Aurora Oil and Gas	1279%
Kodiak Oil & Gas	1009%
Rex Energy	992%
Gulfsands Petroleum	904%

Source: IHS Herold © 2014 IHS

Seven of the 10 leaders in 3-year reserve replacement costs are natural gas producers, including six companies operating in the United States. Of the six US operators, five have significant positions in the Marcellus Shale, highlighting the economics of that play. Novatek was the leader in global 3-year reserve replacement costs at \$2.14/boe by exploiting its Russian natural gas reserves. It was followed by Dorchester Minerals, which added reserves at \$2.26/boe, primarily natural gas in the Mid-Continent region of the United States. The next two companies, DNO and Gazprom Neft, two of the three oil producers in the top 10, added reserves at \$3.07/boe and \$3.65/boe, respectively. DNO produces exclusively in the Africa & Middle East region, with most of its production from Kurdistan. Gazprom Neft primarily produces out of the Russia & Caspian region but does have other projects worldwide. The five top US operators focused on the Marcellus Shale, CONSOL Energy, Antero Resources, Cabot Oil & Gas, Range Resources, and EQT, had 3-year reserve replacement costs between \$3.83/boe and \$5.29/boe. The remaining company in the top 10 was MEG Energy, a Canadian oil sands producer, which has added reserves at \$4.63/boe since 2011.

Reserve changes & performance metrics: Regional analysis

- Reserves of companies in the Russia & Caspian region rose 16% in 2013, primarily from the acquisition of TNK-BP by Rosneft.
- Reserves in the United States and Canada grew 9% and 10%, respectively, on the continuing strength of oil/liquids additions.
- Reserves fell in the Europe and Africa & Middle East regions by 7% and 5%, respectively, because of the low reinvestment rate in Europe and political instability in Africa & Middle East.
- Reserve replacement costs were substantially lower worldwide, primarily because of double-digit declines in the United States and Canada.

Oil and gas reserves by region, MMboe

	2009	2010	2011	2012	2013	1-year chg.	5-year CAGR
Worldwide	269,244	278,433	288,816	291,911	308,581	6%	3%
United States	46,628	51,969	56,389	56,032	61,317	9%	7%
Canada	23,716	24,164	26,701	27,758	30,507	10%	6%
Europe	19,606	19,491	19,635	18,144	16,935	-7%	-4%
Africa & Middle East	18,490	20,074	18,805	18,259	17,401	-5%	-2%
Asia-Pacific	41,709	41,630	42,495	42,353	41,746	-1%	0%
South & Central America	31,809	32,556	32,509	31,631	31,879	1%	0%
Russia & Caspian	54,558	55,391	58,995	63,088	73,412	16%	8%

Source: IHS Herold

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Oil and gas production by region, MMboe

	2009	2010	2011	2012	2013	1-year chg.	5-year CAGR
Worldwide	19,937	20,783	20,684	21,150	21,707	3%	2%
United States	3,687	3,784	3,896	4,198	4,438	6%	5%
Canada	1,412	1,461	1,461	1,496	1,557	4%	2%
Europe	2,309	2,241	2,008	1,870	1,727	-8%	-7%
Africa & Middle East	1,898	2,035	1,781	1,890	1,762	-7%	-2%
Asia-Pacific	2,599	2,829	2,822	2,914	2,976	2%	3%
South & Central America	2,939	3,027	3,006	2,941	2,936	0%	0%
Russia & Caspian	2,846	2,952	3,065	3,101	3,529	14%	6%

Source: IHS Herold

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Reserve replacement costs by region, \$/boe

	2009	2010	2011	2012	2013	5-year avg.
Worldwide	\$11.56	\$16.15	\$15.78	\$19.96	\$14.03	\$15.32
United States	\$13.53	\$15.78	\$17.49	\$31.20	\$15.64	\$17.99
Canada	\$11.58	\$18.96	\$13.82	\$20.03	\$15.42	\$15.52
Europe	\$16.78	\$14.87	\$17.94	\$44.20	\$53.20	\$24.56
Africa & Middle East	\$19.61	\$12.58	\$52.91	\$27.89	\$44.56	\$24.78
Asia-Pacific	\$9.60	\$23.39	\$17.77	\$33.51	\$32.91	\$20.99
South & Central America	\$9.88	\$24.12	\$15.79	\$17.78	\$21.31	\$17.63
Russia & Caspian	\$3.97	\$5.29	\$3.36	\$3.82	\$4.61	\$4.28

Source: IHS Herold

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Reserve replacement rates by region, %						
	2009	2010	2011	2012	2013	5-year avg.
Worldwide	163%	170%	168%	145%	238%	177%
United States	167%	349%	253%	159%	255%	236%
Canada	294%	197%	275%	203%	301%	254%
Europe	90%	91%	113%	56%	62%	84%
Africa & Middle East	105%	158%	45%	88%	63%	94%
Asia-Pacific	227%	99%	146%	100%	105%	133%
South & Central America	136%	126%	110%	104%	110%	117%
Russia & Caspian	182%	147%	237%	262%	633%	305%

Source: IHS Herold

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Regional analysis

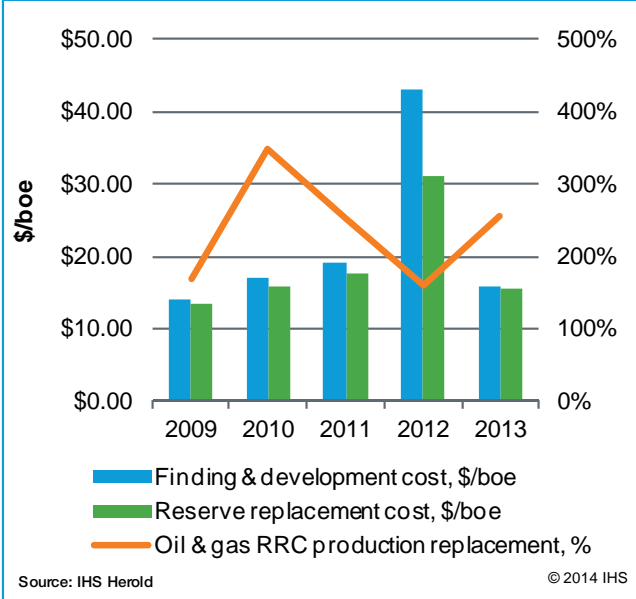
Companies in the Russia & Caspian region had the strongest reserve growth in 2013 because of Rosneft's TNK-BP acquisition. Reserves continued to grow rapidly in North America, including a study-leading 10% gain in Canada. Strong dill-bit additions led Canadian oil and natural gas reserve growth of 11% and 5%, respectively. In the United States, companies in our study universe increased total reserves by 9%, with oil reserves up 11% and gas reserves up 8%. Strong drill-bit results fueled the reserve gains, including 32 Tcf and 4.8 billion barrels in gas and oil extensions and discoveries, respectively. Reserves fell in three regions: Europe, Africa & Middle East, and Asia-Pacific. The largest decline was 7% in Europe, where capital investment is growing but was still insufficient to grow or maintain reserves. Reserves in the Africa & Middle East region fell 5% because political instability hampered upstream activity.

Global oil and gas production increased by 3% in 2013, the highest rate since 2010. The Russia & Caspian region had the strongest growth because of the Rosneft purchase of TNK-BP. Production grew 6% in the United States on a 14% gain in oil/liquids output. US gas production dipped 0.3% after rising nearly 4% in 2012. In Canada, total oil and gas production was 4% higher in 2013, with oil/liquids production increasing 9% and natural gas slipping nearly 3%, its fourth consecutive annual decline.

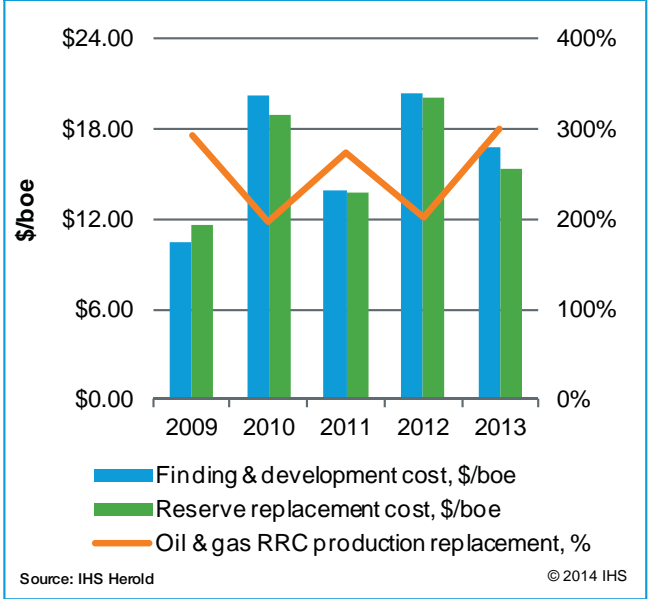
Worldwide reserve replacement costs fell 30% because of sizeable declines in the United States and Canada. US reserve replacement costs fell by half to \$15.64/boe, on a 230% F&D replacement rate. Canada's reserve replacement costs fell by 23% as F&D reserve additions grew by nearly 40%. Oil and liquids accounted for most of the reserve growth, but companies also organically replaced 170% of natural gas production. Reserve replacement costs in the Africa & Middle East region increased nearly 60% to \$44.56/boe as capital spending increased 7%, while reserve additions fell by one-third. Reserve replacement costs also increased 20% in Europe to \$53.20/boe because capital spending in Europe rose by 24% and reserve additions were only 3% higher. Oil reserve additions rose by 8% but were eroded by a 4% decline in natural gas reserve additions. Reserve replacement costs fell by less than 2% in the Asia-Pacific region because capital spending was up 6% and reserve additions were ahead 8%. Gas reserve additions surged 21%, largely from 11 Tcf in extensions and discoveries by PetroChina. Oil reserve additions were 2% lower.

Worldwide reserve replacement rates surged in 2013, reaching 238% of production. While oil was the primary reason for the increase because of its 275% production replacement rate, gas reserve replacement also was a strong 200% of production. The Russian & Caspian region had the highest rate, followed by Canada and the United States, which replaced 301% and 255% of production, respectively. The industry failed to replace production in Europe and the Africa & Middle East region. Europe reserve replacement was at a five-year low at 62% of production, while results were only marginally better in the Africa & Middle East region. Reserve replacement rates in the Asia-Pacific and South & Central America regions were below their five-year averages.

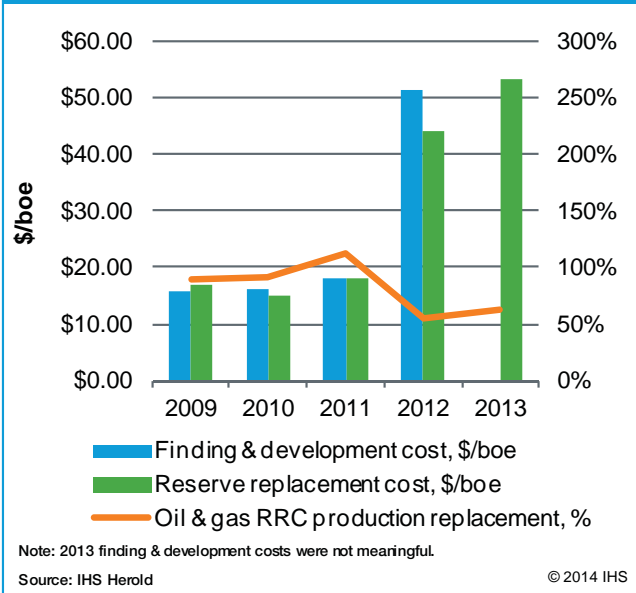
United States



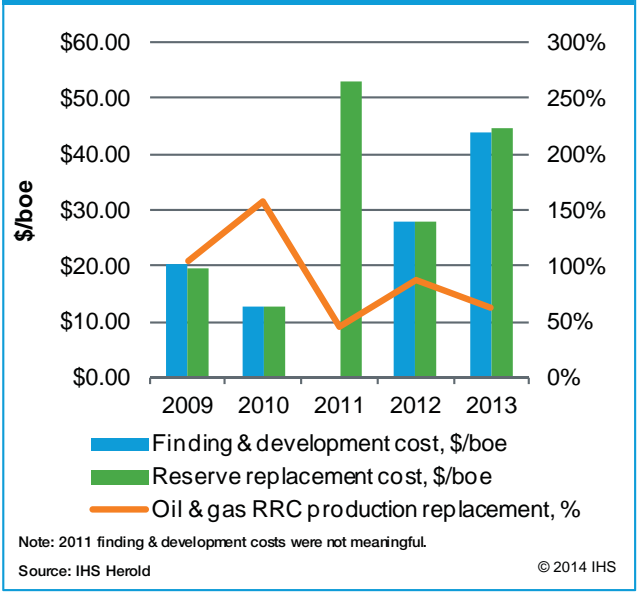
Canada

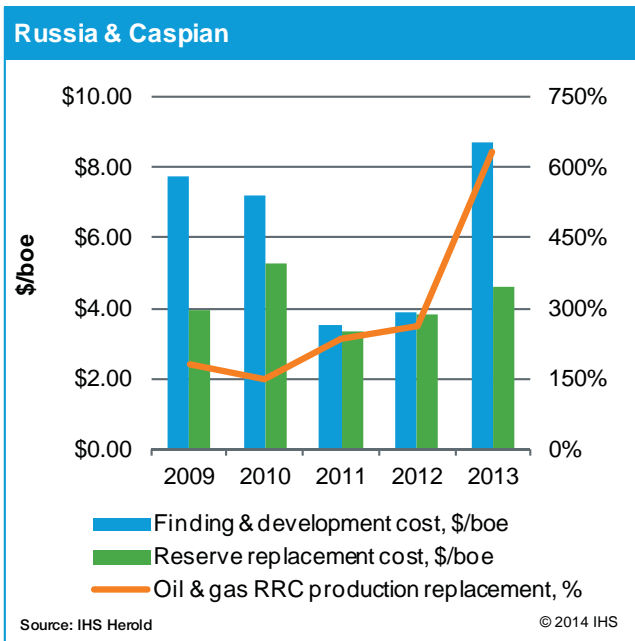
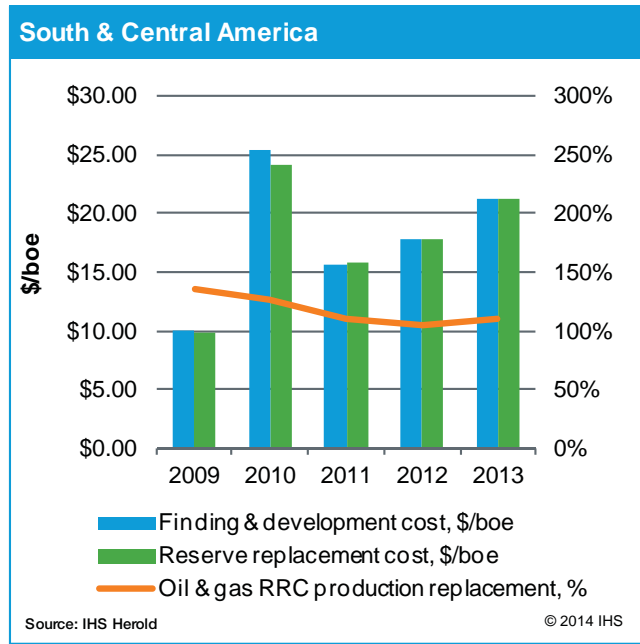
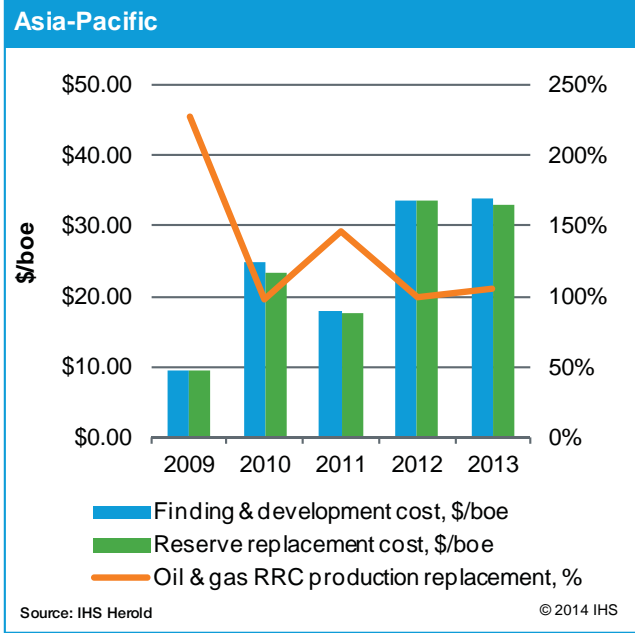


Europe



Africa & Middle East





Reserve changes & performance metrics: What to watch for

Future reserve growth looks bright in most parts of the globe, but especially in the Africa & Middle East. Six of the top 10 discoveries to date in 2014 are from that region. Of the 2.1 billion boe of proved plus probable reserves in the top 10 2014 discoveries, nearly 1.6 billion barrels are from the region. That region also had 7 of the top 10 discoveries in 2013 and 6 of the top 10 in 2012.

The prospects for significant reserve growth in South & Central America improved considerably after passage of energy reform legislation in Mexico that opens its upstream oil and gas industry to outside investment. Only a small percentage of reserves have been booked to date from the massive Brazil presalt discoveries. The five largest companies in the play (Petrobras, BG, Galp, Sinopec, and Repsol) have booked 2.6 billion boe of proved reserves, with nearly 22 billion of unproven resources remaining.

The shale revolution has turned North America from a mature region into a high-growth area. IHS Energy estimates that North America has approximately 100 billion barrels of oil and liquids resource potential and an additional 400 Tcf of natural gas resource potential. About 80% of the resource potential is in the United States.

LNG development has sparked the Asia-Pacific's strong gas production growth over the past decade. IHS Energy projects that LNG capacity will grow significantly over the next 4 years in what has been termed the "Pacific Push," which will add 71.4 million metric ton of annual LNG capacity, equal to 600 MMboe, or 12 billion boe, in reserves over the 20-year life of an LNG project.

Russian companies have formed joint ventures with major international oil companies to explore potentially huge Arctic resources. However, the ongoing conflict in Ukraine and the resulting sanctions, particularly those that limit capital flows, could cloud the timetable for when or even if these resources would be developed.

2014 top discovery to date							
Rank	Region	Country	Basin	Discovery Name	MMboe (2P)	Current Operators	% Oil
1	Africa & Middle East	Gabon	North Gabon Subbasin (Gabon Coastal Basin)	Nyonie Deep 1	377.5	Eni	11%
2	Africa & Middle East	Tanzania	Mafia Deep Subbasin (Tanzania Basin)	Piri 1	318.7	Statoil	1%
3	Africa & Middle East	Mozambique	Rovuma Basin	Tubarao Tigre 1	303.6	Anadarko	1%
4	Africa & Middle East	Angola	Kwanza Basin	Bicuar 1A	300.0	Cobalt International	67%
5	Africa & Middle East	Tanzania	Mandawa Subbasin (Tanzania Basin)	Taachui 1ST	168.7	BG Group	1%
6	South & Central America	Argentina	Chihuidos High (Neuquen Basin)	Pampa de las Yeguas	168.3	YPF SA	21%
7	Africa & Middle East	Egypt	Nile Coastal/Deep Water Subbasin (Nile Delta Bsn)	Notus 1	125.8	BG	1%
8	Europe	Norway	Donna and Halten Terraces (Voring Basin)	6406/12-03S (Pii)	109.8	VNG Norge AS	78%
9	United States	United States	Sigsbee Subbasin (DWGoM Basin)	Rydberg	106.7	Royal DutchShell	94%
10	South & Central America	Brazil	Potiguar Basin	Pitu	96.7	PetroBras	83%

Source: IHS Herold

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Reserve changes: Worldwide

Reserve changes: Worldwide										
	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
UNIVERSE*	291,911	22,655	8,487	21,211	(13,976)	(21,707)	-	308,581	-	40%
Rosneft Oil	16,773	1,279	1,203	13,063	-	(1,530)	2	30,788	1	0%
Exxon Mobil	25,165	732	770	163	(44)	(1,569)	1	25,216	2	47%
PetroChina	22,829	2,602	(1,093)	-	-	(1,400)	3	22,937	3	51%
BP	16,768	750	785	6,101	(5,477)	(1,194)	5	17,733	4	43%
Lukoil	17,296	635	116	195	(7)	(833)	9	17,401	5	23%
Royal Dutch Shell	13,328	302	1,211	57	(13)	(1,186)	6	13,700	6	52%
Petrobras	12,895	1,049	168	0	(116)	(862)	8	13,134	7	16%
PEMEX	13,543	77	798	-	-	(1,294)	4	13,125	8	16%
Novatek	11,282	375	207	1,186	(1,213)	(400)	17	11,437	9	90%
Chevron	11,347	248	533	28	(6)	(948)	7	11,203	10	43%
Total	10,831	942	(100)	224	(179)	(801)	10	10,917	11	50%
ConocoPhillips	8,642	716	344	0	(188)	(593)	12	8,921	12	38%
Gazprom Neft	7,526	-	1,068	217	-	(449)	14	8,361	13	27%
Eni S.p.A.	6,843	104	490	4	(619)	(567)	13	6,255	14	48%
Statoil ASA	5,225	496	387	14	(128)	(606)	11	5,387	15	57%
CNOOC	3,470	387	132	823	-	(409)	16	4,402	16	26%
Canadian Natural Resources	4,126	110	195	33	(0)	(218)	27	4,246	17	13%
Sinopec	3,965	294	108	294	-	(443)	15	4,217	18	26%
Suncor Energy	3,508	881	102	-	(116)	(178)	30	4,196	19	0%
TengizChevrOil	4,230	-	103	-	-	(234)	25	4,099	20	19%
Imperial Oil	3,574	-	88	54	-	(95)	43	3,621	21	3%
Occidental Petroleum	3,295	81	351	38	(4)	(278)	19	3,482	22	27%
BG Group	3,431	15	252	-	(143)	(231)	26	3,323	23	54%
Devon Energy	2,963	261	7	1	(16)	(253)	21	2,963	24	52%
Anadarko Petroleum	2,560	145	347	36	(12)	(284)	18	2,792	25	55%
Chesapeake Energy	2,615	524	(29)	2	(189)	(245)	22	2,678	26	73%
Apache	2,852	389	33	6	(355)	(278)	20	2,646	27	46%
BHP Billiton Group	2,559	501	(253)	(2)	-	(241)	24	2,563	28	66%
Marathon Oil	2,017	184	144	17	(14)	(177)	31	2,171	29	21%
EOG Resources	1,811	399	109	3	(15)	(188)	29	2,119	30	40%
INPEX	2,280	12	25	20	(140)	(140)	33	2,057	31	55%
Ecopetrol	1,851	74	256	9	(3)	(243)	23	1,945	32	26%
Cenovus Energy	1,715	136	87	-	(5)	(94)	44	1,839	33	7%
EnCana	1,675	219	(127)	2	(51)	(189)	28	1,529	34	86%
Repsol	1,239	224	117	-	(13)	(122)	37	1,445	35	71%
Hess	1,554	241	(93)	-	(140)	(125)	35	1,437	36	23%
Noble Energy	1,184	250	95	24	(47)	(100)	42	1,406	37	69%
EQT	1,001	341	32	79	(0)	(61)	52	1,391	38	91%
BASF SE	1,276	1	168	63	-	(126)	34	1,382	39	77%
Range Resources	1,084	289	75	0	(24)	(57)	53	1,367	40	69%
Antero Resources	822	597	(115)	0	0	(32)	71	1,273	41	88%
Southwestern Energy	670	547	54	1	0	(109)	38	1,163	42	100%
MEG Energy	985	132	(4)	0	0	(10)	115	1,103	43	0%
OMV AG	1,081	4	29	86	(1)	(102)	40	1,097	44	42%

Reserve changes: Worldwide

	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
Woodside Petroleum	1,177	0	3	0	(1)	(87)	45	1,093	45	87%
Continental Resources	785	445	(96)	0	0	(50)	58	1,084	46	32%
Linn Energy	799	88	(26)	268	(12)	(50)	57	1,067	47	47%
YPF	961	59	211	14	(15)	(176)	32	1,054	48	40%
Husky Energy	975	123	54	1	(1)	(101)	41	1,051	49	32%
Sasol	1,035	0	19	0	0	(71)	48	983	50	27%
CONSOL Energy	666	272	46	0	0	(29)	74	955	51	97%
Cabot Oil & Gas	640	288	72	0	(22)	(69)	50	909	52	97%
PTT E&P Public	960	22	28	10	0	(124)	36	896	53	72%
Talisman Energy	870	141	(22)	9	(3)	(104)	39	891	54	73%
Pioneer Natural Res.	1,086	152	(300)	0	(26)	(67)	51	845	55	38%
WPX Energy	786	93	26	0	(0)	(78)	46	828	56	75%
Murphy Oil	604	105	77	0	(24)	(75)	47	688	57	28%
QEP Resources	656	131	(55)	2	(6)	(51)	55	677	58	63%
Canadian Oil Sands	693	0	(10)	0	0	(32)	70	651	59	0%
Santos	1,411	7	(745)	2	0	(51)	56	623	60	87%
Newfield Exploration	567	80	14	1	(1)	(49)	59	613	61	45%
Ultra Petroleum	513	246	(128)	10	0	(39)	65	602	62	94%
EP Energy	625	155	24	0	(202)	(43)	62	559	63	34%
Concho Resources	447	105	(18)	2	0	(34)	69	503	64	39%
Tourmaline Oil	434	71	8	14	(10)	(24)	80	493	65	88%
Berry Petroleum	275	16	196	0	(3)	(15)	94	469	66	20%
Denbury Resources	409	0	42	43	0	(26)	77	468	67	17%
Whiting Petroleum	379	109	12	17	(44)	(34)	67	439	68	11%
SandRidge Energy	566	119	(19)	0	(199)	(34)	68	433	69	53%
SM Energy Company	293	141	60	1	(18)	(48)	60	429	70	46%
Cimarex Energy	376	121	(36)	0	(3)	(42)	63	416	71	52%
Dragon Oil	401	0	13	0	0	(12)	103	403	72	23%
Mitsui	370	57	36	9	0	(70)	49	402	73	72%
Crescent Point Energy	356	37	26	4	(0)	(39)	64	384	74	8%
Pacific Rubiales Energy	331	46	40	20	(0)	(54)	54	384	75	24%
Tullow Oil	388	26	12	1	(14)	(31)	72	382	76	14%
Penn West Petroleum	384	3	37	0	(23)	(43)	61	358	77	31%
MOL	386	5	5	0	(14)	(35)	66	348	78	49%
Energen	346	37	5	0	(15)	(25)	78	348	79	34%
Oil Search	338	0	(0)	0	0	(7)	131	331	80	81%
ARC Resources	309	27	12	0	(5)	(29)	73	315	81	64%
Afren	210	26	68	0	(1)	(17)	88	286	82	0%
Rosetta Resources	202	83	(11)	23	0	(18)	86	279	83	41%
Peyto Expl. & Dev.	247	49	(4)	0	0	(19)	84	273	84	89%
PDC Energy	193	142	(46)	1	(16)	(7)	125	266	85	46%
DNO ASA	244	26	4	0	0	(14)	97	260	86	0%
National Fuel Gas	208	63	8	0	0	(20)	83	258	87	84%
Premier Oil	282	0	(8)	1	0	(21)	82	255	88	44%
Pengrowth Energy	224	63	25	1	(40)	(25)	79	247	89	33%
Oasis Petroleum	143	46	5	46	0	(12)	101	228	90	13%
Bonavista Energy	216	10	12	12	(4)	(23)	81	222	91	64%
Quicksilver Resources	245	10	45	0	(59)	(18)	85	222	92	82%
Swift Energy	192	76	(37)	0	(1)	(12)	105	219	93	62%
Enerplus	189	34	12	18	(7)	(27)	75	218	94	52%
Breitburn Energy Part.	149	1	14	61	(0)	(11)	108	214	95	40%
Laredo Petroleum	189	70	(15)	0	(29)	(11)	107	204	96	45%
EV Energy Partners	151	36	10	12	(0)	(10)	112	199	97	69%
Birchcliff Energy	168	41	(1)	0	(2)	(9)	120	198	98	90%

Reserve changes: Worldwide										
	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
Lundin Petroleum AB	202	0	4	0	0	(12)	104	194	100	8%
EXCO Resources	168	14	25	67	(60)	(27)	76	187	101	90%
Maurel & Prom SA	198	0	(4)	0	(3)	(7)	128	184	102	0%
Advantage Oil & Gas	178	19	10	0	(19)	(9)	119	179	103	89%
Energy XXI (Bermuda)	120	47	14	13	0	(16)	92	179	104	25%
Vanguard Natural Res.	152	3	2	28	0	(13)	99	172	105	57%
Kodiak Oil & Gas	95	56	4	25	(2)	(11)	111	167	106	17%
Unit	150	31	(1)	0	(3)	(17)	90	160	107	61%
Chaparral Energy	146	25	(1)	5	(7)	(10)	116	158	108	32%
Stone Energy	129	20	12	0	(0)	(17)	89	144	109	53%
Rex Energy	103	52	(8)	0	0	(6)	140	142	110	61%
Questar	122	26	(20)	23	0	(11)	110	141	111	96%
Penn Virginia	113	47	(28)	11	0	(7)	130	136	112	39%
Halcon Resources	109	70	(10)	3	(23)	(12)	102	136	113	9%
Baytex Energy	120	33	(6)	0	(1)	(17)	91	128	114	12%
Midstates Petroleum	75	44	(20)	38	0	(9)	118	128	115	37%
Bankers Petroleum	118	0	14	0	(0)	(6)	138	127	116	0%
Kinder Morgan Energy	89	0	(3)	52	0	(15)	93	122	117	0%
Aurora Oil and Gas	70	33	18	7	0	(6)	139	122	118	23%
Loews	138	1	(10)	0	(0)	(8)	123	120	119	72%
Vermilion Energy	98	18	16	1	0	(14)	98	119	120	41%
W&T Offshore	118	20	(4)	2	(0)	(18)	87	118	121	37%
Approach Resources	95	27	(5)	0	0	(4)	156	115	122	31%
QR Energy LP	99	5	4	7	0	(7)	132	109	123	23%
Lightstream Resources	114	4	6	1	(2)	(15)	95	108	124	21%
Forest Oil	227	25	(2)	0	(133)	(13)	100	104	125	73%
Carrizo Oil & Gas	121	43	6	0	(58)	(10)	114	102	126	31%
Comstock Resources	119	13	4	0	(27)	(12)	106	97	127	77%
Bellatrix Exploration	42	26	11	25	(1)	(6)	133	97	128	66%
JKX Oil & Gas	94	0	4	0	0	(4)	155	94	129	96%
Legacy Reserves LP	83	0	7	5	(1)	(7)	127	88	130	30%
Northern Oil & Gas	68	35	(14)	0	0	(4)	149	84	131	10%
MDU Resources Group	80	19	0	0	(8)	(10)	113	82	132	40%
EPL Oil & Gas	77	11	2	0	(2)	(9)	117	80	133	36%
Paramount Resources	49	36	4	0	(2)	(7)	129	79	134	60%
Magnum Hunter Res.	86	1	9	0	(16)	(5)	144	76	135	54%
Goodrich Petroleum	56	9	15	0	(0)	(5)	147	75	136	73%
NuVista Energy	52	27	2	0	(5)	(6)	141	71	137	72%
Clayton Williams Energy	75	28	(1)	0	(27)	(5)	143	70	138	18%
Bonanza Creek Energy	130	10	(66)	2	0	(6)	137	70	139	33%
Trilogy Energy	61	14	3	0	0	(11)	109	67	140	64%
SOCO International	67	0	5	0	0	(6)	136	66	141	0%
Salamander Energy	72	0	3	3	(8)	(5)	142	64	142	50%
Niko Resources	30	41	(0)	0	0	(7)	126	64	143	98%
Diamondback Energy	40	26	(10)	11	0	(3)	164	64	144	16%
Alta Mesa Holdings	52	21	(7)	2	(2)	(6)	134	60	145	37%
Resolute Energy	79	6	(23)	8	(6)	(4)	150	59	146	12%
Sanchez Energy	31	17	(10)	25	0	(4)	153	59	147	11%
Long Run Exploration	47	1	9	6	(1)	(8)	124	55	148	57%
Gastar Exploration	30	15	2	15	(4)	(3)	161	55	149	55%
Venoco	52	5	(1)	0	0	(3)	159	53	150	4%
PetroQuest Energy	38	7	6	6	(0)	(5)	145	52	151	82%
Athabasca Oil	48	4	1	0	0	(2)	173	51	152	14%
Bonterra Energy	29	1	5	16	0	(4)	152	47	153	27%

Reserve changes: Worldwide

	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
Kosmos Energy	44	0	12	0	0	(8)	121	47	154	4%
Global Energy Develop.	40	0	(2)	9	0	(0)	198	47	155	0%
Gran Tierra Energy	41	5	5	0	0	(8)	122	42	156	5%
Gulfport Energy	14	29	(1)	0	0	(4)	151	38	157	64%
Gulfsands Petroleum	34	0	(1)	0	0	(0)	206	34	158	9%
Warren Resources	25	8	3	0	0	(2)	171	34	159	52%
Apco Oil & Gas Int'l	36	0	1	0	0	(5)	146	32	160	44%
PrimeEnergy	26	8	1	0	0	(2)	177	32	161	26%
Abraxas Petroleum	30	11	0	0	(9)	(2)	179	31	162	26%
Perpetual Energy	32	6	5	0	(6)	(6)	135	31	163	88%
LRR Energy	30	0	1	0	0	(2)	166	28	164	53%
Panhandle Oil and Gas	21	7	(0)	0	0	(2)	170	25	165	87%
Equal Energy	21	2	4	0	0	(2)	167	24	166	45%
Endeavour International	26	0	2	0	(1)	(4)	154	24	167	48%
Heritage Oil	23	0	0	0	0	0	NA	23	168	0%
Serinus Energy	19	(0)	1	3	0	(2)	175	21	169	87%
Harvest Natural Res.	38	1	(2)	0	(13)	(3)	160	21	170	10%
Canacol Energy	18	3	(9)	10	(0)	(2)	174	20	171	47%
PostRock Energy	14	2	4	1	0	(3)	165	19	172	77%
Chinook Energy	25	2	(5)	0	(1)	(3)	162	18	173	52%
Saratoga Resources	17	1	(3)	3	0	(1)	190	17	174	46%
GeoMet	23	0	3	0	(7)	(2)	176	17	175	100%
BPZ Resources	17	0	(0)	0	0	(1)	195	16	176	0%
TransGlobe Energy	16	3	1	0	0	(3)	158	16	177	0%
Triangle Petroleum	1	13	2	0	(0)	(0)	196	16	178	14%
Dune Energy	15	1	(0)	0	(0)	(1)	191	16	179	54%
Constellation Energy Par.	15	1	7	1	(8)	(2)	182	15	180	100%
Dorchester Minerals	14	0	3	0	0	(2)	172	15	181	66%
Callon Petroleum Co.	14	9	(3)	0	(4)	(1)	184	15	182	20%
Zargon Oil & Gas	16	2	1	0	(2)	(2)	168	15	183	26%
Parex Resources	8	7	3	1	0	(5)	148	15	184	0%
Freehold Royalties	15	1	1	0	0	(3)	163	14	185	41%
Black Hills	13	2	0	0	(0)	(2)	183	14	186	73%
Mid-Con Energy Part.	13	0	0	1	0	(1)	189	14	187	2%
Santonia Energy	14	1	1	0	(1)	(1)	185	14	188	84%
Escalera Resources	13	0	1	0	0	(2)	180	12	189	97%
TransAtlantic Petroleum	12	2	0	0	(2)	0	NA	12	190	21%
Max Petroleum	11	1	1	0	0	(1)	186	11	191	0%
Corridor Resources	9	0	1	0	0	(0)	197	10	192	98%
Magellan Petroleum	11	0	(1)	0	0	(0)	199	9	193	20%
FX Energy	8	1	(0)	0	0	(1)	192	7	194	94%
VAALCO Energy	8	1	1	0	0	(2)	178	7	195	3%
Calvalley Petroleum	6	0	0	0	0	(1)	194	6	196	0%
Anderson Energy	9	0	1	0	(4)	(1)	188	5	197	65%
Sonde Resources	4	0	0	0	0	0	NA	4	198	74%
Tap Oil	6	0	0	0	(3)	0	NA	4	199	0%
Carnarvon Petroleum	4	0	(0)	0	0	(0.2)	202	3	200	0%
Barnwell Industries	3	0	0	0	0	(1)	193	3	201	65%
Valeura Energy	1	0	1	0	0	(0)	201	2	202	91%
Adams Res. and Energy	2	0	(0)	0	(0)	(0)	200	1	203	74%
FieldPoint Petroleum	2	0	(0)	0	0	(0)	203	1	204	25%
Royale Energy	1	0	(0)	0	(0)	(0)	205	1	205	94%
ZaZa Energy	3	0	0	1	(3)	(0)	204	1	206	53%

Reserve changes: Worldwide

	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
All Integrated & Diversified Oils	200,711	11,332	7,200	17,927	(10,253)	(14,976)	-	211,940	-	35%
All E&Ps	89,673	11,323	1,287	3,284	(3,722)	(6,731)	-	95,113	-	51%
Regional Integrations	131,718	8,712	4,411	14,021	(1,180)	(9,925)	1	147,756	1	25%
Global Integrated Oils	77,438	2,974	3,199	6,572	(5,719)	(5,697)	2	78,768	2	47%
Large E&Ps	68,886	7,700	1,613	2,558	(2,472)	(5,034)	3	73,251	3	53%
Mid-Sized E&Ps	14,043	2,206	(325)	279	(722)	(1,082)	4	14,399	4	43%
Small E&Ps	5,384	1,061	(19)	354	(461)	(465)	5	5,853	5	43%
Smallest E&Ps	1,445	338	(11)	94	(67)	(155)	6	1,644	6	45%
Balanced companies	153,276	11,162	3,843	7,340	(7,858)	(11,751)	1	156,011	1	49%
Oil-Weighted companies	113,988	7,360	5,318	15,064	(932)	(8,427)	2	132,370	2	14%
Gas-Weighted companies	31,023	4,391	(264)	1,488	(1,831)	(2,156)	3	32,651	3	86%

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Reserve changes: United States

Reserve changes: United States										
	Beginning Year Reserves	Extensions & Discoveries	Improved Recovery, Transfers & Revisions	Purchases	Sales	Production	Prod. Rank	Year End Reserves	Res. Rank	% Gas
	MMboe	MMboe	MMboe	MMboe	MMboe	MMboe		MMboe		
UNIVERSE*	56,032	10,108	256	1,133	(1,774)	(4,438)	-	61,317	-	53%
Exxon Mobil	7,153	408	76	62	(42)	(391)	1	7,266	1	60%
ConocoPhillips	3,698	387	127	-	(44)	(273)	2	3,895	2	41%
BP	4,304	11	(178)	-	(36)	(238)	6	3,862	3	43%
Chesapeake Energy	2,615	524	(29)	2	(189)	(245)	4	2,678	4	73%
Anadarko Petroleum	2,292	131	326	36	(12)	(252)	3	2,521	5	61%
Occidental Petroleum	2,265	6	284	38	(4)	(173)	8	2,415	6	20%
Devon Energy	2,236	212	(41)	1	(15)	(187)	7	2,206	7	65%
Chevron	1,979	214	43	4	(5)	(240)	5	1,995	8	33%
EOG Resources	1,662	383	114	3	(15)	(158)	9	1,989	9	37%
BHP Billiton Group	1,519	499	(268)	(2)	-	(130)	11	1,618	10	62%
EQT	1,001	341	32	79	(0)	(61)	19	1,391	11	91%
Range Resources	1,084	289	75	-	(24)	(57)	20	1,367	12	69%
Royal Dutch Shell	1,295	200	14	2	-	(154)	10	1,358	13	27%
Apache	1,424	254	13	0	(223)	(121)	12	1,347	14	33%
Antero Resources	822	597	(115)	-	-	(32)	34	1,273	15	88%
Southwestern Energy	670	547	54	1	-	(109)	13	1,163	16	100%
Continental Resources	785	445	(96)	0	-	(50)	25	1,084	17	32%
Linn Energy	799	88	(26)	268	(12)	(50)	24	1,067	18	47%
CONSOL Energy	666	272	46	-	-	(29)	36	955	19	97%
Cabot Oil & Gas	640	288	72	-	(22)	(69)	17	909	20	97%
Pioneer Natural Res.	1,086	152	(300)	0	(26)	(67)	18	845	21	38%
WPX Energy	748	89	29	-	(0)	(73)	16	794	22	76%
Marathon Oil	649	164	45	16	(14)	(74)	15	787	23	22%
Noble Energy	575	211	64	24	(44)	(56)	21	774	24	57%
EnCana	815	108	(78)	2	(0)	(90)	14	757	25	85%
QEP Resources	656	131	(55)	2	(6)	(51)	23	677	26	63%
Hess	540	233	(57)	-	(3)	(54)	22	659	27	12%
Ultra Petroleum	513	246	(128)	10	-	(39)	30	602	28	94%
Newfield Exploration	533	78	5	1	(1)	(40)	29	577	29	48%
EP Energy	612	155	24	-	(202)	(41)	28	548	30	33%
Concho Resources	447	105	(18)	2	-	(34)	33	503	31	39%
Berry Petroleum	275	16	196	-	(3)	(15)	48	469	32	20%
Denbury Resources	409	0	42	43	-	(26)	38	468	33	17%
Whiting Petroleum	379	109	12	17	(44)	(34)	31	439	34	11%
SandRidge Energy	566	119	(19)	0	(199)	(34)	32	433	35	53%
SM Energy Company	293	141	60	1	(18)	(48)	26	429	36	46%
Cimarex Energy	376	121	(36)	0	(3)	(42)	27	416	37	52%
Energen	346	37	5	0	(15)	(25)	39	348	38	34%
Talisman Energy	246	100	0	-	-	(31)	35	314	39	88%
Rosetta Resources	202	83	(11)	23	0	(18)	42	279	40	41%
PDC Energy	193	142	(46)	1	(16)	(7)	70	266	41	46%
National Fuel Gas	208	63	8	0	0	(20)	41	258	42	84%
Murphy Oil	178	67	22	0	0	(21)	40	246	43	13%

Reserve changes: United States										
	Beginning Year Reserves	Extensions & Discoveries	Improved Recovery, & Revisions Transfers	Purchases	Sales	Production	Prod. Rank	Year End Reserves	Res. Rank	% Gas
	MMboe	MMboe	MMboe	MMboe	MMboe	MMboe		MMboe		
Oasis Petroleum	143	46	5	46	0	(12)	52	228	44	13%
Swift Energy	192	76	(37)	0	(1)	(12)	54	219	45	62%
Breitbart Energy Partners	149	1	14	61	(0)	(11)	60	214	46	40%
Laredo Petroleum	189	70	(15)	0	(29)	(11)	59	204	47	45%
EV Energy Partners	151	36	10	12	(0)	(10)	63	199	48	69%
Bill Barrett	174	76	2	0	(40)	(14)	49	197	49	39%
EXCO Resources	168	14	25	67	(60)	(27)	37	187	50	90%
Energy XXI (Bermuda)	120	47	14	13	0	(16)	46	179	51	25%
Quicksilver Resources	200	8	40	0	(59)	(12)	55	177	52	77%
Vanguard Natural Res.	152	3	2	28	0	(13)	50	172	53	57%
Kodiak Oil & Gas Unit	95 150	56 31	4 (1)	25 0	(2) (3)	(11) (17)	62 45	167 160	54 55	17% 61%
Chaparral Energy	146	25	(1)	5	(7)	(10)	66	158	56	32%
Petrobras	85	46	22	0	(4)	(5)	80	145	57	15%
Stone Energy	129	20	12	0	(0)	(17)	44	144	58	53%
Rex Energy	103	52	(8)	0	0	(6)	77	142	59	61%
Questar	122	26	(20)	23	0	(11)	61	141	60	96%
Penn Virginia	113	47	(28)	11	0	(7)	72	136	61	39%
Halcon Resources	109	70	(10)	3	(23)	(12)	53	136	62	9%
Midstates Petroleum	75	44	(20)	38	0	(9)	68	128	63	37%
Kinder Morgan Energy	89	0	(3)	52	0	(15)	47	122	64	0%
Aurora Oil and Gas	70	33	18	7	0	(6)	76	122	65	23%
Loews	138	1	(10)	0	(0)	(8)	69	120	66	72%
W&T Offshore	118	20	(4)	2	(0)	(18)	43	118	67	37%
Approach Resources	95	27	(5)	0	0	(4)	88	115	68	31%
Enerplus	75	28	6	16	0	(12)	56	113	69	56%
QR Energy LP	99	5	4	7	0	(7)	73	109	70	23%
Forest Oil	227	25	(2)	0	(133)	(13)	51	104	71	73%
Carrizo Oil & Gas	115	43	6	0	(52)	(10)	65	102	72	31%
Comstock Resources	119	13	4	0	(27)	(12)	57	97	73	77%
Legacy Reserves LP	83	0	7	5	(1)	(7)	71	88	74	30%
Northern Oil & Gas	68	35	(14)	0	0	(4)	84	84	75	10%
MDU Resources Group	80	19	0	0	(8)	(10)	64	82	76	40%
EPL Oil & Gas	77	11	2	0	(2)	(9)	67	80	77	36%
Magnum Hunter Res.	86	1	9	0	(16)	(5)	79	76	78	54%
Goodrich Petroleum	56	9	15	0	(0)	(5)	82	75	79	73%
Clayton Williams Energy	75	28	(1)	0	(27)	(5)	78	70	80	18%
Bonanza Creek Energy	130	10	(66)	2	0	(6)	75	70	81	33%
Diamondback Energy	40	26	(10)	11	0	(3)	92	64	82	16%
Alta Mesa Holdings	52	21	(7)	2	(2)	(6)	74	60	83	37%
Resolute Energy	79	6	(23)	8	(6)	(4)	85	59	84	12%
Sanchez Energy	31	17	(10)	25	0	(4)	87	59	85	11%
Gastar Exploration	30	15	2	15	(4)	(3)	91	55	86	55%
Venoco	52	5	(1)	0	0	(3)	90	53	87	4%
PetroQuest Energy	38	7	6	6	(0)	(5)	81	52	88	82%
Crescent Point Energy	41	14	1	0	0	(5)	83	51	89	11%
Repsol	53	0	4	0	0	(12)	58	45	90	16%
Gulfport Energy	14	29	(1)	0	0	(4)	86	38	91	64%
Warren Resources	25	8	3	0	0	(2)	98	34	92	52%
PrimeEnergy	26	8	1	0	0	(2)	101	32	93	26%
Abraxas Petroleum	30	11	0	0	(9)	(2)	103	31	94	26%
Baytex Energy	18	15	(2)	0	0	(1)	109	30	95	18%

Reserve changes: United States

	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
LRR Energy	30	0	1	0	0	(2)	94	28	96	53%
Panhandle Oil and Gas	21	7	(0)	0	0	(2)	97	25	97	87%
Equal Energy	21	2	4	0	0	(2)	95	24	98	45%
PostRock Energy	14	2	4	1	0	(3)	93	19	99	77%
Saratoga Resources	17	1	(3)	3	0	(1)	111	17	100	46%
GeoMet	23	0	3	0	(7)	(2)	100	17	101	100%
Triangle Petroleum	1	13	2	0	(0)	(0)	113	16	102	14%
Dune Energy	15	1	(0)	0	(0)	(1)	112	16	103	54%
Constellation Energy Part.	15	1	7	1	(8)	(2)	105	15	104	100%
Dorchester Minerals	14	0	3	0	0	(2)	99	15	105	66%
Callon Petroleum Co.	14	9	(3)	0	(4)	(1)	107	15	106	20%
Black Hills	13	2	0	0	(0)	(2)	106	14	107	73%
Mid-Con Energy Partners	13	0	0	1	0	(1)	110	14	108	2%
Escalera Resources	13	0	1	0	0	(2)	102	12	109	97%
Magellan Petroleum	9	0	(1)	0	0	(0)	116	7	110	0%
Endeavour International	2	0	1	0	(1)	(0)	114	2	111	100%
Zargon Oil & Gas	2	0	(0)	0	0	(0)	119	2	112	0%
Adams Res. and Energy	2	0	(0)	0	(0)	(0)	115	1	113	74%
FieldPoint Petroleum	2	0	(0)	0	0	(0)	117	1	114	25%
Royale Energy	1	0	(0)	0	(0)	(0)	120	1	115	94%
ZaZa Energy	3	0	0	1	(3)	(0)	118	1	116	53%
FX Energy	1	0	(0)	0	0	(0)	121	0	117	0%
VAALCO Energy	0	0	0	0	0	0	NA	0	NA	0%
All Integrated & Diversified Oils	16,388	1,377	(287)	66	(86)	(1,169)	-	16,288	-	50%
All E&Ps	38,733	8,732	543	1,067	(1,688)	(3,269)	-	44,117	-	54%
Large E&Ps	27,317	5,820	539	470	(646)	(2,310)	1	31,191	1	57%
Global Integrated Oils	14,731	831	(46)	68	(83)	(1,022)	2	14,480	2	49%
Mid-Sized E&Ps	6,982	1,781	111	224	(595)	(558)	3	7,945	3	44%
Small E&Ps	3,763	890	(89)	325	(414)	(340)	4	4,136	4	44%
Regional Integrations	1,657	545	(241)	(2)	(4)	(147)	5	1,808	5	57%
Smallest E&Ps	732	223	(48)	49	(33)	(65)	6	857	6	51%
Balanced companies	36,702	4,991	(131)	617	(850)	(2,860)	1	38,470	1	50%
Gas-Weighted companies	10,166	3,291	(31)	191	(506)	(913)	2	12,199	2	86%
Oil-Weighted companies	8,335	1,828	407	324	(419)	(671)	3	9,805	3	21%

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Reserve changes: Canada

Reserve changes: Canada										
	Beginning Year	Extensions & Discoveries	Improved Recovery, Transfers & Revisions	Purchases	Sales	Production	Prod. Rank	Year End Reserves	Res. Rank	% Gas
	MMboe	MMboe	MMboe	MMboe	MMboe	MMboe		MMboe		
UNIVERSE*	27,758	2,320	1,635	799	(448)	(1,557)	-	30,507	-	19%
Exxon Mobil	4,600	5	139	102	(2)	(127)	3	4,717	1	4%
Suncor Energy	3,329	881	94	-	(116)	(155)	2	4,033	2	0%
Canadian Natural Resources	3,784	110	198	25	(0)	(205)	1	3,912	3	14%
Imperial Oil	3,574	-	88	54	-	(95)	8	3,621	4	3%
Royal Dutch Shell	2,014	63	460	-	-	(105)	4	2,432	5	10%
ConocoPhillips	2,270	80	171	0	(1)	(100)	5	2,421	6	13%
Cenovus Energy	1,715	136	87	-	(5)	(94)	9	1,839	7	7%
MEG Energy	985	132	(4)	-	-	(10)	28	1,103	8	0%
Husky Energy	896	118	49	1	(1)	(99)	6	965	9	28%
CNOOC	-	49	186	590	-	(22)	21	803	10	4%
EnCana	860	111	(50)	-	(51)	(98)	7	773	11	86%
Devon Energy	727	49	48	-	(1)	(66)	10	757	12	17%
Marathon Oil	653	6	36	-	-	(15)	25	680	13	0%
Canadian Oil Sands	693	-	(10)	-	-	(32)	14	651	14	0%
Tourmaline Oil	434	71	8	14	(10)	(24)	17	493	15	88%
Apache	541	74	18	-	(132)	(39)	12	462	16	63%
Penn West Petroleum	384	3	37	0	(23)	(43)	11	358	17	31%
Crescent Point Energy	315	23	25	4	(0)	(34)	13	333	18	8%
ARC Resources	309	27	12	0	(5)	(29)	15	315	19	64%
Peyto Expl. & Dev.	247	49	(4)	0	-	(19)	22	273	20	89%
Murphy Oil	248	7	17	-	-	(22)	20	250	21	38%
Pengrowth Energy	224	63	25	1	(40)	(25)	16	247	22	33%
Talisman Energy	230	31	11	1	(3)	(23)	19	247	23	76%
Bonavista Energy	216	10	12	12	(4)	(23)	18	222	24	64%
Birchcliff Energy	168	41	(1)	-	(2)	(9)	30	198	25	90%
BP	196	-	(5)	-	-	(1)	47	190	26	1%
Advantage Oil & Gas	178	19	10	-	(19)	(9)	29	179	27	89%
Lightstream Resources	114	4	6	1	(2)	(15)	26	108	28	21%
Enerplus	114	6	5	2	(7)	(15)	24	105	29	48%
Baytex Energy	102	17	(4)	-	(1)	(16)	23	99	30	10%
Bellatrix Exploration	42	26	11	25	(1)	(6)	35	97	31	66%
Paramount Resources	46	36	7	-	(2)	(7)	33	79	32	60%
NuVista Energy	52	27	2	-	(5)	(6)	37	71	33	72%
Trilogy Energy	61	14	3	0	-	(11)	27	67	34	64%
Long Run Exploration	47	1	9	6	(1)	(8)	31	55	35	57%
Athabasca Oil	48	4	1	-	-	(2)	44	51	36	14%
Bonterra Energy	29	1	5	16	-	(4)	39	47	37	27%
Vermilion Energy	35	10	7	-	-	(5)	38	47	38	50%
Quicksilver Resources	44	2	5	-	-	(7)	34	44	39	100%
Perpetual Energy	32	6	5	0	(6)	(6)	36	31	40	88%
EOG Resources	36	1	(1)	0	0	(7)	32	28	41	60%
Freehold Royalties	15	1	1	0	0	(3)	41	14	42	41%
Santonia Energy	14	1	1	0	(1)	(1)	45	14	43	84%
Chinook Energy	16	1	(0)	0	(1)	(3)	42	14	44	64%

Reserve changes: Canada

	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, & Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
Zargon Oil & Gas	14	2	1	0	(2)	(2)	43	13	45	29%
Corridor Resources	9	0	1	0	0	(0)	49	10	46	98%
Sasol	9	0	3	0	0	(4)	40	8	47	98%
Anderson Energy	9	0	1	0	(4)	(1)	46	5	48	65%
Sonde Resources	4	0	0	0	0	0	NA	4	49	74%
Barnwell Industries	3	0	0	0	0	(1)	48	3	50	65%
Abraxas Petroleum	0	0	(0)	0	0	(0)	50	0	51	52%
Valeura Energy	0	0	0	0	0	(0)	51	0	52	45%
Maurel & Prom SA	0	0	0	0	0	0	NA	0	NA	0%
All Integrated & Diversified Oils	13,139	1,203	826	103	(124)	(584)	-	14,563	-	9%
All E&Ps	14,355	1,116	809	696	(323)	(973)	-	15,680	-	28%
Large E&Ps	10,086	643	614	615	(188)	(585)	1	11,185	1	19%
Regional Integrated	9,524	1,135	320	55	(122)	(446)	2	10,466	2	5%
Global Integrated Oils	6,809	69	593	102	(2)	(233)	4	7,339	3	6%
Mid-Sized E&Ps	3,229	260	132	32	(88)	(275)	3	3,290	4	43%
Small E&Ps	801	163	34	26	(30)	(77)	5	916	5	61%
Smallest E&Ps	239	50	30	23	(17)	(36)	6	289	6	58%
Oil-Weighted companies	17,118	1,556	837	690	(190)	(892)	1	19,119	1	8%
Balanced companies	11,297	405	897	147	(160)	(557)	2	12,029	2	15%
Gas-Weighted companies	2,274	359	(12)	15	(98)	(202)	3	2,336	3	86%

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS Herold

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Reserve changes: Europe

Reserve changes: Europe										
	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
UNIVERSE*	18,144	265	400	307	(454)	(1,727)	-	16,935	-	56%
Statoil ASA	3,872	172	225	14	(110)	(427)	1	3,746	1	66%
Royal Dutch Shell	3,154	2	100	30	-	(276)	2	3,011	2	73%
Exxon Mobil	2,504	1	44	-	-	(272)	3	2,277	3	86%
Total	1,619	11	18	0	(51)	(135)	4	1,462	4	54%
Eni S.p.A.	1,070	5	70	-	(13)	(119)	5	1,013	5	46%
BP	1,286	-	(95)	2	(149)	(50)	8	994	6	23%
ConocoPhillips	818	46	(2)	-	(3)	(73)	6	786	7	38%
OMV AG	819	4	21	-	-	(72)	7	771	8	46%
Hess	476	5	(35)	-	(97)	(18)	17	331	9	12%
BG Group	290	(5)	3	-	-	(37)	9	252	10	46%
Canadian Natural Resources	249	-	(3)	8	-	(7)	19	247	11	6%
MOL	258	1	7	0	(0)	(28)	13	239	12	60%
Chevron	200	9	36	-	(0)	(35)	11	210	13	21%
BASF SE	131	-	20	63	-	(23)	15	190	14	47%
Lundin Petroleum AB	179	-	4	-	-	(11)	18	172	15	8%
CNOOC	-	1	20	182	-	(32)	12	171	16	3%
Apache	169	2	0	6	-	(27)	14	150	17	12%
Bankers Petroleum	118	-	14	-	(0)	(6)	21	127	18	0%
Marathon Oil	106	6	33	-	-	(36)	10	109	19	18%
Suncor Energy	125	-	3	-	-	(20)	16	108	20	1%
Vermilion Energy	52	4	7	1	-	(6)	20	58	21	44%
JKX Oil & Gas	30	-	5	-	-	(2)	26	33	22	91%
Endeavour International	23	-	2	-	-	(3)	24	22	23	43%
Talisman Energy	125	-	(106)	-	-	(6)	22	14	24	22%
TransAtlantic Petroleum	12	2	0	-	(2)	-	NA	12	25	21%
FX Energy	7	1	(0)	-	-	(1)	28	7	26	100%
Serinus Energy	-	(0)	6	-	-	(1)	27	5	27	100%
Repsol	5	-	1	-	-	(2)	25	4	28	0%
Valeura Energy	1	-	1	-	-	(0)	29	1	29	95%
Heritage Oil	-	-	-	-	-	-	NA	-	NA	0%
Magellan Petroleum	-	-	-	-	-	-	NA	-	NA	0%
Murphy Oil	24	-	-	-	(24)	(0)	30	-	NA	0%
All Integrated & Diversified Oils	15,333	199	453	109	(323)	(1,495)	-	14,277	-	62%
All E&Ps	2,518	66	(53)	198	(131)	(232)	-	2,365	-	21%
Global Integrated Oils	8,763	23	103	32	(200)	(768)	1	7,953	1	66%
Regional Integrations	6,569	177	351	77	(123)	(727)	2	6,324	2	57%
Large E&Ps	1,943	59	(93)	196	(100)	(197)	3	1,807	3	22%
Small E&Ps	386	4	30	1	(6)	(24)	4	390	4	18%
Mid-Sized E&Ps	147	0	1	1	(24)	(6)	5	120	5	8%
Smallest E&Ps	43	3	9	0	(2)	(5)	6	47	6	53%
Balanced companies	16,258	251	436	54	(326)	(1,563)	1	15,110	1	60%
Oil-Weighted companies	1,294	13	36	190	(128)	(129)	2	1,277	2	8%
Gas-Weighted companies	299	1	(73)	63	0	(35)	3	255	3	54%

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS

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Reserve changes: Africa & Middle East

Reserve changes: Africa & Middle East										
	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
UNIVERSE*	18,259	473	430	30	(30)	(1,762)	-	17,401	-	31%
Total	3,212	23	(86)	-	-	(267)	2	2,882	1	27%
Eni S.p.A.	2,846	59	221	4	-	(310)	1	2,821	2	45%
Chevron	1,644	18	109	-	(1)	(157)	4	1,612	3	31%
Exxon Mobil	1,656	52	9	(1)	-	(178)	3	1,539	4	9%
Royal Dutch Shell	1,062	18	71	-	-	(124)	5	1,027	5	37%
BP	1,077	9	10	-	-	(120)	6	976	6	47%
Occidental Petroleum	929	75	67	-	-	(94)	7	976	7	46%
Sasol	1,022	-	15	-	-	(66)	8	971	8	26%
Noble Energy	595	38	32	-	-	(42)	12	622	9	85%
Marathon Oil	609	9	29	1	-	(52)	11	595	10	43%
ConocoPhillips	398	23	39	-	(23)	(28)	15	409	11	39%
INPEX	371	-	23	-	-	(31)	13	363	12	0%
Tullow Oil	342	26	10	-	-	(24)	16	355	13	8%
Statoil ASA	356	8	45	-	-	(66)	9	343	14	16%
Afren	210	26	68	-	(1)	(17)	18	286	15	0%
Apache	273	51	1	0	-	(54)	10	271	16	50%
DNO ASA	244	26	4	-	-	(14)	19	260	17	0%
Hess	234	2	-	-	(4)	(22)	17	210	18	0%
Maurel & Prom SA	195	-	(4)	-	-	(7)	24	184	19	0%
CNOOC	136	1	19	27	-	(28)	14	155	20	0%
Repsol	150	-	0	-	-	(13)	20	138	21	18%
BASF SE	257	-	(117)	-	-	(12)	21	128	22	9%
Canadian Natural Resources	93	-	(1)	-	-	(6)	26	86	23	7%
OMV AG	56	-	3	-	-	(10)	22	48	24	42%
Kosmos Energy	44	-	12	-	-	(8)	23	47	25	4%
Mitsui	24	4	3	-	-	(7)	25	24	26	23%
TransGlobe Energy	16	3	1	-	-	(3)	27	16	27	0%
VAALCO Energy	8	1	1	-	-	(2)	28	7	28	3%
Calvalley Petroleum	6	0	0	-	-	(1)	30	6	29	0%
Chinook Energy	9	1	(5)	-	-	(1)	29	5	30	18%
Harvest Natural Resources	-	-	-	-	-	-	NA	-	NA	0%
Heritage Oil	-	-	-	-	-	-	NA	-	NA	0%
MOL	-	-	-	-	-	-	NA	-	NA	0%
Murphy Oil	-	-	-	-	-	-	NA	-	NA	0%
Petrobras	148	-	(148)	-	-	-	NA	-	NA	0%
Serinus Energy	-	-	-	-	-	-	NA	-	NA	0%
All Integrated & Diversified Oils	13,508	191	135	3	(1)	(1,328)	-	12,508	-	31%
All E&Ps	4,751	282	295	28	(28)	(434)	-	4,893	-	32%
Global Integrated Oils	8,650	120	113	(1)	(1)	(845)	1	8,036	1	28%
Regional Integrated	4,858	71	22	4	0	(483)	2	4,472	2	37%
Large E&Ps	3,638	198	208	28	(27)	(358)	3	3,688	3	41%

Reserve changes: Africa & Middle East

	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
Mid-Sized E&Ps	797	79	82	0	(1)	(55)	4	902	4	3%
Small E&Ps	200	0	(4)	0	0	(7)	6	189	5	0%
Smallest E&Ps	116	4	8	0	0	(14)	5	114	6	5%
Balanced companies	13,554	300	471	3	(24)	(1,386)	1	12,918	1	34%
Oil-Weighted companies	4,273	169	73	28	(5)	(344)	2	4,193	2	24%
Gas-Weighted companies	431	4	(114)	0	0	(32)	3	290	3	14%

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS

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Reserve changes: Asia-Pacific

Reserve changes: Asia-Pacific										
	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
UNIVERSE*	42,353	3,601	(1,332)	124	(25)	(2,976)	-	41,746	-	57%
PetroChina	22,282	2,602	(1,109)	-	-	(1,400)	1	22,374	1	52%
Sinopec	3,965	294	108	-	-	(443)	2	3,923	2	28%
CNOOC	2,693	301	46	1	-	(289)	3	2,752	3	35%
Chevron	1,843	-	45	-	-	(36)	13	1,852	4	93%
Total	1,469	200	44	118	-	(92)	5	1,739	5	60%
Exxon Mobil	1,511	1	17	-	-	(40)	12	1,490	6	84%
Royal Dutch Shell	1,075	-	136	-	(13)	(43)	11	1,154	7	88%
Woodside Petroleum	1,177	-	3	-	(1)	(87)	6	1,093	8	87%
BP	1,031	88	(35)	-	-	(57)	9	1,027	9	92%
BHP Billiton Group	896	2	23	-	-	(84)	7	837	10	72%
Santos	1,411	7	(745)	2	-	(51)	10	623	11	87%
ConocoPhillips	654	17	(3)	-	-	(81)	8	587	12	58%
PTT E&P Public	513	19	17	-	-	(94)	4	456	13	75%
Oil Search	338	-	(0)	-	-	(7)	22	331	14	81%
Apache	342	5	(0)	-	-	(21)	17	326	15	82%
Talisman Energy	232	5	(6)	-	-	(30)	16	201	16	85%
Murphy Oil	155	31	38	-	-	(31)	15	193	17	35%
Eni S.p.A.	119	-	55	-	-	(11)	19	163	18	87%
Mitsui	132	-	24	-	-	(34)	14	122	19	69%
Salamander Energy	72	-	3	3	(8)	(5)	24	64	20	50%
Niko Resources	30	25	(0)	-	-	(7)	21	48	21	97%
Newfield Exploration	34	2	9	-	-	(9)	20	36	22	0%
Lundin Petroleum AB	15	-	1	-	-	(1)	26	16	23	12%
Vermilion Energy	10	3	3	-	-	(2)	25	14	24	0%
Tap Oil	6	-	-	-	(3)	-	NA	4	25	0%
Carnarvon Petroleum	4	-	(0)	-	-	(0)	27	3	26	0%
Magellan Petroleum	2	-	0	-	-	(0)	28	2	27	100%
Heritage Oil	-	-	-	-	-	-	NA	-	NA	0%
Maurel & Prom SA	-	-	-	-	-	-	NA	-	NA	0%
Repsol	-	-	-	-	-	-	NA	-	NA	0%
Serinus Energy	-	-	-	-	-	-	NA	-	NA	0%
All Integrated & Diversified Oils	34,444	3,186	(693)	118	(13)	(2,239)	-	34,803	-	56%
All E&Ps	7,909	415	(639)	6	(12)	(737)	-	6,943	-	59%
Regional Integrated	27,393	2,897	(900)	0	0	(1,971)	1	27,419	1	49%
Global Integrated Oils	6,929	289	207	118	(13)	(268)	3	7,262	2	82%
Large E&Ps	5,611	346	58	1	(1)	(601)	2	5,414	3	56%
Mid-Sized E&Ps	2,096	40	(707)	2	0	(114)	4	1,317	4	74%
Small E&Ps	160	3	11	3	(8)	(14)	5	154	5	22%
Smallest E&Ps	42	25	(1)	0	(3)	(8)	6	57	6	86%
Balanced companies	31,497	2,919	(822)	121	(21)	(1,896)	1	31,798	1	60%
Oil-Weighted companies	6,902	626	196	1	(3)	(770)	2	6,953	2	30%
Gas-Weighted companies	3,832	56	(707)	2	(1)	(309)	3	2,873	3	84%

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS

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Reserve changes: South & Central America

Reserve changes: South & Central America										
	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
UNIVERSE*	31,631	1,536	1,616	89	(58)	(2,936)	-	31,879	-	24%
PEMEX	13,543	77	798	-	-	(1,294)	1	13,125	1	16%
Petrobras	12,630	1,004	143	0	(43)	(841)	2	12,894	2	16%
Ecopetrol	1,851	74	256	9	(3)	(243)	3	1,945	3	26%
BP	1,694	-	65	-	-	(148)	5	1,612	4	95%
Repsol	982	223	104	-	-	(90)	6	1,220	5	80%
YPF	953	59	210	14	(9)	(175)	4	1,053	6	40%
Pacific Rubiales Energy	331	46	40	20	(0)	(54)	7	384	7	24%
BASF SE	204	-	(0)	-	-	(24)	8	179	8	94%
Royal Dutch Shell	85	5	4	24	-	(10)	11	107	9	11%
Apache	102	4	0	-	-	(16)	10	90	10	76%
EOG Resources	101	13	(4)	-	-	(22)	9	88	11	98%
Global Energy Development	40	-	(2)	9	-	(0)	18	47	12	0%
Gran Tierra Energy	41	5	5	-	-	(8)	12	42	13	5%
Canacol Energy	18	3	(9)	10	(0)	(2)	15	20	14	47%
Apco Oil & Gas Int'l	19	0	2	-	-	(3)	14	18	15	50%
BPZ Resources	16	0	(0)	-	-	(1)	17	16	16	0%
Niko Resources	-	16	0	-	-	-	NA	16	17	100%
Parex Resources	8	7	3	1	-	(5)	13	15	18	0%
CNOOC	-	-	-	2	-	-	NA	2	19	0%
Maurel & Prom SA	3	-	-	-	(3)	(0)	19	-	NA	0%
All Integrated & Diversified Oils	30,937	1,442	1,581	48	(54)	(2,823)	-	31,130	-	23%
All E&Ps	693	95	36	41	(3)	(112)	-	749	-	39%
Regional Integrations	30,163	1,437	1,512	24	(54)	(2,666)	1	30,415	1	20%
Global Integrated Oils	1,779	5	69	24	0	(158)	2	1,719	2	90%
Mid-Sized E&Ps	345	46	40	20	(0)	(56)	3	395	3	26%
Large E&Ps	203	17	(4)	2	0	(38)	4	180	4	86%
Smallest E&Ps	142	31	(1)	19	(0)	(19)	5	174	5	21%
Small E&Ps	3	0	0	0	(3)	(0)	6	0	NA	0%
Oil-Weighted companies	28,477	1,214	1,244	41	(49)	(2,447)	1	28,480	1	17%
Balanced companies	3,154	84	279	63	(9)	(407)	2	3,165	2	72%
Gas-Weighted companies	1,186	239	104	0	0	(114)	3	1,415	3	82%

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS

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Reserve changes: Russia & Caspian

Reserve changes: Russia & Caspian										
	Beginning Year Reserves MMboe	Extensions & Discoveries MMboe	Improved Recovery, Transfers & Revisions MMboe	Purchases MMboe	Sales MMboe	Production MMboe	Prod. Rank	Year End Reserves MMboe	Res. Rank	% Gas
UNIVERSE*	63,088	2,283	3,208	18,106	(9,745)	(3,529)	-	73,412	-	26%
Rosneft Oil	16,773	1,279	1,203	13,063	-	(1,530)	1	30,788	1	0%
Lukoil	15,643	613	50	196	-	(743)	2	15,759	2	19%
Novatek	11,282	375	207	1,186	(1,213)	(400)	4	11,437	3	90%
Gazprom Neft	7,526	-	1,068	217	-	(449)	3	8,361	4	27%
BP	5,183	270	498	6,058	(5,177)	(352)	5	6,481	5	24%
TengizChevrOil	4,230	-	103	-	-	(234)	6	4,099	6	19%
Chevron	2,115	-	52	-	-	(117)	7	2,050	7	19%
Eni S.p.A.	1,010	-	31	-	-	(35)	9	1,005	8	32%
BASF SE	684	1	265	-	-	(66)	8	885	9	90%
Dragon Oil	401	-	13	-	-	(12)	10	403	10	23%
INPEX	188	-	11	-	-	(9)	11	190	11	4%
JKX Oil & Gas	64	-	(1)	-	-	(2)	12	61	12	99%
Heritage Oil	23	-	-	-	-	-	NA	23	13	0%
Max Petroleum	11	1	1	-	-	(1)	13	11	14	0%
Lundin Petroleum AB	7	-	0	-	-	(1)	15	6	15	0%
ConocoPhillips	4	-	1	-	-	(1)	14	4	16	0%
MOL	-	-	-	-	-	-	NA	-	NA	0%
All Integrated & Diversified Oils	46,819	1,908	2,874	16,920	(8,532)	(2,869)	-	57,120	-	14%
All E&Ps	16,210	375	334	1,186	(1,213)	(659)	-	16,233	-	69%
Regional Integrations	42,499	1,991	2,616	13,476	0	(2,883)	1	57,699	1	11%
Large E&Ps	15,705	375	322	1,186	(1,213)	(644)	2	15,730	2	70%
Global Integrated Oils	7,299	270	550	6,058	(5,177)	(469)	3	8,530	3	22%
Mid-Sized E&Ps	401	0	13	0	0	(12)	4	403	4	23%
Small E&Ps	71	0	(1)	0	0	(3)	5	67	5	90%
Smallest E&Ps	34	1	1	0	0	(1)	6	34	6	0%
Oil-Weighted companies	44,614	1,893	2,438	13,476	0	(2,970)	1	59,449	1	10%
Gas-Weighted companies	12,030	376	471	1,186	(1,213)	(468)	3	12,382	2	90%
Balanced companies	8,500	270	592	6,058	(5,177)	(514)	2	9,729	3	23%

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

Source: IHS

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Performance metrics: Worldwide

Performance metrics: Worldwide											
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	2013	3-Year	3-Year	2013	3-Year	2011-13	3-Year	2013	3-Year	2011-13	3-Year
		\$/boe			\$/boe	Rank			\$/boe	\$/boe	
UNIVERSE*	\$4.86	\$5.96	-	\$20.43	\$19.50	138%	-	\$14.03	\$16.11	184%	-
Novatek	\$1.57	\$1.88	12	\$9.67	\$2.26	361%	1	\$4.23	\$2.14	516%	1
Dorchester Minerals	NA	NA	NA	\$2.03	\$2.26	124%	2	\$2.03	\$2.26	124%	2
DNO ASA	NA	NA	NA	\$9.83	\$3.25	432%	3	\$9.83	\$3.07	457%	3
Gazprom Neft	NA	NA	NA	\$5.30	\$4.23	229%	6	\$4.40	\$3.65	266%	4
CONSOL Energy	NA	NA	NA	\$3.27	\$3.73	712%	4	\$3.27	\$3.83	712%	5
Antero Resources	NA	\$12.28	68	\$4.26	\$3.76	1881%	5	\$4.30	\$3.84	1898%	6
Cabot Oil & Gas	NA	NA	NA	\$3.30	\$4.56	461%	7	\$3.30	\$4.56	461%	7
MEG Energy	NA	NA	NA	\$8.68	\$4.63	2639%	8	\$8.68	\$4.63	2639%	8
Range Resources	NA	NA	NA	\$4.00	\$4.97	704%	9	\$4.00	\$4.97	704%	9
EQT	\$1.15	\$2.53	17	\$3.57	\$5.70	417%	11	\$3.14	\$5.29	479%	10
Rosneft Oil	\$5.39	\$5.39	29	\$17.46	\$5.46	191%	10	\$6.16	\$5.41	589%	11
Birchcliff Energy	NA	\$16.10	93	\$6.27	\$6.57	559%	12	\$6.27	\$6.71	568%	12
Advantage Oil & Gas	NA	NA	NA	\$6.69	\$6.73	342%	13	\$6.69	\$6.73	342%	13
Rex Energy	NM	NM	NA	\$7.68	\$7.03	992%	14	\$7.74	\$7.06	992%	14
PrimeEnergy	NA	NA	NA	\$3.25	\$7.16	426%	15	\$3.25	\$7.09	430%	15
BP	\$0.30	\$0.84	4	\$14.83	\$17.74	102%	59	\$3.22	\$7.13	275%	16
Bellatrix Exploration	\$0.52	\$1.42	9	\$7.87	\$9.47	464%	22	\$4.84	\$7.15	651%	17
Gulfsands Petroleum	NA	NA	NA	NM	\$7.19	904%	16	NM	\$7.19	904%	18
Panhandle Oil and Gas	\$4.49	\$5.65	31	\$4.36	\$8.48	175%	17	\$4.36	\$7.64	248%	19
BASF SE	\$17.94	\$6.81	38	\$5.75	\$8.50	119%	18	\$7.94	\$8.05	163%	20
PDC Energy	\$27.53	\$5.02	27	\$4.14	\$10.11	556%	25	\$4.39	\$8.86	736%	21
Southwestern Energy	\$0.83	\$0.86	5	\$3.36	\$8.99	229%	20	\$3.36	\$8.98	229%	22
Abraxas Petroleum	NA	NM	NA	\$8.17	\$8.86	528%	19	\$8.17	\$9.16	528%	23
Bonterra Energy	NA	\$1.00	6	\$19.11	\$20.12	166%	71	\$5.32	\$9.34	380%	24
Peyto Expl. & Dev.	NM	\$0.31	1	\$14.75	\$10.73	283%	27	\$14.80	\$9.79	311%	25
National Fuel Gas	NA	\$6.63	37	\$7.88	\$10.05	408%	23	\$7.98	\$9.92	424%	26
ZaZa Energy	\$4.93	\$1.01	8	NM	\$21.79	888%	85	\$59.74	\$9.93	2071%	27
INPEX	NA	\$12.22	66	NM	\$10.06	261%	24	NM	\$10.11	268%	28
Gastar Exploration	\$12.95	\$12.94	74	\$9.38	\$9.24	635%	21	\$11.02	\$10.18	853%	29
Vanguard Natural Res.	\$12.07	\$9.71	53	\$10.54	\$27.17	21%	107	\$11.82	\$10.39	545%	30
NuVista Energy	NA	\$7.21	40	\$7.26	\$10.55	222%	26	\$7.53	\$10.43	230%	31
EV Energy Partners	\$5.08	\$6.32	35	\$2.50	\$40.24	42%	146	\$3.02	\$10.53	337%	32
Cenovus Energy	NA	NM	NA	\$13.37	\$10.77	298%	28	\$13.37	\$10.80	298%	33
Tourmaline Oil	\$13.64	\$5.27	28	\$13.41	\$12.72	395%	35	\$13.44	\$10.93	520%	34
Rosetta Resources	\$12.67	\$12.50	71	\$21.23	\$11.06	578%	29	\$19.18	\$11.19	634%	35
Corridor Resources	NA	NA	NA	\$3.29	\$11.27	86%	30	\$3.29	\$11.27	86%	36
Suncor Energy	NA	NM	NA	\$6.02	\$11.60	282%	31	\$6.02	\$11.60	282%	37
SM Energy Company	\$22.97	\$22.27	119	\$8.44	\$11.94	365%	32	\$8.53	\$11.98	366%	38
Aurora Oil and Gas	\$5.65	\$2.77	19	\$11.23	\$13.67	1081%	44	\$10.58	\$11.98	1279%	39
Warren Resources	\$12.77	\$2.12	14	\$6.75	\$14.56	245%	47	\$6.82	\$12.10	305%	40
Continental Resources	\$36.27	\$9.70	52	\$10.85	\$12.60	696%	34	\$10.89	\$12.31	774%	41
PEMEX	NA	NA	NA	\$19.54	\$12.55	91%	33	\$19.54	\$12.55	91%	42
Questar	\$4.65	\$4.65	22	\$21.20	\$21.70	66%	84	\$8.22	\$12.57	143%	43
Imperial Oil	\$0.62	\$0.62	3	NM	\$13.07	482%	40	\$55.14	\$12.59	502%	44

Performance metrics: Worldwide												
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs				
	2013	3-Year		2013	3-Year		2011-13 F&D Repl. %	3-Year Rank	2013	3-Year		3-Year Rank
		2011-13	3-Year		2011-13	3-Year				2011-13	3-Year	
		\$/boe	Rank		\$/boe	Rank				Reserve	Rank	
Approach Resources	\$9.19	\$1.72	11	\$15.06	\$14.57	677%	48	\$15.02	\$12.62	798%	45	
Lukoil	\$11.27	\$9.56	51	\$18.53	\$13.13	97%	41	\$17.03	\$12.79	107%	46	
TengizChevrOil	NA	NA	NA	\$19.94	\$12.81	49%	37	\$19.94	\$12.81	49%	47	
EP Energy	NA	NM	NA	\$10.64	\$12.81	270%	38	\$10.65	\$12.82	270%	48	
Repsol	NA	\$11.41	59	\$10.81	\$12.94	180%	39	\$11.03	\$12.90	184%	49	
Equal Energy	NA	\$13.77	81	\$4.96	\$12.74	152%	36	\$4.96	\$13.11	236%	50	
Swift Energy	NA	NA	NA	\$13.58	\$13.25	404%	42	\$13.58	\$13.52	404%	51	
Perpetual Energy	\$25.36	\$43.63	142	\$10.07	\$13.40	130%	43	\$10.12	\$13.64	131%	52	
WPX Energy	NA	NA	NA	\$9.96	\$13.99	117%	45	\$9.96	\$13.87	118%	53	
LRR Energy	NA	NA	NA	\$35.36	\$14.16	118%	46	\$35.37	\$14.33	118%	54	
Anadarko Petroleum	\$9.13	\$8.13	42	\$14.56	\$15.34	157%	50	\$14.19	\$15.12	162%	55	
Afren	NA	\$3.64	20	\$26.67	\$33.80	186%	126	\$26.67	\$15.30	481%	56	
JKX Oil & Gas	NA	NA	NA	\$15.64	\$15.32	194%	49	\$15.64	\$15.32	194%	57	
Bonavista Energy	\$1.69	\$8.42	44	\$19.57	\$20.37	96%	73	\$13.39	\$15.64	159%	58	
YPF	\$1.01	\$1.01	7	\$18.88	\$16.03	117%	52	\$17.99	\$15.69	120%	59	
Long Run Exploration	\$18.22	\$9.34	49	\$27.59	\$40.42	114%	147	\$23.91	\$16.39	504%	60	
Linn Energy	\$13.94	\$11.53	61	\$45.56	\$48.49	89%	155	\$19.86	\$16.44	670%	61	
ARC Resources	NA	\$16.55	95	\$19.74	\$16.57	157%	54	\$19.70	\$16.57	159%	62	
Carrizo Oil & Gas	NA	NA	NA	\$16.15	\$16.96	461%	55	\$16.15	\$16.96	461%	63	
QEP Resources	\$13.94	\$13.59	80	\$19.30	\$17.68	182%	58	\$19.15	\$17.00	218%	64	
Bill Barrett	NA	\$10.28	54	\$6.09	\$18.38	237%	61	\$6.10	\$17.41	269%	65	
PetroQuest Energy	\$30.33	\$29.48	133	\$11.84	\$15.37	202%	51	\$17.67	\$17.65	241%	66	
Northern Oil & Gas	NA	NA	NA	\$19.47	\$16.32	773%	53	\$20.87	\$17.69	773%	67	
Exxon Mobil	\$1.29	\$1.68	10	\$23.81	\$19.65	104%	67	\$21.61	\$17.94	115%	68	
Max Petroleum	NA	NA	NA	\$30.74	\$18.15	305%	60	\$30.74	\$18.15	305%	69	
Denbury Resources	\$18.83	\$12.44	69	\$27.15	\$22.43	210%	89	\$22.95	\$18.32	356%	70	
Cimarex Energy	\$8.54	\$6.46	36	\$18.85	\$18.62	228%	62	\$18.84	\$18.44	231%	71	
Energy XXI (Bermuda)	\$8.48	\$12.65	73	\$13.71	\$22.42	216%	88	\$12.83	\$18.44	365%	72	
Clayton Williams Energy	NA	\$11.73	63	\$10.18	\$18.91	364%	63	\$10.18	\$18.51	386%	73	
PostRock Energy	\$14.04	\$14.70	88	\$7.41	\$19.23	52%	65	\$7.94	\$18.71	59%	74	
Noble Energy	NA	\$4.28	21	\$13.24	\$20.94	221%	79	\$12.38	\$18.73	255%	75	
Bankers Petroleum	NA	\$2.06	13	\$19.01	\$20.05	237%	69	\$19.20	\$18.76	256%	76	
Kinder Morgan Energy	\$5.51	\$5.51	30	NM	\$47.31	57%	153	\$15.89	\$18.99	176%	77	
ConocoPhillips	NM	\$18.00	102	\$19.63	\$18.99	151%	64	\$19.64	\$18.99	151%	78	
Laredo Petroleum	\$23.41	\$7.38	41	\$13.39	\$19.37	396%	66	\$13.46	\$19.03	407%	79	
Mid-Con Energy Partners	\$22.64	\$17.54	100	\$48.48	\$21.22	176%	83	\$29.83	\$19.05	431%	80	
QR Energy LP	\$17.35	\$20.15	108	\$10.77	\$17.59	102%	57	\$13.71	\$19.16	264%	81	
Marathon Oil	\$5.40	\$13.52	79	\$16.35	\$20.83	171%	77	\$15.82	\$19.46	211%	82	
Canadian Natural Resources	\$7.45	\$12.95	75	\$21.22	\$20.65	150%	76	\$19.88	\$19.85	167%	83	
Freehold Royalties	NM	\$26.65	128	\$12.66	\$16.99	68%	56	\$15.55	\$19.87	96%	84	
BG Group	NA	\$9.52	50	\$37.09	\$20.12	180%	70	\$37.09	\$19.95	182%	85	
Oasis Petroleum	\$16.45	\$16.21	94	\$34.01	\$21.11	677%	82	\$25.73	\$20.03	868%	86	
Ecopetrol	\$19.31	\$22.76	121	\$19.80	\$19.95	131%	68	\$19.79	\$20.08	137%	87	
MOL	NM	NM	NA	NM	\$20.27	67%	72	NM	\$20.32	67%	88	
Unit	NA	\$6.14	33	\$17.00	\$30.38	149%	116	\$17.00	\$20.40	253%	89	
Eni S.p.A.	\$22.18	\$24.76	126	\$24.54	\$20.49	130%	74	\$24.52	\$20.50	130%	90	
Triangle Petroleum	\$2.40	\$2.40	16	\$12.30	\$20.95	2613%	80	\$12.12	\$20.64	2657%	91	
Midstates Petroleum	\$10.98	\$11.43	60	\$34.72	\$33.54	353%	125	\$20.08	\$20.80	833%	92	
Pengrowth Energy	\$25.19	\$20.46	110	\$4.96	\$21.02	169%	81	\$5.10	\$20.84	246%	93	
Venoco	NA	\$33.14	138	\$23.16	\$20.86	167%	78	\$23.21	\$20.90	167%	94	
Concho Resources	\$7.38	\$14.63	85	\$21.11	\$22.90	275%	92	\$20.87	\$21.02	356%	95	
BHP Billiton Group	NA	\$6.83	39	\$32.35	\$40.99	121%	148	\$32.61	\$21.29	286%	96	
Stone Energy	NA	\$17.60	101	\$23.84	\$22.48	186%	90	\$26.05	\$21.37	240%	97	
Breitburn Energy Partners	\$15.95	\$14.54	83	\$26.77	NM	NM	NA	\$18.09	\$21.45	462%	98	

Performance metrics: Worldwide												
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs				
	2013	3-Year		2013	3-Year		3-Year 2011-13 F&D Repl. %	3-Year Rank	2013	3-Year		3-Year Rank
		2011-13	3-Year		2011-13	2011-13				Reserve	2011-13	
		\$/boe	Rank		\$/boe	Rank				Repl. %	Repl. %	
SandRidge Energy	NM	\$27.02	130	\$13.13	\$20.49	282%	75	\$13.33	\$21.87	357%	99	
Baytex Energy	NA	\$23.48	123	\$17.72	\$21.98	143%	86	\$17.84	\$22.13	159%	100	
Trilogy Energy	NA	NA	NA	\$23.49	\$22.24	163%	87	\$23.48	\$22.24	163%	101	
Legacy Reserves LP	\$22.34	\$21.43	112	\$14.21	\$25.26	68%	103	\$17.64	\$22.28	305%	102	
Kodiak Oil & Gas	\$17.95	\$20.59	111	\$23.02	\$23.42	748%	93	\$21.50	\$22.69	1009%	103	
Canacol Energy	\$16.66	\$12.60	72	\$49.77	\$37.23	186%	136	\$21.57	\$22.72	453%	104	
Chesapeake Energy	\$10.82	\$28.31	131	\$13.30	\$22.70	202%	91	\$13.29	\$22.76	204%	105	
Serinus Energy	NA	NA	NA	\$55.66	\$37.48	106%	139	\$17.87	\$23.08	172%	106	
TransGlobe Energy	NA	\$11.38	58	\$45.49	\$27.25	118%	108	\$45.49	\$23.18	159%	107	
EPL Oil & Gas	NM	\$22.26	118	\$27.06	\$24.79	149%	99	\$29.69	\$23.21	394%	108	
Chevron	\$5.72	\$5.66	32	\$42.67	\$24.87	118%	100	\$41.38	\$23.35	128%	109	
Dune Energy	NA	NA	NA	\$40.44	\$23.48	167%	94	\$40.44	\$23.48	167%	110	
Total	\$4.19	\$4.72	24	\$35.46	\$37.25	84%	137	\$28.90	\$23.99	143%	111	
Enerplus	\$9.23	\$13.03	77	\$16.04	\$26.45	132%	106	\$14.16	\$24.07	161%	112	
EOG Resources	\$37.00	\$15.92	91	\$13.54	\$24.15	165%	96	\$13.69	\$24.08	167%	113	
PetroChina	NA	NA	NA	\$24.78	\$24.18	104%	97	\$24.78	\$24.18	104%	114	
Petrobras	NM	NM	NA	\$22.86	\$23.84	120%	95	\$23.66	\$24.37	120%	115	
Devon Energy	\$18.86	\$15.05	89	\$22.07	\$24.63	113%	98	\$22.06	\$24.52	115%	116	
Whiting Petroleum	\$13.56	\$14.59	84	\$22.10	\$25.62	294%	104	\$21.04	\$24.93	314%	117	
Paramount Resources	NA	\$22.28	120	\$16.38	\$25.21	382%	102	\$16.44	\$24.99	413%	118	
Murphy Oil	NA	\$24.75	125	\$24.58	\$25.07	215%	101	\$24.65	\$25.06	221%	119	
Magnum Hunter Resources	NM	\$19.54	106	\$12.08	\$27.55	541%	109	\$18.36	\$25.22	763%	120	
Sanchez Energy	\$16.69	\$16.69	96	\$45.40	\$31.15	786%	119	\$28.29	\$25.22	1333%	121	
W&T Offshore	\$43.39	\$14.69	87	\$39.30	\$37.98	80%	141	\$39.79	\$25.48	172%	122	
Occidental Petroleum	\$9.64	\$15.75	90	\$17.02	\$29.49	98%	115	\$16.43	\$25.49	139%	123	
Vermilion Energy	\$37.23	\$22.02	114	\$15.43	\$26.21	147%	105	\$15.82	\$25.52	175%	124	
CNOOC	\$15.04	\$12.04	65	\$53.42	\$35.24	135%	131	\$29.88	\$25.56	232%	125	
Salamander Energy	NA	NA	NA	NM	\$28.17	205%	110	NM	\$25.87	224%	126	
Statoil ASA	\$27.06	\$11.85	64	\$23.71	\$28.61	119%	112	\$23.76	\$27.36	129%	127	
Energen	\$19.02	\$8.97	47	\$27.02	\$33.81	138%	127	\$26.97	\$27.41	185%	128	
Sinopec	NA	NA	NA	\$40.98	\$34.32	97%	129	\$23.67	\$27.74	120%	129	
Royal Dutch Shell	\$18.35	\$12.28	67	\$25.20	\$29.11	95%	113	\$24.95	\$28.33	100%	130	
Athabasca Oil	NA	NA	NA	NM	\$28.54	3238%	111	NM	\$28.54	3238%	131	
Global Energy Development	NA	NA	NA	NM	NM	NM	NA	\$0.21	\$28.73	72%	132	
Gran Tierra Energy	NA	\$12.98	76	\$32.47	\$33.27	146%	122	\$32.47	\$28.83	187%	133	
Husky Energy	\$30.79	\$8.85	46	\$23.85	\$34.30	128%	128	\$23.90	\$29.27	159%	134	
Chaparral Energy	\$14.15	\$13.52	78	\$24.69	\$31.28	167%	120	\$22.91	\$29.43	186%	135	
Penn West Petroleum	NA	\$37.04	141	\$23.46	\$29.39	111%	114	\$23.37	\$29.74	116%	136	
Crescent Point Energy	\$31.16	\$29.77	134	\$26.44	\$30.59	170%	117	\$26.69	\$30.29	268%	137	
Maurel & Prom SA	NA	NA	NA	NM	\$30.94	175%	118	NM	\$30.94	175%	138	
Pacific Rubiales Energy	\$38.17	\$22.25	117	\$44.64	\$34.50	145%	130	\$43.15	\$31.40	194%	139	
VAALCO Energy	NA	NA	NA	NM	\$33.21	110%	121	NM	\$33.21	110%	140	
Tap Oil	NA	NA	NA	NA	\$33.35	532%	123	NA	\$33.35	532%	141	
Alta Mesa Holdings	\$21.49	\$18.09	103	\$22.51	\$38.17	112%	142	\$22.41	\$33.99	142%	142	
EXCO Resources	\$11.31	\$11.55	62	\$13.23	NM	12%	NA	\$12.02	\$34.31	98%	143	
Zargon Oil & Gas	NA	\$11.02	57	\$23.97	\$36.86	72%	134	\$23.81	\$34.44	80%	144	
Newfield Exploration	\$7.71	\$10.47	55	\$24.30	\$36.27	123%	133	\$24.09	\$34.96	130%	145	
Diamondback Energy	\$31.57	\$20.44	109	\$39.95	\$57.14	377%	158	\$36.49	\$36.03	888%	146	
Mitsui	\$40.62	\$17.29	99	\$38.19	\$39.51	105%	144	\$38.41	\$36.07	124%	147	
Lightstream Resources	\$33.49	\$36.44	140	NM	\$36.08	176%	132	NM	\$36.08	178%	148	
Bonanza Creek Energy	\$5.50	\$20.14	107	NM	\$37.90	242%	140	NM	\$36.72	259%	149	
Callon Petroleum Company	NM	NM	NA	\$30.73	\$33.53	231%	124	\$33.07	\$36.82	236%	150	
Goodrich Petroleum	\$32.08	\$32.08	136	\$10.08	\$37.12	132%	135	\$10.51	\$37.01	135%	151	
Apache	\$29.62	\$26.17	127	\$25.14	\$40.10	93%	145	\$25.20	\$37.73	112%	152	

Performance metrics: Worldwide

	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	2013	3-Year		2013	3-Year		3-Year	2013	3-Year		3-Year
		\$/boe	2011-13		3-Year	2011-13			F&D	Repl. %	
			Rank	\$/boe	\$/boe	Repl. %	Rank	\$/boe	\$/boe	Repl. %	Rank
Adams Res. and Energy	NA	NA	NA	NM	\$38.64	124%	143	NM	\$38.64	124%	153
Tullow Oil	NA	\$23.31	122	NM	\$42.37	189%	150	NM	\$40.05	215%	154
Santonia Energy	NA	\$5.01	26	\$20.62	\$41.48	74%	149	\$20.61	\$40.95	75%	155
OMV AG	\$25.28	\$22.01	113	NM	NM	49%	NA	\$54.66	\$41.85	96%	156
Hess	NA	\$29.28	132	\$45.77	\$42.46	136%	151	\$45.77	\$42.36	137%	157
Parex Resources	\$23.37	NM	NA	\$21.28	\$37.27	216%	138	\$21.38	\$42.92	236%	158
Halcon Resources	\$22.12	\$18.48	104	\$39.84	NM	405%	NA	\$38.92	\$43.95	901%	159
Premier Oil	NA	\$6.29	34	NM	NM	48%	NA	NM	\$45.05	126%	160
Dragon Oil	NA	NA	NA	\$24.75	\$45.44	65%	152	\$24.75	\$45.44	65%	161
FX Energy	NA	NA	NA	NM	\$48.10	107%	154	NM	\$48.10	107%	162
Gulfport Energy	NA	NA	NA	\$28.63	\$48.98	417%	156	\$28.63	\$48.97	417%	163
Talisman Energy	\$11.98	\$22.06	115	\$32.36	\$53.50	73%	157	\$30.88	\$49.11	84%	164
Valeura Energy	NA	\$19.47	105	\$30.55	NM	121%	NA	\$30.55	\$55.86	216%	165
Saratoga Resources	\$0.50	\$0.61	2	NM	NM	NM	NA	\$39.31	\$59.39	73%	166
EnCana	\$26.60	\$10.56	56	\$30.27	NM	27%	NA	\$30.20	NM	32%	NA
Barnwell Industries	NA	NA	NA	\$28.18	NM	20%	NA	\$28.18	NM	20%	NA
Constellation Energy Partners	\$16.79	\$16.86	98	\$1.93	NM	NM	NA	\$3.80	NM	17%	NA
Santos	\$21.31	\$4.77	25	NM	NM	106%	NA	NM	NM	125%	NA
Endeavour International	NA	\$12.45	70	NM	NM	35%	NA	NM	NM	187%	NA
Woodside Petroleum	NA	NA	NA	NM	NM	32%	NA	NM	NM	32%	NA
Lundin Petroleum AB	NA	NA	NA	NM	NM	98%	NA	NM	NM	120%	NA
Penn Virginia	\$24.32	\$24.19	124	\$34.33	NM	57%	NA	\$30.48	NM	112%	NA
PTT E&P Public	NM	\$32.63	137	\$59.49	NM	43%	NA	NM	NM	51%	NA
Anderson Energy	NA	NA	NA	\$26.95	NM	49%	NA	\$23.09	NM	51%	NA
Chinook Energy	NA	\$30.22	135	NM	NM	25%	NA	NM	NM	35%	NA
MDU Resources Group	NA	\$26.83	129	\$19.81	NM	44%	NA	\$19.90	NM	45%	NA
Resolute Energy	\$19.95	\$16.06	92	NM	NM	NM	NA	NM	NM	134%	NA
Magellan Petroleum	NA	\$4.71	23	NM	NM	NM	NA	NM	NM	42%	NA
Sasol	NA	\$14.64	86	NM	NM	14%	NA	NM	NM	19%	NA
FieldPoint Petroleum	NA	NA	NA	NM	NM	29%	NA	NM	NM	29%	NA
Kosmos Energy	NA	NA	NA	\$38.41	NM	57%	NA	\$38.41	NM	57%	NA
Pioneer Natural Resources	\$42.33	\$2.72	18	NM	NM	28%	NA	NM	NM	36%	NA
Royale Energy	NA	\$34.11	139	NM	NM	29%	NA	NM	NM	31%	NA
Sonde Resources	NA	\$14.08	82	NA	NM	19%	NA	NA	NM	46%	NA
Comstock Resources	NA	\$8.40	43	\$27.46	NM	NM	NA	\$27.84	NM	23%	NA
Berry Petroleum	NA	\$8.70	45	NM	NM	NM	NA	NM	NM	18%	NA
Oil Search	NA	NA	NA	NM	NM	71%	NA	NM	NM	71%	NA
Black Hills	NA	NA	NA	\$26.59	NM	12%	NA	\$26.68	NM	12%	NA
TransAtlantic Petroleum	NA	\$16.77	97	\$45.29	NM	NM	NA	\$45.29	NM	11%	NA
Quicksilver Resources	NA	NA	NA	\$1.62	NM	NM	NA	\$1.62	NM	NM	NA
Loews	NA	NM	NA	NM	NM	NM	NA	NM	NM	NM	NA
GeoMet	NA	\$9.14	48	\$0.32	NM	NM	NA	\$0.37	NM	NM	NA
Niko Resources	NA	NA	NA	\$5.73	NM	NM	NA	\$5.73	NM	NM	NA
Escalera Resources	NA	\$2.18	15	\$10.00	NM	NM	NA	\$10.00	NM	NM	NA
Carnarvon Petroleum	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Calvalley Petroleum	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Harvest Natural Resources	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
BPZ Resources	NA	NA	NA	\$28.38	NM	NM	NA	\$28.38	NM	NM	NA
Canadian Oil Sands	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Apco Oil & Gas Int'l	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Forest Oil	NA	NA	NA	\$15.20	NM	NM	NA	\$15.20	NM	NM	NA
Ultra Petroleum	\$22.19	\$22.19	116	\$6.72	NM	NM	NA	\$7.93	NM	NM	NA
Heritage Oil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOCO International	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Performance metrics: Worldwide																	
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs									
	2013	3-Year		2013	3-Year		2011-13	3-Year	2013	3-Year		3-Year					
		\$/boe	\$/boe		Rank	\$/boe				\$/boe	F&D		Rank	\$/boe	\$/boe	Repl. %	Rank
											Repl. %					Repl. %	
All Integrated & Diversified Oils	\$3.80	\$4.25	-	\$22.06	\$19.32	120%	-	\$12.77	\$14.92	170%	-						
All E&Ps	\$10.61	\$11.11	-	\$18.24	\$19.71	178%	-	\$16.71	\$18.20	217%	-						
Regional Integrations	\$5.57	\$5.73	2	\$20.33	\$16.63	135%	1	\$12.24	\$13.41	191%	1						
Large E&Ps	\$8.01	\$8.96	3	\$17.32	\$17.35	178%	2	\$15.31	\$16.04	211%	2						
Global Integrated Oils	\$0.64	\$1.89	1	\$25.89	\$24.11	102%	3	\$12.87	\$16.75	152%	3						
Small E&Ps	\$11.59	\$12.69	4	\$21.34	\$28.64	180%	5	\$18.98	\$23.52	265%	4						
Mid-Sized E&Ps	\$17.01	\$14.12	5	\$21.87	\$25.93	184%	4	\$21.34	\$23.75	225%	5						
Smallest E&Ps	\$14.16	\$15.23	6	\$22.63	\$36.10	132%	6	\$20.81	\$30.19	184%	6						
Gas-Weighted companies	\$6.94	\$6.12	2	\$9.72	\$13.50	194%	1	\$9.08	\$12.28	233%	1						
Oil-Weighted companies	\$6.10	\$6.78	3	\$21.18	\$16.75	149%	2	\$12.38	\$13.46	222%	2						
Balanced companies	\$2.02	\$4.69	1	\$23.80	\$23.23	121%	3	\$16.65	\$19.03	156%	3						

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

NM - Not Meaningful. Costs per boe greater than \$60/boe or downward revisions exceeded reserves added. NA - Not applicable/Not available.

Source: IHS

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Performance metrics: United States

Performance metrics: United States												
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs				
	2013	3-Year		2013	3-Year		2011-13	3-Year	2013	3-Year		3-Year
		\$/boe	2011-13		Rank	\$/boe				2011-13	F&D	
						Repl. %				Repl. %		
UNIVERSE*	\$12.97	\$10.90	-	\$15.94	\$22.18	180%	-	\$15.64	\$20.03	222%	-	
Dorchester Minerals	NA	NA	NA	\$2.03	\$2.26	124%	1	\$2.03	\$2.26	124%	1	
CONSOL Energy	NA	NA	NA	\$3.27	\$3.73	712%	2	\$3.27	\$3.83	712%	2	
Antero Resources	NA	\$12.28	43	\$4.26	\$3.76	1881%	3	\$4.30	\$3.84	1898%	3	
Cabot Oil & Gas	NA	NA	NA	\$3.30	\$4.56	461%	4	\$3.30	\$4.56	461%	4	
Range Resources	NA	NA	NA	\$4.00	\$4.97	704%	5	\$4.00	\$4.97	704%	5	
EQT	\$1.15	\$2.53	8	\$3.57	\$5.70	417%	6	\$3.14	\$5.29	479%	6	
Rex Energy	NM	NM	NA	\$7.68	\$7.03	992%	7	\$7.74	\$7.06	992%	7	
PrimeEnergy	NA	NA	NA	\$3.25	\$7.16	426%	8	\$3.25	\$7.09	430%	8	
Panhandle Oil and Gas	\$4.49	\$5.65	16	\$4.36	\$8.48	175%	11	\$4.36	\$7.64	248%	9	
Abraxas Petroleum	NA	NM	NA	\$7.86	\$7.77	538%	9	\$7.86	\$8.08	538%	10	
PDC Energy	\$27.53	\$5.02	14	\$4.14	\$10.11	556%	16	\$4.39	\$8.86	736%	11	
Southwestern Energy	\$0.83	\$0.86	2	\$3.36	\$8.99	229%	12	\$3.36	\$8.98	229%	12	
ZaZa Energy	\$4.93	\$9.37	32	NM	\$9.79	1672%	14	\$59.74	\$9.74	1893%	13	
National Fuel Gas	NA	\$6.63	21	\$7.88	\$10.05	408%	15	\$7.98	\$9.92	424%	14	
Equal Energy	NA	\$13.73	52	\$4.96	\$8.10	165%	10	\$4.96	\$10.17	261%	15	
Gastar Exploration	\$12.95	\$12.94	48	\$9.38	\$9.24	635%	13	\$11.02	\$10.18	853%	16	
Vanguard Natural Res.	\$12.07	\$9.71	34	\$10.54	\$27.17	21%	64	\$11.82	\$10.39	545%	17	
EV Energy Partners	\$5.08	\$6.32	18	\$2.50	\$40.24	42%	82	\$3.02	\$10.53	337%	18	
Rosetta Resources	\$12.67	\$12.50	46	\$21.23	\$11.06	578%	17	\$19.18	\$11.19	634%	19	
Baytex Energy	NA	NA	NA	\$5.89	\$11.84	1759%	18	\$5.90	\$11.87	1759%	20	
SM Energy Company	\$22.97	\$22.27	80	\$8.44	\$11.94	365%	19	\$8.53	\$11.98	366%	21	
Aurora Oil and Gas	\$5.65	\$2.77	10	\$11.23	\$13.67	1081%	25	\$10.58	\$11.98	1279%	22	
Warren Resources	\$12.77	\$2.12	5	\$6.75	\$14.56	245%	27	\$6.82	\$12.10	305%	23	
Continental Resources	\$36.27	\$9.70	33	\$10.85	\$12.60	696%	20	\$10.89	\$12.31	774%	24	
Questar	\$4.65	\$4.65	13	\$21.20	\$21.70	66%	51	\$8.22	\$12.57	143%	25	
Approach Resources	\$9.19	\$1.72	4	\$15.06	\$14.57	677%	28	\$15.02	\$12.62	798%	26	
EP Energy	NA	NM	NA	\$10.63	\$12.71	281%	21	\$10.65	\$12.71	281%	27	
Anadarko Petroleum	\$9.13	\$8.13	25	\$12.55	\$12.93	163%	22	\$12.30	\$12.77	169%	28	
WPX Energy	NA	NA	NA	\$9.29	\$13.17	124%	23	\$9.29	\$13.05	126%	29	
Swift Energy	NA	NA	NA	\$13.58	\$13.25	404%	24	\$13.58	\$13.52	404%	30	
LRR Energy	NA	NA	NA	\$35.36	\$14.16	118%	26	\$35.37	\$14.33	118%	31	
Exxon Mobil	\$1.54	\$1.36	3	\$18.18	\$20.14	125%	44	\$16.31	\$16.19	159%	32	
Carrizo Oil & Gas	NA	NA	NA	\$16.15	\$16.23	461%	30	\$16.15	\$16.23	461%	33	
Linn Energy	\$13.94	\$11.53	39	\$45.56	\$48.49	89%	87	\$19.86	\$16.44	670%	34	
Noble Energy	NA	\$4.28	12	\$12.58	\$19.57	290%	43	\$11.57	\$16.89	351%	35	
ConocoPhillips	NA	\$10.07	35	\$12.89	\$16.96	133%	33	\$12.89	\$16.92	134%	36	
QEP Resources	\$13.94	\$13.59	51	\$19.30	\$17.68	182%	35	\$19.15	\$17.00	218%	37	
Bill Barrett	NA	\$10.28	36	\$6.09	\$18.38	237%	37	\$6.10	\$17.41	269%	38	
PetroQuest Energy	\$30.33	\$29.48	85	\$11.84	\$15.37	202%	29	\$17.67	\$17.65	241%	39	
Northern Oil & Gas	NA	NA	NA	\$19.47	\$16.32	773%	32	\$20.87	\$17.69	773%	40	
Murphy Oil	NA	\$10.73	37	\$21.57	\$18.01	558%	36	\$21.72	\$17.78	576%	41	
Denbury Resources	\$18.83	\$12.44	45	\$27.15	\$22.43	210%	54	\$22.95	\$18.32	356%	42	
Cimarex Energy	\$8.54	\$6.46	19	\$18.85	\$18.62	228%	38	\$18.84	\$18.44	231%	43	

Performance metrics: United States											
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		3-Year		3-Year		3-Year	
	2013	2011-13		2013	2011-13	F&D	3-Year	2013	2011-13	Reserve	3-Year
	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	Repl. %	Rank	\$/boe	\$/boe	Repl. %	Rank
Energy XXI (Bermuda)	\$8.48	\$12.65	47	\$13.71	\$22.42	216%	53	\$12.83	\$18.44	365%	44
Clayton Williams Energy	NA	\$11.73	41	\$10.18	\$18.91	364%	39	\$10.18	\$18.51	386%	45
PostRock Energy	\$14.04	\$14.70	58	\$7.41	\$19.23	52%	41	\$7.94	\$18.71	59%	46
Enerplus	\$8.03	\$12.34	44	\$13.26	\$20.30	342%	45	\$11.59	\$18.73	426%	47
Kinder Morgan Energy	\$5.51	\$5.51	15	NM	\$47.31	57%	86	\$15.89	\$18.99	176%	48
Laredo Petroleum	\$23.41	\$7.38	24	\$13.39	\$19.37	396%	42	\$13.46	\$19.03	407%	49
Mid-Con Energy Partners	\$22.64	\$17.54	67	\$48.48	\$21.22	176%	50	\$29.83	\$19.05	431%	50
EOG Resources	\$37.00	\$15.92	60	\$12.59	\$19.07	235%	40	\$12.75	\$19.05	237%	51
QR Energy LP	\$17.35	\$20.15	73	\$10.77	\$17.59	102%	34	\$13.71	\$19.16	264%	52
BHP Billiton Group	NA	\$6.83	22	\$26.83	\$43.21	203%	83	\$27.06	\$19.82	569%	53
Oasis Petroleum	\$16.45	\$16.21	62	\$34.01	\$21.11	677%	49	\$25.73	\$20.03	868%	54
Unit	NA	\$6.14	17	\$17.00	\$30.38	149%	68	\$17.00	\$20.40	253%	55
Triangle Petroleum	\$2.40	\$2.40	7	\$12.30	\$20.95	2613%	48	\$12.12	\$20.64	2657%	56
Midstates Petroleum	\$10.98	\$11.43	38	\$34.72	\$33.54	353%	73	\$20.08	\$20.80	833%	57
Venoco	NA	\$33.14	87	\$23.16	\$20.86	167%	47	\$23.21	\$20.90	167%	58
Concho Resources	\$7.38	\$14.63	56	\$21.11	\$22.90	275%	57	\$20.87	\$21.02	356%	59
Stone Energy	NA	\$17.60	68	\$23.84	\$22.48	186%	55	\$26.05	\$21.37	240%	60
Breitbart Energy Partners	\$15.95	\$14.54	54	\$26.77	NM	NM	NA	\$18.09	\$21.45	462%	61
SandRidge Energy	NM	\$27.02	83	\$13.13	\$20.49	282%	46	\$13.33	\$21.87	357%	62
Legacy Reserves LP	\$22.34	\$21.43	77	\$14.21	\$25.26	68%	62	\$17.64	\$22.28	305%	63
Kodiak Oil & Gas	\$17.95	\$20.59	75	\$23.02	\$23.42	748%	58	\$21.50	\$22.69	1009%	64
Chesapeake Energy	\$10.82	\$28.31	84	\$13.30	\$22.70	202%	56	\$13.29	\$22.76	204%	65
EPL Oil & Gas	NM	\$22.26	79	\$27.06	\$24.79	149%	61	\$29.69	\$23.21	394%	66
Talisman Energy	NA	NM	NA	\$9.68	\$22.16	190%	52	\$9.68	\$23.25	192%	67
Marathon Oil	\$3.15	\$13.31	49	\$18.70	\$27.23	270%	65	\$17.59	\$23.28	378%	68
Dune Energy	NA	NA	NA	\$40.44	\$23.48	167%	59	\$40.44	\$23.48	167%	69
Devon Energy	\$16.29	\$8.92	29	\$26.41	\$24.08	120%	60	\$26.34	\$23.94	121%	70
Whiting Petroleum	\$13.56	\$14.59	55	\$22.10	\$25.62	294%	63	\$21.04	\$24.93	314%	71
Magnum Hunter Resources	NM	\$19.54	71	\$12.08	\$27.55	541%	66	\$18.36	\$25.22	763%	72
Sanchez Energy	\$16.69	\$16.69	63	\$45.40	\$31.15	786%	69	\$28.29	\$25.22	1333%	73
W&T Offshore	\$43.39	\$14.69	57	\$39.30	\$37.98	80%	79	\$39.79	\$25.48	172%	74
Petrobras	NA	NA	NA	\$8.18	\$16.32	1287%	31	\$22.33	\$26.74	1287%	75
Energen	\$19.02	\$8.97	30	\$27.02	\$33.81	138%	74	\$26.97	\$27.41	185%	76
Hess	NA	\$36.00	89	\$22.21	\$28.62	312%	67	\$22.21	\$28.62	312%	77
Chaparral Energy	\$14.15	\$13.52	50	\$24.69	\$31.28	167%	70	\$22.91	\$29.43	186%	78
Apache	NM	\$17.05	66	\$23.19	\$31.88	164%	71	\$23.23	\$29.90	189%	79
Chevron	\$17.75	\$6.59	20	\$33.91	\$36.35	115%	76	\$33.67	\$30.00	146%	80
Crescent Point Energy	NA	\$21.07	76	\$25.94	\$43.84	412%	84	\$25.94	\$30.85	959%	81
Occidental Petroleum	\$9.64	\$15.71	59	\$16.58	\$44.72	77%	85	\$15.79	\$31.22	143%	82
Alta Mesa Holdings	\$21.49	\$18.09	69	\$22.51	\$38.17	112%	80	\$22.41	\$33.99	142%	83
EXCO Resources	\$11.31	\$11.55	40	\$13.23	NM	12%	NA	\$12.02	\$34.31	98%	84
Newfield Exploration	\$6.86	\$8.44	27	\$21.69	\$36.12	127%	75	\$21.48	\$34.47	135%	85
Diamondback Energy	\$31.57	\$20.44	74	\$39.95	\$57.14	377%	90	\$36.49	\$36.03	888%	86
Bonanza Creek Energy	\$5.50	\$20.14	72	NM	\$37.90	242%	78	NM	\$36.72	259%	87

Performance metrics: United States

	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		3-Year 2011-13 F&D Repl. %	3-Year Rank	3-Year		3-Year Reserve Repl. %	3-Year Rank
	2013	2011-13		2013	2011-13			2013	2011-13		
	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	Repl. %	Repl. %			
Callon Petroleum Company	NM	NM	NA	\$30.73	\$33.53	231%	72	\$33.07	\$36.82	236%	88
Goodrich Petroleum	\$32.08	\$32.08	86	\$10.08	\$37.12	132%	77	\$10.51	\$37.01	135%	89
Adams Res. and Energy	NA	NA	NA	NM	\$38.64	124%	81	NM	\$38.64	124%	90
Halcon Resources	\$22.12	\$18.48	70	\$39.84	NM	405%	NA	\$38.92	\$43.95	901%	91
Gulfport Energy	NA	NA	NA	\$28.63	\$48.98	417%	88	\$28.63	\$48.97	417%	92
Royal Dutch Shell	\$21.86	\$12.00	42	\$43.11	\$57.14	112%	89	\$42.88	\$52.90	124%	93
Saratoga Resources	\$0.50	\$0.61	1	NM	NM	NM	NA	\$39.31	\$59.39	73%	94
Constellation Energy Partners	\$16.79	\$16.86	65	\$1.93	NM	NM	NA	\$3.80	NM	17%	NA
Penn Virginia	\$24.32	\$24.19	81	\$34.33	NM	57%	NA	\$30.48	NM	112%	NA
Zargon Oil & Gas	NA	NA	NA	\$31.07	NM	28%	NA	\$31.07	NM	28%	NA
MDU Resources Group	NA	\$26.83	82	\$19.81	NM	44%	NA	\$19.90	NM	45%	NA
Resolute Energy	\$19.95	\$16.06	61	NM	NM	NM	NA	NM	NM	134%	NA
FieldPoint Petroleum	NA	NA	NA	NM	NM	29%	NA	NM	NM	29%	NA
Pioneer Natural Resources	\$42.33	\$2.72	9	NM	NM	28%	NA	NM	NM	36%	NA
EnCana	\$25.47	\$14.30	53	\$46.01	NM	12%	NA	\$44.88	NM	15%	NA
Royale Energy	NA	\$34.11	88	NM	NM	29%	NA	NM	NM	31%	NA
Repsol	NA	NA	NA	NM	NM	58%	NA	NM	NM	58%	NA
Comstock Resources	NA	\$8.40	26	\$27.46	NM	NM	NA	\$27.84	NM	23%	NA
Berry Petroleum	NA	\$8.70	28	NM	NM	NM	NA	NM	NM	18%	NA
Endeavour International	NA	\$7.07	23	\$23.36	NM	9%	NA	\$23.36	NM	17%	NA
Black Hills	NA	NA	NA	\$26.59	NM	12%	NA	\$26.68	NM	12%	NA
Quicksilver Resources	NA	NA	NA	\$1.34	NM	NM	NA	\$1.34	NM	NM	NA
Magellan Petroleum	NA	\$3.78	11	NM	NM	NM	NA	NM	NM	NM	NA
Forest Oil	NA	NA	NA	\$15.20	NM	0%	NA	\$15.20	NM	0%	NA
Loews	NA	NM	NA	NM	NM	NM	NA	NM	NM	NM	NA
GeoMet	NA	\$9.13	31	\$0.32	NM	NM	NA	\$0.37	NM	NM	NA
Escalera Resources	NA	\$2.18	6	\$10.00	NM	NM	NA	\$10.00	NM	NM	NA
FX Energy	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
BP	NA	\$16.85	64	NM	NM	NM	NA	NM	NM	NM	NA
Ultra Petroleum	\$22.19	\$22.19	78	\$6.72	NM	NM	NA	\$7.93	NM	NM	NA
VAALCO Energy	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Integrated & Diversified Oils	\$18.65	\$7.03	-	\$37.69	\$39.57	99%	-	\$36.61	\$28.38	151%	-
All E&Ps	\$12.62	\$12.92	-	\$13.33	\$18.98	212%	-	\$13.26	\$18.04	250%	-
Large E&Ps	\$10.29	\$12.06	3	\$11.65	\$16.82	213%	1	\$11.56	\$16.31	239%	1
Mid-Sized E&Ps	\$15.99	\$14.42	5	\$15.79	\$21.30	229%	2	\$15.81	\$20.14	276%	2
Regional Integrations	NM	\$8.29	2	\$26.44	\$41.26	225%	6	\$29.96	\$21.97	541%	3
Smallest E&Ps	\$20.97	\$21.67	6	\$20.83	\$23.65	210%	3	\$20.86	\$23.27	261%	4
Small E&Ps	\$12.41	\$12.95	4	\$19.61	\$31.34	165%	4	\$17.66	\$23.99	275%	5
Global Integrated Oils	\$3.21	\$5.34	1	\$42.04	\$39.12	86%	5	\$38.95	\$31.65	110%	6
Gas-Weighted companies	\$8.01	\$10.35	2	\$6.98	\$14.74	213%	1	\$7.04	\$14.52	224%	1
Balanced companies	\$12.43	\$9.40	1	\$20.55	\$24.73	152%	3	\$19.64	\$21.22	197%	2
Oil-Weighted companies	\$16.92	\$15.58	3	\$19.18	\$24.35	259%	2	\$18.87	\$22.38	334%	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

NM - Not Meaningful. Costs per boe greater than \$60/boe or downward revisions exceeded reserves added. NA - Not applicable/Not available.

Source: IHS

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Performance metrics: Canada

Performance metrics: Canada											
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	2013	3-Year	3-Year	2013	3-Year	2011-13	3-Year	2013	3-Year	2011-13	3-Year
		\$/boe			\$/boe	Rank			\$/boe	\$/boe	
UNIVERSE*	\$8.48	\$11.00	-	\$16.84	\$16.70	231%	-	\$15.42	\$16.06	260%	-
MEG Energy	NA	NA	NA	\$8.68	\$4.63	2639%	1	\$8.68	\$4.63	2639%	1
Marathon Oil	NA	NA	NA	\$6.88	\$5.59	345%	2	\$7.60	\$5.82	345%	2
Birchcliff Energy	NA	\$16.10	20	\$6.27	\$6.57	559%	3	\$6.27	\$6.71	568%	3
Advantage Oil & Gas	NA	NA	NA	\$6.69	\$6.73	342%	4	\$6.69	\$6.73	342%	4
Bellatrix Exploration	\$0.52	\$1.42	5	\$7.87	\$9.47	464%	5	\$4.84	\$7.15	651%	5
Bonterra Energy	NA	\$1.00	4	\$19.11	\$20.12	166%	20	\$5.32	\$9.34	380%	6
Peyto Expl. & Dev.	NM	\$0.31	1	\$14.75	\$10.73	283%	7	\$14.80	\$9.79	311%	7
NuVista Energy	NA	\$7.21	10	\$7.26	\$10.55	222%	6	\$7.53	\$10.43	230%	8
ConocoPhillips	\$60.00	\$19.50	22	\$15.62	\$10.78	329%	9	\$15.65	\$10.79	329%	9
Cenovus Energy	NA	NM	NA	\$13.37	\$10.77	298%	8	\$13.37	\$10.80	298%	10
Suncor Energy	NA	NM	NA	\$5.41	\$10.82	319%	10	\$5.42	\$10.82	319%	11
Tourmaline Oil	\$13.64	\$5.27	8	\$13.41	\$12.72	395%	13	\$13.44	\$10.93	520%	12
Royal Dutch Shell	NA	NA	NA	\$6.56	\$11.24	298%	11	\$6.56	\$11.25	298%	13
Corridor Resources	NA	NA	NA	\$3.29	\$11.27	86%	12	\$3.29	\$11.27	86%	14
Imperial Oil	\$0.62	\$0.62	2	NM	\$13.07	482%	14	\$55.14	\$12.59	502%	15
Perpetual Energy	\$25.36	\$43.63	34	\$10.07	\$13.40	130%	15	\$10.12	\$13.64	131%	16
Exxon Mobil	\$0.66	\$0.68	3	NM	\$14.37	523%	16	\$54.26	\$13.67	551%	17
Bonavista Energy	\$1.69	\$8.42	11	\$19.57	\$20.37	96%	21	\$13.39	\$15.64	159%	18
Long Run Exploration	\$18.22	\$9.34	14	\$27.59	\$40.42	114%	37	\$23.91	\$16.39	504%	19
ARC Resources	NA	\$16.55	21	\$19.74	\$16.57	157%	17	\$19.70	\$16.57	159%	20
Canadian Natural Resources	\$9.91	\$14.00	18	\$19.67	\$18.94	164%	19	\$18.95	\$18.46	181%	21
Freehold Royalties	NM	\$26.65	28	\$12.66	\$16.99	68%	18	\$15.55	\$19.87	96%	22
Pengrowth Energy	\$25.19	\$20.46	23	\$4.96	\$21.02	169%	22	\$5.10	\$20.84	246%	23
Quicksilver Resources	NA	NA	NA	\$3.71	\$21.86	100%	23	\$3.71	\$21.86	100%	24
Talisman Energy	\$7.83	\$11.74	16	\$9.42	\$22.27	129%	26	\$9.39	\$22.19	130%	25
Trilogy Energy	NA	NA	NA	\$23.49	\$22.24	163%	25	\$23.48	\$22.24	163%	26
Murphy Oil	NA	\$37.88	33	\$15.53	\$21.89	139%	24	\$15.53	\$22.90	149%	27
Paramount Resources	NA	\$22.28	25	\$16.38	\$25.27	387%	27	\$16.44	\$25.04	418%	28
Devon Energy	NA	\$26.40	27	\$14.47	\$26.47	96%	28	\$14.50	\$26.47	98%	29
Husky Energy	\$30.79	\$8.85	12	\$21.15	\$33.67	109%	34	\$21.22	\$28.04	141%	30
Vermilion Energy	NA	NA	NA	\$14.10	\$26.94	221%	29	\$14.10	\$28.18	221%	31
Athabasca Oil	NA	NA	NA	NM	\$28.54	3238%	31	NM	\$28.54	3238%	32
Penn West Petroleum	NA	\$37.04	32	\$23.46	\$29.39	111%	32	\$23.37	\$29.74	116%	33
Crescent Point Energy	\$31.16	\$34.25	30	\$26.58	\$28.28	154%	30	\$26.90	\$30.13	223%	34
Baytex Energy	NA	\$23.37	26	\$26.59	\$32.63	73%	33	\$26.79	\$30.92	89%	35
Zargon Oil & Gas	NA	\$10.56	15	\$23.72	\$35.98	75%	35	\$23.55	\$33.56	82%	36
Lightstream Resources	\$33.49	\$36.44	31	NM	\$36.08	176%	36	NM	\$36.08	178%	37
EnCana	NA	\$9.12	13	\$22.54	\$43.56	44%	39	\$22.58	\$39.05	50%	38
Santonia Energy	NA	\$5.01	7	\$20.62	\$41.48	74%	38	\$20.61	\$40.95	75%	39
Enerplus	\$21.38	\$21.26	24	\$23.86	\$52.93	36%	40	\$23.58	\$50.34	40%	40
Chinook Energy	NA	\$30.22	29	\$43.37	NM	25%	NA	\$46.31	\$53.78	38%	41
Barnwell Industries	NA	NA	NA	\$28.18	NM	20%	NA	\$28.18	NM	20%	NA
Anderson Energy	NA	NA	NA	\$26.95	NM	49%	NA	\$23.09	NM	51%	NA

Performance metrics: Canada

	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		3-Year		3-Year		3-Year	
	2013	2011-13		2013	2011-13	F&D	3-Year	2013	2011-13	Reserve	3-Year
	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	Repl. %	Rank	\$/boe	\$/boe	Repl. %	Rank
Sasol	NA	\$12.87	17	NM	NM	79%	NA	NM	NM	216%	NA
Abraxas Petroleum	NA	NA	NA	NM	NM	170%	NA	NM	NM	170%	NA
Sonde Resources	NA	\$14.08	19	NA	NM	19%	NA	NA	NM	46%	NA
BP	NA	\$6.86	9	NM	NM	257%	NA	NM	NM	307%	NA
EOG Resources	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Valeura Energy	NA	NA	NA	\$6.74	NM	NM	NA	\$6.74	NM	NM	NA
Canadian Oil Sands	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Apache	NA	\$1.76	6	\$9.84	NM	NM	NA	\$9.84	NM	NM	NA
CNOOC	\$9.86	NA	NA	\$34.72	NA	NA	NA	\$16.93	NA	NA	NA
Maurel & Prom SA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Integrated & Diversified Oils	\$1.02	\$5.15	-	\$14.88	\$14.23	318%	-	\$14.19	\$13.89	331%	-
All E&Ps	\$9.58	\$12.13	-	\$18.87	\$19.35	179%	-	\$16.39	\$18.06	218%	-
Global Integrated Oils	\$0.66	\$0.77	1	\$26.40	\$14.03	421%	2	\$22.97	\$13.56	436%	1
Regional Integrations	\$1.30	\$6.47	2	\$14.03	\$13.98	299%	1	\$13.55	\$13.68	312%	2
Large E&Ps	\$9.93	\$10.53	5	\$18.88	\$17.75	191%	4	\$15.95	\$16.43	233%	3
Small E&Ps	\$1.76	\$8.34	3	\$17.23	\$17.71	274%	3	\$15.48	\$17.14	292%	4
Smallest E&Ps	\$5.81	\$9.50	4	\$17.98	\$27.91	143%	6	\$15.24	\$21.53	219%	5
Mid-Sized E&Ps	\$11.80	\$18.05	6	\$19.87	\$23.97	132%	5	\$19.24	\$22.80	164%	6
Balanced companies	\$1.88	\$5.79	2	\$21.00	\$16.18	259%	1	\$19.07	\$15.61	274%	1
Oil-Weighted companies	\$9.15	\$12.24	3	\$17.83	\$16.29	258%	2	\$15.85	\$15.75	298%	2
Gas-Weighted companies	\$14.16	\$5.77	1	\$12.53	\$16.92	150%	3	\$12.60	\$15.78	167%	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

NM - Not Meaningful. Costs per boe greater than \$60/boe or downward revisions exceeded reserves added. NA - Not applicable/Not available.

Source: IHS

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Performance metrics: Europe

Performance metrics: Europe												
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs				
	2013	3-Year		2013	3-Year		2011-13	3-Year	2013	3-Year		3-Year
		\$/boe	2011-13		Rank	\$/boe				2011-13	F&D	
						Repl. %				Repl. %		
UNIVERSE*	\$20.60	\$16.18	-	NM	\$35.86	66%	-	\$53.20	\$32.79	78%	-	
Murphy Oil	NA	NA	NA	NA	\$8.21	358%	1	NA	\$8.21	358%	1	
Marathon Oil	NA	NA	NA	\$11.79	\$13.51	92%	2	\$11.79	\$13.54	92%	2	
Royal Dutch Shell	\$9.56	\$7.88	6	\$52.14	\$19.02	66%	3	\$42.36	\$17.50	77%	3	
Bankers Petroleum	NA	\$2.06	2	\$19.01	\$20.05	237%	5	\$19.20	\$18.76	256%	4	
Suncor Energy	NA	NA	NA	NM	\$19.99	107%	4	NM	\$19.99	107%	5	
Statoil ASA	\$27.06	\$13.44	9	\$25.68	\$20.87	93%	6	\$25.73	\$20.59	97%	6	
Chevron	NA	NA	NA	\$30.29	\$23.96	110%	7	\$30.31	\$23.97	110%	7	
MOL	NA	NA	NA	\$33.78	\$24.15	26%	8	\$33.37	\$24.06	26%	8	
Vermilion Energy	\$37.23	\$18.49	12	\$19.13	\$29.47	99%	9	\$20.09	\$25.06	166%	9	
BASF SE	\$17.94	\$17.94	11	\$59.04	\$36.40	117%	12	\$27.70	\$27.93	216%	10	
Exxon Mobil	NA	\$3.52	4	\$57.90	\$30.57	33%	10	\$57.90	\$28.21	36%	11	
ConocoPhillips	NA	NA	NA	NM	\$35.10	111%	11	NM	\$35.10	111%	12	
Total	NA	\$9.12	7	NM	\$46.79	69%	16	NM	\$39.66	85%	13	
OMV AG	NA	NA	NA	NM	\$40.89	49%	13	NM	\$40.89	49%	14	
BG Group	NA	\$3.87	5	NM	\$53.62	48%	17	NM	\$42.93	61%	15	
FX Energy	NA	NA	NA	NM	\$45.62	116%	14	NM	\$45.62	116%	16	
Eni S.p.A.	NA	NA	NA	\$52.21	\$46.43	70%	15	\$52.21	\$46.18	71%	17	
Valeura Energy	NA	\$19.47	13	\$30.77	NM	139%	NA	\$30.77	\$53.33	242%	18	
Endeavour International	NA	\$12.53	8	NM	NM	45%	NA	NM	NM	252%	NA	
Lundin Petroleum AB	NA	NA	NA	NM	NM	97%	NA	NM	NM	122%	NA	
Apache	\$21.94	\$37.24	15	NM	NM	NM	NA	NM	NM	93%	NA	
Hess	NA	\$29.00	14	NM	NM	43%	NA	NM	NM	48%	NA	
Serinus Energy	NA	NA	NA	\$44.90	NM	55%	NA	\$44.90	NM	55%	NA	
JKX Oil & Gas	NA	NA	NA	\$8.03	NM	8%	NA	\$8.03	NM	8%	NA	
Repsol	NA	NA	NA	NM	NM	45%	NA	NM	NM	45%	NA	
Canadian Natural Resources	\$0.23	\$0.23	1	NM	NM	NM	NA	\$51.23	NM	12%	NA	
TransAtlantic Petroleum	NA	\$16.77	10	\$44.01	NM	NM	NA	\$44.01	NM	11%	NA	
BP	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA	
Talisman Energy	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA	
CNOOC	\$24.06	NA	NA	NM	NA	NA	NA	\$39.16	NA	NA	NA	
Heritage Oil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Magellan Petroleum	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Performance metrics: Europe

	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		3-Year 2011-13 F&D Repl. %	3-Year Rank	3-Year		3-Year 2011-13 Reserve Repl. %	3-Year Rank
	2013	2011-13		2013	2011-13			2013	2011-13		
	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	Repl. %	Repl. %			
All Integrated & Diversified Oils	\$16.48	\$10.14	-	\$55.98	\$31.22	65%	-	\$50.31	\$29.20	71%	-
All E&Ps	\$22.87	\$21.89	-	NM	NM	74%	-	\$59.77	\$45.61	119%	-
Mid-Sized E&Ps	NA	\$2.84	1	\$6.31	\$9.52	304%	1	\$3.00	\$6.39	571%	1
Regional Integrations	\$19.55	\$14.39	5	\$35.44	\$27.60	81%	2	\$33.41	\$26.74	87%	2
Global Integrated Oils	\$9.09	\$7.37	2	NM	\$36.68	50%	3	NM	\$32.61	58%	3
Small E&Ps	\$40.85	\$9.57	4	NM	\$57.40	105%	4	NM	\$46.47	136%	4
Large E&Ps	\$22.98	\$26.97	6	NM	NM	66%	NA	\$59.45	\$50.09	105%	5
Smallest E&Ps	NA	\$9.39	3	NM	NM	48%	NA	NM	NM	191%	NA
Balanced companies	\$15.16	\$12.98	1	\$58.62	\$32.44	66%	1	\$55.46	\$30.31	74%	1
Oil-Weighted companies	\$23.02	\$21.92	3	NM	\$54.31	80%	2	\$51.33	\$41.10	134%	2
Gas-Weighted companies	\$17.94	\$18.20	2	NM	NM	42%	NA	\$37.61	NM	84%	NA

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

NM - Not Meaningful. Costs per boe greater than \$60/boe or downward revisions exceeded reserves added. NA - Not applicable/Not available.

Source: IHS

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Performance metrics: Africa & Middle East

Performance metrics: Africa & Middle East											
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	2013	3-Year	3-Year	2013	3-Year	2011-13	3-Year	2013	3-Year	2011-13	3-Year
		\$/boe			\$/boe	Rank			\$/boe	\$/boe	
UNIVERSE*	NM	\$15.18	-	\$43.94	\$39.91	63%	-	\$44.56	\$38.66	66%	-
DNO ASA	NA	NA	NA	\$9.79	\$3.23	432%	1	\$9.79	\$3.05	457%	1
Occidental Petroleum	NA	NA	NA	\$15.56	\$14.79	138%	2	\$15.56	\$14.82	138%	2
Marathon Oil	\$18.00	\$20.00	5	\$14.31	\$15.15	62%	3	\$14.36	\$15.18	63%	3
Afren	NA	\$3.64	2	\$26.67	\$33.80	186%	16	\$26.67	\$15.30	481%	4
ConocoPhillips	NA	NA	NA	\$8.58	\$15.57	109%	4	\$8.58	\$15.57	109%	5
Petrobras	NA	NA	NA	NA	\$17.65	140%	5	NA	\$17.65	140%	6
VAALCO Energy	NA	NA	NA	\$53.20	\$17.84	110%	6	\$53.20	\$17.84	110%	7
Noble Energy	NA	NA	NA	\$10.31	\$18.72	152%	7	\$10.31	\$18.72	152%	8
Repsol	NA	NA	NA	NM	\$18.76	111%	8	NM	\$18.76	111%	9
Royal Dutch Shell	NA	NA	NA	\$32.06	\$20.69	72%	9	\$32.07	\$20.69	72%	10
TransGlobe Energy	NA	\$11.38	3	\$45.49	\$27.25	118%	12	\$45.49	\$23.18	159%	11
Chevron	NA	NA	NA	\$30.78	\$23.13	91%	10	\$30.99	\$23.21	91%	12
Apache	NM	NM	NA	\$22.93	\$23.36	79%	11	\$23.60	\$23.73	79%	13
Maurel & Prom SA	NA	NA	NA	NM	\$28.17	158%	13	NM	\$28.17	158%	14
Eni S.p.A.	\$22.18	\$35.93	6	\$20.25	\$28.51	70%	14	\$20.28	\$28.55	71%	15
Tullow Oil	NA	NA	NA	\$46.69	\$31.35	247%	15	\$46.69	\$29.67	261%	16
Mitsui	NA	\$15.60	4	\$55.00	NM	72%	NA	\$55.00	\$48.05	101%	17
INPEX	NA	NA	NA	\$22.01	\$48.98	24%	17	\$22.01	\$48.98	24%	18
BASF SE	NA	NA	NA	NM	\$57.94	11%	18	NM	\$57.94	11%	19
Exxon Mobil	NA	NA	NA	NM	\$59.10	37%	19	NM	\$59.39	37%	20
Statoil ASA	NA	NA	NA	\$46.34	NM	68%	NA	\$46.34	NM	68%	NA
CNOOC	NM	NM	NA	NM	NM	74%	NA	NM	NM	113%	NA
OMV AG	NA	\$2.07	1	NM	NM	28%	NA	NM	NM	55%	NA
Hess	NA	NA	NA	NM	NM	24%	NA	NM	NM	24%	NA
Kosmos Energy	NA	NA	NA	\$38.41	NM	57%	NA	\$38.41	NM	57%	NA
Sasol	NA	NA	NA	NM	NM	9%	NA	NM	NM	9%	NA
Chinook Energy	NA	NA	NA	NM	NM	20%	NA	NM	NM	20%	NA
Total	NA	NA	NA	NM	NM	8%	NA	NM	NM	8%	NA
Murphy Oil	NA	NA	NA	NA	NM	NM	NA	NA	NM	NM	NA
Canadian Natural Resources	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Calvalley Petroleum	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
BP	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Harvest Natural Resources	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heritage Oil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serinus Energy	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Integrated & Diversified Oils	NM	\$32.64	-	NM	\$52.19	47%	-	NM	\$52.03	47%	-
All E&Ps	NM	\$13.49	-	\$23.83	\$23.58	114%	-	\$25.79	\$22.56	127%	-
Mid-Sized E&Ps	NA	\$3.28	2	\$28.93	\$20.07	261%	1	\$28.93	\$15.97	346%	1
Large E&Ps	NM	NM	NA	\$20.40	\$23.39	92%	2	\$23.06	\$24.48	95%	2
Small E&Ps	NA	NA	NA	NM	\$29.11	154%	3	NM	\$29.11	154%	3
Regional Integrations	\$27.99	\$15.11	4	\$30.49	\$36.42	62%	4	\$30.46	\$36.03	63%	4

Performance metrics: Africa & Middle East

	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		2011-13 F&D Repl. %	3-Year Rank	3-Year		2011-13 Reserve Repl. %	3-Year Rank
	2013	2011-13		2013	2011-13			2013	2011-13		
	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	Repl. %	Repl. %			
Smallest E&Ps	NA	\$11.38	3	NM	\$59.60	107%	5	NM	\$55.87	116%	5
Global Integrated Oils	NM	NM	NA	NM	NM	38%	NA	NM	NM	38%	NA
Oil-Weighted companies	NM	\$13.29	1	\$33.35	\$25.63	108%	1	\$35.69	\$24.04	124%	1
Gas-Weighted companies	NA	\$15.60	2	NM	\$33.29	52%	2	NM	\$31.92	57%	2
Balanced companies	NM	\$43.51	3	\$47.52	\$47.13	52%	3	\$47.77	\$47.11	52%	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

NM - Not Meaningful. Costs per boe greater than \$60/boe or downward revisions exceeded reserves added. NA - Not applicable/Not available.

Source: IHS

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Performance metrics: Asia-Pacific

Performance metrics: Asia-Pacific											
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		3-Year	3-Year Rank	3-Year		3-Year	3-Year Rank
	2013	2011-13		2013	2011-13	F&D Repl. %		2013	2011-13	Reserve Repl. %	
	\$/boe	\$/boe		\$/boe	\$/boe			\$/boe	\$/boe		
UNIVERSE*	\$10.21	\$10.23	-	\$33.84	\$27.27	114%	-	\$32.91	\$26.94	117%	-
Magellan Petroleum	NA	\$6.15	3	NM	\$8.62	326%	1	NM	\$7.47	609%	1
Eni S.p.A.	NA	NA	NA	\$3.43	\$9.85	229%	2	\$3.43	\$9.85	229%	2
BP	NA	NA	NA	\$7.55	\$12.32	63%	3	\$7.55	\$12.32	63%	3
Chevron	NA	NA	NA	NM	\$15.78	878%	4	NM	\$15.78	878%	4
Vermilion Energy	NA	NA	NA	\$12.48	\$17.17	111%	5	\$12.48	\$17.17	111%	5
Total	\$4.12	\$7.07	4	\$25.50	\$19.39	299%	6	\$18.52	\$17.78	344%	6
CNOOC	NM	\$3.36	1	\$27.71	\$22.84	118%	7	\$28.06	\$22.04	124%	7
PetroChina	NA	NA	NA	\$24.45	\$23.71	104%	8	\$24.45	\$23.71	104%	8
Lundin Petroleum AB	NA	NA	NA	NM	\$24.28	927%	9	NM	\$24.28	927%	9
Salamander Energy	NA	NA	NA	NM	\$28.17	205%	10	NM	\$25.87	224%	10
Mitsui	NA	NA	NA	\$21.88	\$28.54	67%	11	\$21.88	\$28.54	67%	11
Royal Dutch Shell	NA	NA	NA	\$45.53	\$29.49	371%	12	\$45.53	\$29.49	371%	12
BHP Billiton Group	NA	NA	NA	NM	\$29.75	66%	13	NM	\$29.75	66%	13
Tap Oil	NA	NA	NA	NA	\$33.35	532%	14	NA	\$33.35	532%	14
Sinopec	NA	NA	NA	\$40.97	\$34.32	97%	16	\$40.97	\$34.32	97%	15
Murphy Oil	NA	NA	NA	\$26.18	\$34.32	123%	17	\$26.18	\$34.32	123%	16
Apache	NA	\$56.45	5	NM	\$36.99	116%	18	NM	\$37.13	117%	17
Newfield Exploration	NA	NA	NA	\$44.09	\$37.06	107%	19	\$44.18	\$37.74	107%	18
PTT E&P Public	NA	NA	NA	\$38.04	\$33.88	40%	15	\$51.36	\$40.07	40%	19
ConocoPhillips	NA	NA	NA	NM	\$42.88	50%	20	NM	\$43.17	50%	20
Exxon Mobil	NA	NA	NA	NM	\$56.21	91%	21	NM	\$56.21	91%	21
Santos	\$21.31	\$4.77	2	NM	NM	106%	NA	NM	NM	125%	NA
Woodside Petroleum	NA	NA	NA	NM	NM	32%	NA	NM	NM	32%	NA
Talisman Energy	NA	NM	NA	NM	NM	21%	NA	NM	NM	22%	NA
Oil Search	NA	NA	NA	NM	NM	71%	NA	NM	NM	71%	NA
Niko Resources	NA	NA	NA	\$6.40	NM	NM	NA	\$6.40	NM	NM	NA
Carnarvon Petroleum	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Heritage Oil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Maurel & Prom SA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Repsol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Serinus Energy	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Integrated & Diversified Oils	\$4.12	\$7.07	-	\$30.88	\$24.67	126%	-	\$29.67	\$24.42	128%	-
All E&Ps	NM	\$15.03	-	\$48.07	\$39.18	79%	-	\$49.02	\$38.13	83%	-
Global Integrated Oils	\$4.12	\$7.07	3	\$43.91	\$21.40	307%	1	\$36.24	\$20.73	322%	1
Small E&Ps	NA	NA	NA	\$54.22	\$25.74	139%	2	\$42.10	\$24.43	146%	2
Regional Integrateds	NA	NA	NA	\$27.64	\$26.04	101%	3	\$27.64	\$26.04	101%	3

Performance metrics: Asia-Pacific

	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		2011-13 F&D Repl. %	3-Year Rank	3-Year		2011-13 Reserve Repl. %	3-Year Rank
	2013	2011-13		2013	2011-13			2013	2011-13		
	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	\$/boe	Repl. %	Repl. %			
Large E&Ps	NM	\$22.24	4	\$39.52	\$29.90	80%	4	\$41.24	\$29.66	83%	4
Mid-Sized E&Ps	\$21.82	\$5.46	1	NM	NM	93%	NA	NM	NM	102%	NA
Smallest E&Ps	NA	\$6.15	2	\$13.03	NM	NM	NA	\$13.03	NM	NM	NA
Balanced companies	\$4.03	\$7.59	2	\$30.88	\$23.55	130%	1	\$29.42	\$23.28	132%	1
Oil-Weighted companies	NM	\$3.41	1	\$34.33	\$29.43	106%	2	\$34.47	\$28.95	108%	2
Gas-Weighted companies	NM	\$30.82	3	NM	NM	42%	NA	NM	NM	45%	NA

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NM - Not Meaningful. Costs per boe greater than \$60/boe or downward revisions exceeded reserves added. NA - Not applicable/Not available.

Source: IHS

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Performance metrics: South & Central America

Performance metrics: South & Central America											
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		3-Year	3-Year Rank	3-Year		3-Year	3-Year Rank
	2013	2011-13		2013	2011-13	F&D Repl. %		2013	2011-13	Reserve Repl. %	
	\$/boe	\$/boe		\$/boe	\$/boe			\$/boe	\$/boe		
UNIVERSE*	\$21.39	\$22.34	-	\$21.31	\$18.20	106%	-	\$21.31	\$18.28	108%	-
Repsol	NA	NA	NA	\$5.04	\$8.24	191%	1	\$5.04	\$8.24	191%	1
BASF SE	NA	NA	NA	NM	\$9.86	36%	2	NM	\$9.86	36%	2
PEMEX	NA	NA	NA	\$19.54	\$12.55	91%	3	\$19.54	\$12.55	91%	3
YPF	\$1.01	\$1.01	1	\$18.84	\$15.91	118%	5	\$17.95	\$15.58	121%	4
Niko Resources	NA	NA	NA	\$4.57	\$13.91	NA	4	\$4.57	\$18.86	NA	5
Ecopetrol	\$19.31	\$22.76	5	\$19.80	\$19.95	131%	6	\$19.79	\$20.08	137%	6
BP	NA	\$42.14	7	\$29.36	\$20.21	75%	7	\$29.46	\$20.68	76%	7
Canacol Energy	\$16.66	\$12.60	2	\$49.02	\$35.36	186%	13	\$21.46	\$21.96	453%	8
EOG Resources	NA	NA	NA	\$14.99	\$24.18	20%	8	\$14.99	\$24.18	20%	9
Petrobras	NM	NM	NA	\$23.44	\$24.20	115%	9	\$23.45	\$24.25	115%	10
Global Energy Development	NA	NA	NA	NM	NM	NM	NA	\$0.21	\$28.73	72%	11
Gran Tierra Energy	NA	\$12.98	3	\$32.47	\$33.27	146%	10	\$32.47	\$28.83	187%	12
Pacific Rubiales Energy	\$38.17	\$22.25	4	\$43.34	\$34.02	145%	11	\$42.14	\$31.04	194%	13
Apache	NA	NA	NA	\$51.51	\$34.96	49%	12	\$51.51	\$34.96	49%	14
Maurel & Prom SA	NA	NA	NA	NA	\$41.27	1103%	15	NA	\$41.27	1103%	15
Parex Resources	\$23.37	NM	NA	\$21.28	\$37.27	216%	14	\$21.38	\$42.92	236%	16
Royal Dutch Shell	\$28.11	\$28.11	6	NM	NM	84%	NA	NM	NM	135%	NA
BPZ Resources	NA	NA	NA	\$28.38	NM	NM	NA	\$28.38	NM	NM	NA
Apco Oil & Gas Int'l	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
CNOOC	\$36.84	NA	NA	NA	NA	NA	NA	NM	NA	NA	NA
All Integrated & Diversified Oils	\$18.84	\$23.97	-	\$20.55	\$17.57	107%	-	\$20.52	\$17.63	108%	-
All E&Ps	\$24.36	\$20.81	-	\$41.68	\$38.35	97%	-	\$37.06	\$33.98	129%	-
Regional Integrations	\$8.97	\$20.00	2	\$19.47	\$16.97	108%	1	\$19.39	\$16.99	109%	1
Global Integrated Oils	\$28.40	\$31.24	4	NM	\$30.43	75%	2	\$54.96	\$30.50	82%	2
Mid-Sized E&Ps	\$38.17	\$22.25	3	\$43.35	\$34.11	139%	3	\$42.15	\$31.12	186%	3
Smallest E&Ps	\$9.00	\$17.20	1	\$21.73	\$42.33	134%	5	\$17.12	\$33.95	201%	4
Small E&Ps	NA	NA	NA	NA	\$41.27	1103%	4	NA	\$41.27	1103%	5
Large E&Ps	\$36.84	\$36.84	5	NM	\$50.86	33%	6	NM	\$50.17	34%	6
Gas-Weighted companies	NA	NA	NA	\$5.42	\$8.40	171%	1	\$5.42	\$8.49	171%	1
Oil-Weighted companies	\$25.42	\$22.91	2	\$22.46	\$18.73	104%	2	\$22.51	\$18.80	106%	2
Balanced companies	\$13.77	\$14.21	1	\$29.13	\$22.52	86%	3	\$26.88	\$21.80	94%	3

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Source: IHS

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Performance metrics: Russia & Caspian

Performance metrics: Russia & Caspian											
	Proved Acquisition Costs			Finding & Development Costs				Reserve Replacement Costs			
	3-Year		3-Year Rank	3-Year		3-Year 2011-13 F&D Repl. %	3-Year Rank	3-Year		3-Year Reserve Repl. %	3-Year Rank
	2013 \$/boe	2011-13 \$/boe		2013 \$/boe	2011-13 \$/boe			2013 \$/boe	2011-13 \$/boe		
UNIVERSE*	\$3.67	\$3.58	-	\$8.68	\$4.83	193%	-	\$4.61	\$4.20	389%	-
BP	\$0.30	\$0.30	1	\$3.45	\$2.55	237%	3	\$0.65	\$0.97	801%	1
BASF SE	NA	NA	NA	\$0.85	\$1.37	192%	1	\$0.85	\$1.06	250%	2
Novatek	\$1.57	\$1.88	2	\$9.67	\$2.26	361%	2	\$4.23	\$2.14	516%	3
Gazprom Neft	NA	NA	NA	\$5.30	\$4.23	229%	4	\$4.40	\$3.65	266%	4
Rosneft Oil	\$5.39	\$5.39	3	\$17.46	\$5.46	191%	5	\$6.16	\$5.41	589%	5
JKX Oil & Gas	NA	NA	NA	NM	\$9.03	820%	6	NM	\$9.03	820%	6
Lukoil	\$11.25	\$11.06	4	\$15.44	\$10.25	105%	7	\$14.49	\$10.32	114%	7
Chevron	NA	NA	NA	\$19.94	\$12.81	49%	8	\$19.94	\$12.81	49%	8
TengizChevrOil	NA	NA	NA	\$19.94	\$12.81	49%	8	\$19.94	\$12.81	49%	8
Max Petroleum	NA	NA	NA	\$30.74	\$18.15	305%	10	\$30.74	\$18.15	305%	10
Dragon Oil	NA	NA	NA	\$24.75	\$45.44	65%	11	\$24.75	\$45.44	65%	11
Eni S.p.A.	NA	NA	NA	\$26.18	\$52.87	54%	12	\$26.18	\$52.87	54%	12
INPEX	NA	\$47.44	5	\$58.48	NM	14%	NA	\$58.48	NM	39%	NA
ConocoPhillips	NA	NA	NA	\$3.00	NM	NM	NA	\$3.00	NM	NM	NA
Lundin Petroleum AB	NA	NA	NA	NM	NM	NM	NA	NM	NM	NM	NA
Heritage Oil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MOL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Integrated & Diversified Oils	\$3.56	\$3.49	-	\$9.15	\$5.42	183%	-	\$4.52	\$4.36	404%	-
All E&Ps	\$5.12	\$4.49	-	\$6.37	\$2.91	234%	-	\$5.59	\$3.36	327%	-
Global Integrated Oils	\$0.30	\$0.30	1	\$4.48	\$3.16	193%	1	\$0.80	\$1.18	624%	1
Large E&Ps	\$1.57	\$2.06	2	\$11.95	\$3.58	237%	2	\$5.41	\$3.15	332%	2
Regional Integrations	\$5.39	\$5.24	3	\$11.13	\$6.20	172%	3	\$6.44	\$5.70	363%	3
Small E&Ps	NA	NA	NA	NM	\$18.96	203%	4	NM	\$18.96	203%	4
Smallest E&Ps	NA	NA	NA	\$32.14	\$19.70	282%	5	\$32.14	\$19.70	282%	5
Mid-Sized E&Ps	NA	NA	NA	\$24.75	\$45.44	65%	6	\$24.75	\$45.44	65%	6
Balanced companies	\$0.30	\$0.35	1	\$6.02	\$5.20	176%	2	\$1.01	\$1.86	565%	1
Gas-Weighted companies	\$5.12	\$4.07	2	\$1.96	\$1.25	338%	1	\$3.80	\$2.08	480%	2
Oil-Weighted companies	\$5.39	\$5.28	3	\$12.38	\$6.37	159%	3	\$6.57	\$5.78	343%	3

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Source: IHS

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Results of oil and gas operations overview

Nicholas D. Cacchione, CFA

Key implications

- Lower revenues combined with higher costs lowered upstream profits by 7% to 12.99/boe.
- Lifting costs increased 3% in 2013, breaching the \$20/boe threshold for the first time.
- Net income return on cumulative capital costs fell for the second consecutive year to 11%, highlighting the squeeze on margins affecting the upstream business.
- The study universe spent all of its cash flow on organic investments; most of the \$103 billion in proved acquisitions was funded by asset sales and capital markets financings.

Results of oil & gas operations, \$MM						'12 - '13
	2009	2010	2011	2012	2013	% Δ
Oil & gas revenue (a)	\$833,640	\$1,072,609	\$1,337,197	\$1,357,191	\$1,367,750	1%
Lifting costs	\$244,123	\$314,169	\$394,991	\$413,322	\$437,771	6%
Exploration expenses	\$33,243	\$33,803	\$39,396	\$47,369	\$52,251	10%
DD&A (incl. writedowns/impairment)	\$217,956	\$204,974	\$214,940	\$281,682	\$283,823	1%
(Writedowns/impairment) incl. above	\$45,501	\$9,057	\$11,933	\$38,447	\$18,137	(53%)
Other expenses/(income)	\$20,181	\$14,736	\$23,191	\$19,359	\$35,047	81%
Pre-tax profit	\$318,137	\$504,928	\$664,679	\$595,458	\$558,859	(6%)
Income tax/(benefit)	\$161,908	\$237,804	\$323,468	\$301,704	\$278,367	(8%)
Net income (b)	\$156,229	\$267,124	\$341,211	\$293,754	\$280,492	(5%)
Cash flow	\$410,047	\$509,460	\$600,691	\$627,601	\$621,604	(1%)
Free cash flow	\$78,870	\$17,704	\$90,643	\$48,355	\$847	(98%)

Source: IHS Herold

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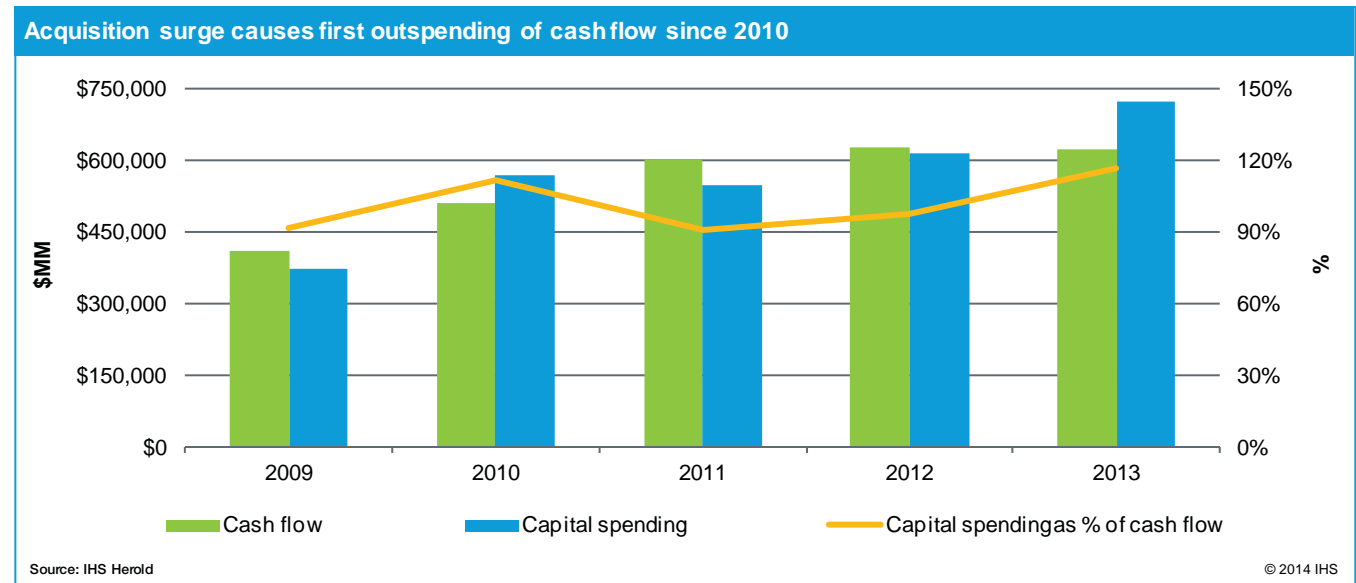
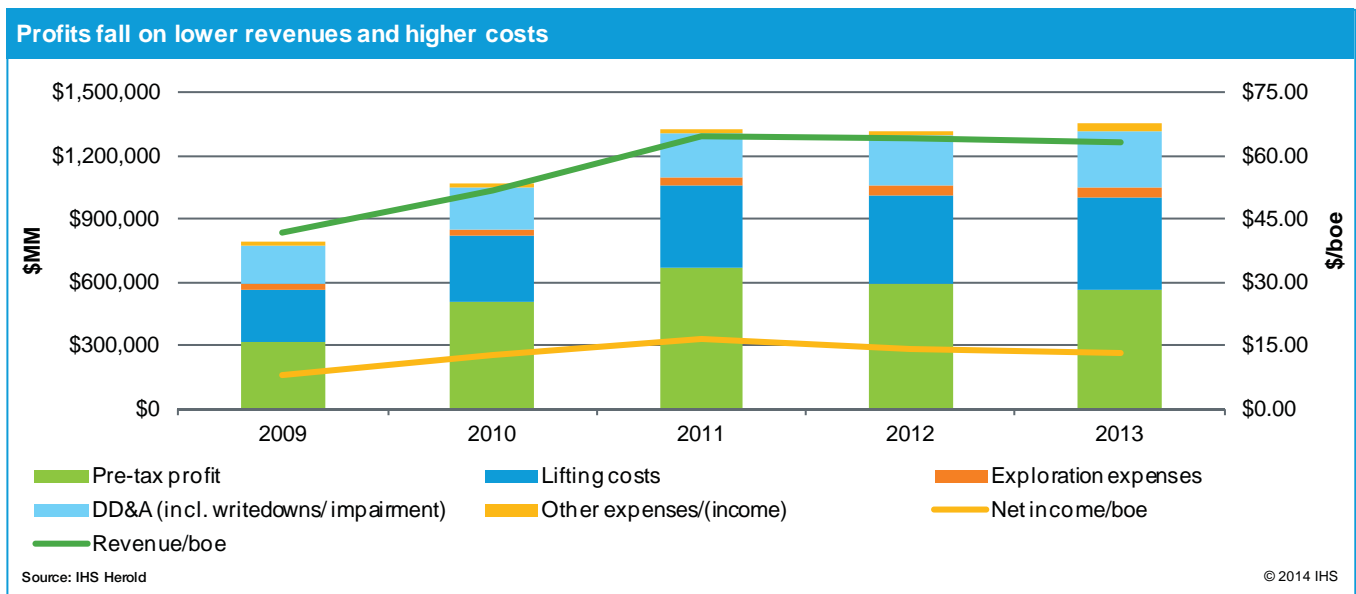
Per boe production & performance metrics						'12 - '13	3-year
	2009	2010	2011	2012	2013	% Δ	average
Oil & gas revenue per boe (a)	\$41.83	\$51.63	\$64.68	\$64.20	\$63.03	(2%)	\$63.93
Lifting costs per boe	\$12.25	\$15.12	\$19.11	\$19.55	\$20.17	3%	\$19.61
Net-back per boe	\$29.51	\$36.18	\$45.54	\$44.44	\$42.67	(4%)	\$44.32
Net income per boe (b)	\$7.86	\$12.90	\$16.60	\$13.98	\$12.99	(7%)	\$14.41
Cash flow per boe	\$20.57	\$24.51	\$29.04	\$29.67	\$28.64	(3%)	\$29.11
Recycle ratio	2.55	2.24	2.89	2.23	3.04	37%	2.74
Net-back margin, %	71%	71%	70%	69%	68%	(2%)	69%
Net income margin, %	19%	25%	26%	22%	21%	(5%)	23%
Net income return on net cum. cap. costs	10%	14%	16%	13%	11%	(14%)	13%
F&D costs incurred as % of cash flow	81%	97%	85%	92%	100%	8%	92%

(a) Excludes the impact of unrealized derivative gains and losses.

(b) Includes certain non-consolidated interests that are not included above due to incomplete disclosure.

Source: IHS Herold

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Results of oil and gas operations: Peer group analysis

Key implications

- The Integrated Oils (including Global and Regional) earned \$1.72/boe more than the E&Ps in 2013. The Integrated Oils's earnings have exceeded that of the E&Ps by an average of more than \$3/boe annually since 2009.
- The Regional Integrated Oils were the most profitable peer group and the Small E&Ps were the worst-performing peer group in 2013.
- The Oil-Weighted peers outearned the Gas-Weighted peers by over \$6/boe in 2013 and by more than \$9/boe annually since 2009.

Net income per boe by peer group

	2009	2010	2011	2012	2013	5-Year Average
All Integrated & Diversified Oils	\$9.31	\$13.04	\$17.76	\$15.97	\$13.54	\$13.96
All E&Ps	\$4.52	\$12.58	\$14.22	\$9.39	\$11.82	\$10.62
Global Integrated Oils	\$9.37	\$13.68	\$18.21	\$16.34	\$13.34	\$14.19
Regional Integrated Oils	\$9.54	\$12.88	\$17.97	\$16.18	\$14.04	\$14.14
Large E&Ps	\$6.12	\$12.87	\$14.83	\$10.73	\$12.33	\$11.45
Mid-Sized E&Ps	\$1.35	\$13.38	\$15.73	\$7.22	\$12.43	\$10.31
Small E&Ps	(\$6.48)	\$9.12	\$5.09	\$2.62	\$6.19	\$3.40
Smallest E&Ps	\$1.27	\$5.78	\$10.76	\$2.34	\$8.90	\$6.08
Oil-Weighted companies	\$9.20	\$13.50	\$18.88	\$16.44	\$13.89	\$14.46
Gas-Weighted companies	\$1.86	\$7.28	\$8.15	\$0.66	\$7.63	\$5.18
Balanced companies	\$8.49	\$13.64	\$17.29	\$15.19	\$13.71	\$13.68

Source: IHS Herold

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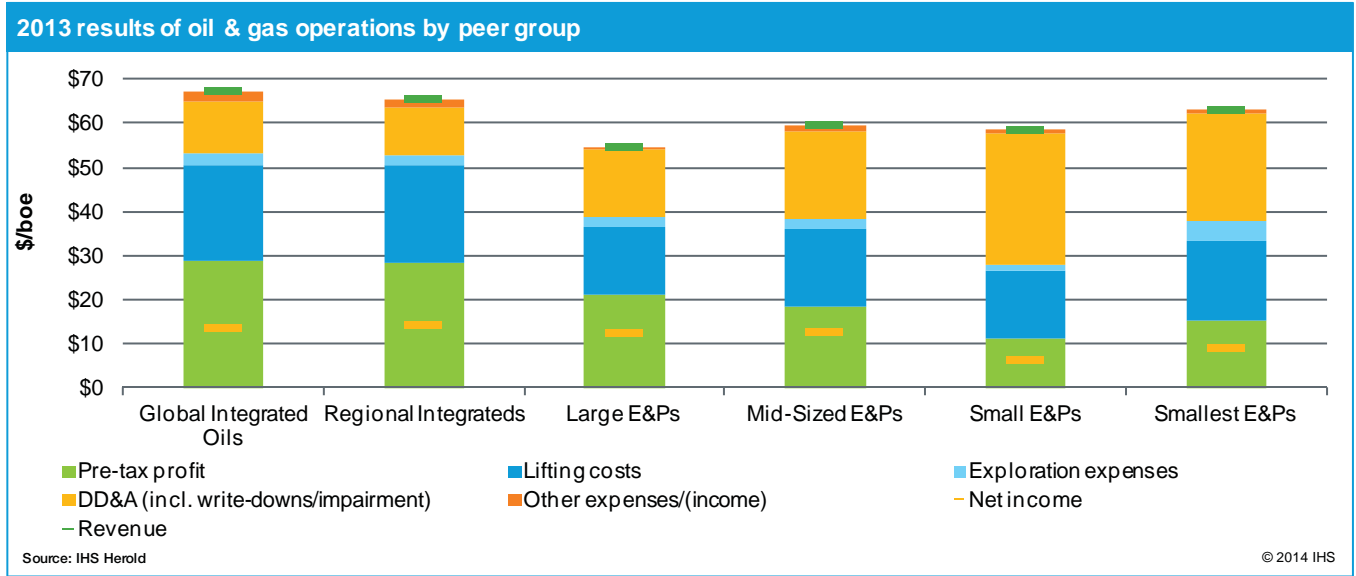
Results of oil and gas operations: Peer group analysis

While Regional Integrated Oils were the most profitable peer group in 2013, the Global Integrated Oils edged them out in five-year profitability by \$.05/boe. Among the E&Ps, the Mid-Sized E&Ps earned \$12.43/boe, only \$0.10/boe more than the Large E&Ps and significantly higher than the Small and Smallest E&P peer groups. Profits of the Oil-Weighted peers were robust, while the Gas-Weighted peers suffered from the weak natural gas market in North America.

While the difference in five-year net profit between the Regional Integrated and Global Integrated Oils was extremely thin, each group had areas of strength and weakness. The Regional Integrated Oils generated about \$0.30/boe in higher revenues and benefited from lower noncash expenses (such as exploration and DD&A) and a lower effective income tax rate. The Global Integrated Oils had a \$1.55/boe advantage in lifting costs.

Each of the E&P peer groups had per unit revenues in the mid-\$50/boe range, with the Large E&Ps slightly trailing because of their higher gas mix. However, the Large E&Ps compensated for this shortfall and outperformed the rest of the peer group because of their lower costs at just over \$43/boe. In contrast, the total costs of the Smallest E&Ps were nearly \$53/boe, making them the least profitable peer group, followed by the Small E&Ps.

The Large E&Ps posted a more than \$13/boe advantage over the Small and Smallest E&Ps in noncash expenses and a nearly \$10/boe advantage over the Mid-Sized E&Ps.



Results of oil and gas operations: Company analysis

Key implications

- Mid-Con Energy Partners was the most profitable company in the universe, leveraging its Mid-Continent oil-weighted properties and its corporate tax-free status as a master limited partnership.
- Calvalley Petroleum became the second-most profitable company in the study universe because of the premium to Brent crude oil pricing from its Yemen operations.
- Dragon Oil benefited from its top-tier lifting costs and strong revenue realizations from its assets in Turkmenistan to become the third-most profitable and fifth-highest cash flow-generating company.

Net income leaders	Primary operating region	\$/boe
Mid-Con Energy Partners	United States	\$53.50
Calvalley Petroleum	Africa & Middle East	\$51.17
Dragon Oil	Russia & Caspian	\$47.32
Venoco	United States	\$44.11
TengizChevrOil	Russia & Caspian	\$42.32
Corridor Resources	Canada	\$37.84
Oil Search	Asia-Pacific	\$35.33
Sasol	Africa & Middle East	\$33.62
VAALCO Energy	Africa & Middle East	\$33.26
Kinder Morgan Energy Partners	United States	\$32.51

Source: IHS Herold

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Cash flow leaders	Primary operating region	\$/boe
ZaZa Energy	United States	\$278.42
Mid-Con Energy Partners	United States	\$70.92
Halcon Resources	United States	\$69.74
Kosmos Energy	Africa & Middle East	\$68.58
Dragon Oil	Russia & Caspian	\$65.25
Serinus Energy	Africa & Middle East	\$65.09
Calvalley Petroleum	Africa & Middle East	\$65.04
Salamander Energy	Asia-Pacific	\$63.99
Tullow Oil	Africa & Middle East	\$61.97
Sanchez Energy	United States	\$61.95

Source: IHS Herold

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Cash flow is defined as net income plus the noncash DD&A and exploration expenses. Companies that are among the cash flow leaders but not among the net income leaders may have had significant noncash expenses, in some cases impairments or write-downs of assets. Three companies are on the cash flow and net income top 10 lists: Mid-Con Energy Partners, Dragon Oil, and Kinder Morgan Energy Partners, indicating that their cash flow metrics are rooted in earnings power. ZaZa Energy, Halcon Resources, and Serinus Energy incurred substantial write-downs and/or impairments that depressed earnings despite significant cash flow.

Lifting cost leaders	\$/boe
EQT	\$1.77
Dorchester Minerals	\$2.43
Peyto Expl. & Dev.	\$3.11
Dragon Oil	\$4.91
FX Energy	\$4.97
Questar	\$5.37
Gastar Exploration	\$5.60
Chesapeake Energy	\$5.68
Southwestern Energy	\$5.74
Cabot Oil & Gas	\$6.00

Source: IHS Herold

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Net-back leaders	\$/boe
Ecopetrol	\$90.99
Kosmos Energy	\$89.03
Lundin Petroleum AB	\$87.08
Dragon Oil	\$82.42
Maurel & Prom SA	\$81.63
Oil Search	\$81.19
SOCO International	\$80.60
Parex Resources	\$80.36
Calvalley Petroleum	\$77.74
Salamander Energy	\$74.71

Source: IHS Herold

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Netback, defined as realized price minus lifting costs, represents field-level earnings, which is a good indication of asset quality. Ecopetrol had the best netback in the study universe during 2013 at nearly \$91/boe, based on a realized price of \$111/boe and lifting costs of just under \$20/boe.

Lifting costs are an important metric when comparing companies with similar asset characteristics, such as US gas producers. Seven of the top 10 performers in lifting costs are North American gas producers. EQT Corporation, an Appalachian gas producer with a Marcellus focus, posted a study-leading lifting cost of an astonishing \$1.77/boe. Peyto Exploration and Development, a producer in Alberta's Deep Gas Basin, reported lifting costs of \$3.11/boe. Dragon Oil is the sole conventional oil producer to make the list, producing oil offshore Turkmenistan at less than \$5/boe.

Results of oil and gas operations: Regional analysis

Key implications

- Worldwide profits fell 7% in 2013 as strong earnings gains in North America more than offset reductions elsewhere.
- Profits in Canada more than tripled and US earnings increased nearly 57% as both regions benefited from higher realized prices and a sharp reduction in impairment charges.
- Profits in Asia-Pacific and South & Central America fell the most in the study, declining 17% and 28%, respectively.

Net income per boe by region						
	2009	2010	2011	2012	2013	5-Year Average
Worldwide	\$7.86	\$12.90	\$16.60	\$13.98	\$12.99	\$12.91
United States	\$1.81	\$11.77	\$12.31	\$5.60	\$8.78	\$8.06
Canada	\$4.26	\$11.63	\$10.12	\$1.97	\$5.94	\$5.94
Europe	\$10.28	\$12.88	\$17.13	\$16.29	\$15.33	\$13.83
Africa & Middle East	\$11.09	\$15.88	\$23.27	\$21.58	\$18.85	\$17.49
Asia-Pacific	\$14.47	\$20.65	\$25.13	\$25.61	\$21.24	\$21.45
South & Central America	\$6.98	\$10.84	\$16.87	\$16.02	\$11.68	\$12.47
Russia & Caspian	\$9.74	\$10.94	\$13.77	\$12.33	\$10.88	\$11.51

Source: IHS Herold

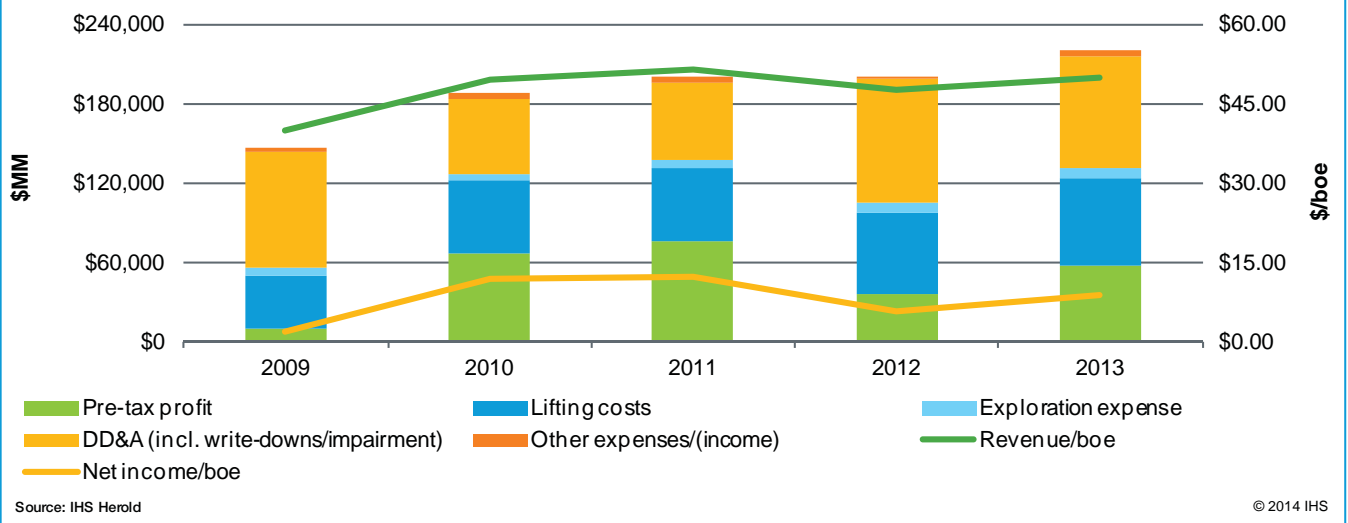
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The profits in the Asia-Pacific were lower in 2013 but it continued to be the most profitable region as companies earned \$21.24/boe, bringing the region's 5-year average to \$21.45/boe. Asia-Pacific's primary advantage was an oil and gas realized pricing premium of nearly \$11/boe in 2013. The production in the region is oil weighted and significant gas volumes are sold as LNG, which carries a premium to the North America gas price. Companies in the region are at a comparative disadvantage in operating costs, but have a lower corporate income tax rate than the global average. Company operations in the Africa & Middle East region also stand out in profitability, earning \$18.85/boe in 2013 and averaging \$17.49/boe annually since 2009. Production in the region is also highly oil weighted and has a \$20/boe advantage in realized prices over the global average. Regional lifting costs are also 25% below the global average, which yields a study-leading netback. The only negative for Africa & Middle East is its high corporate tax rate, which was 59% in 2013.

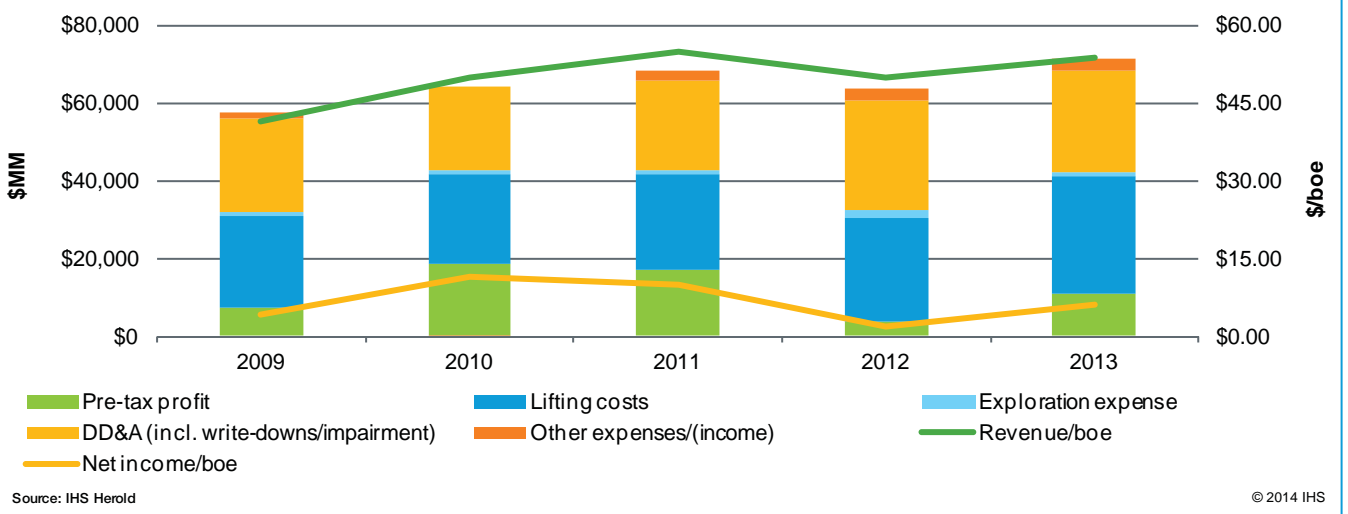
Companies in the United States and Canada have posted the two worst results for earnings per boe since 2009, annually averaging \$8.06/boe and \$5.94/boe, respectively. The United States has the highest gas weighting globally and realized prices are second lowest in the study because of the weak natural gas market. Below-average lifting costs and income taxes mitigate the revenue shortfall. Canada has slightly stronger realized prices, including premium-priced synthetic crude output, which contributed to revenues of over \$53/boe in 2013. But high costs have crushed profitability. Lifting costs and DD&A expenses totaled over \$39/boe in 2013.

Companies in the Europe, South & Central America, and Russia & Caspian regions are in the middle in profitability. Operations in Europe and South & Central America have robust revenues at or above \$75/boe. Production in South & Central America is mostly oil, while Europe's production is equally divided between oil and gas. European gas is premium priced compared with the North American gas market. Companies in the Russia & Caspian suffer from low realized prices primarily due to the highly regressive production tax regime. European companies face the highest pretax expenses due to a near \$20/boe lifting cost and a DD&A rate of just over \$13/boe. Operators in South & Central America have pretax costs of about \$34/boe because of below-average lifting costs and DD&A rates. A low book value of assets in Russia generates a \$5/boe DD&A rate that results in the lowest pretax costs. Companies in both Europe and South & Central America were hampered by very high corporate tax rates of 62% and 71%, respectively, in 2013.

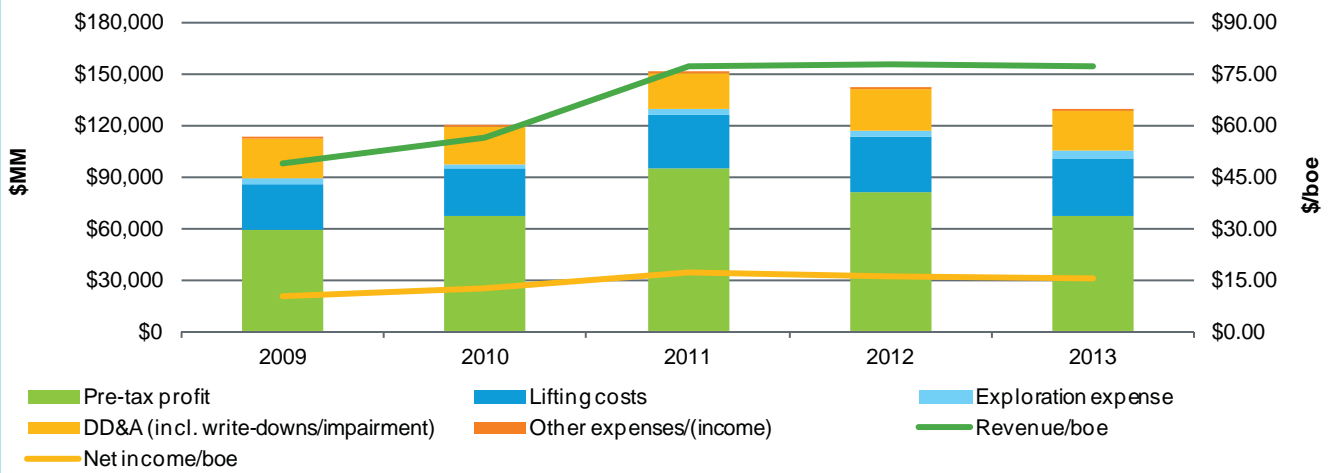
Results of oil & gas operations: United States



Results of oil & gas operations: Canada



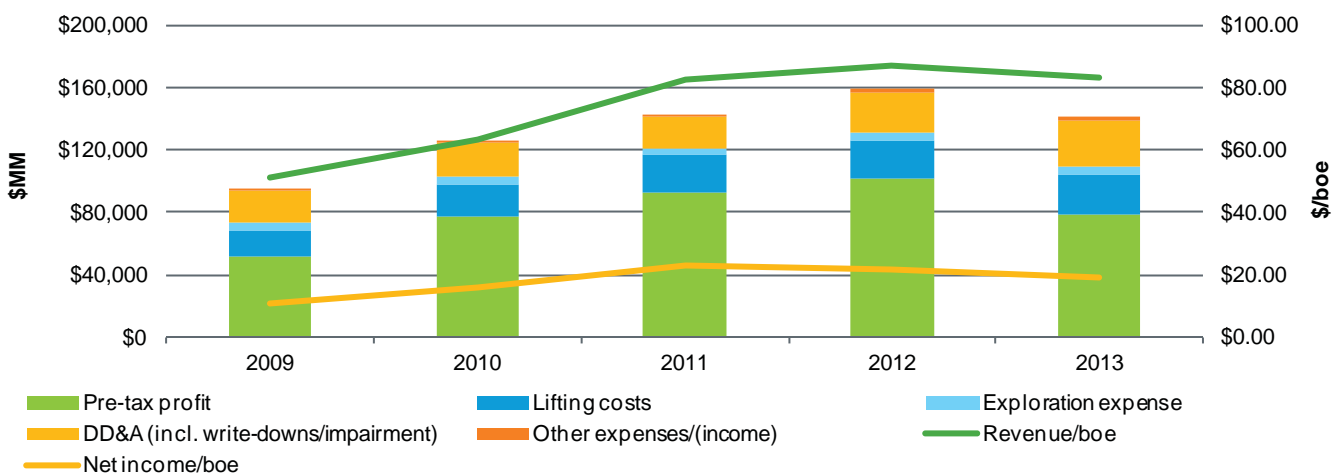
Results of oil & gas operations: Europe



Source: IHS Herold

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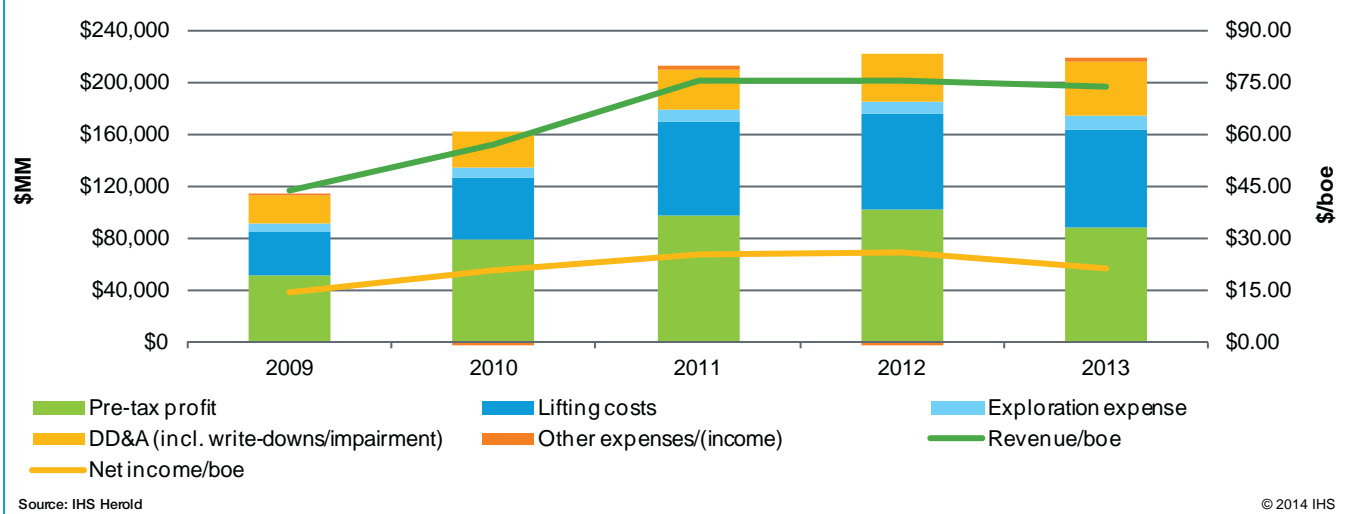
Results of oil & gas operations: Africa & Middle East



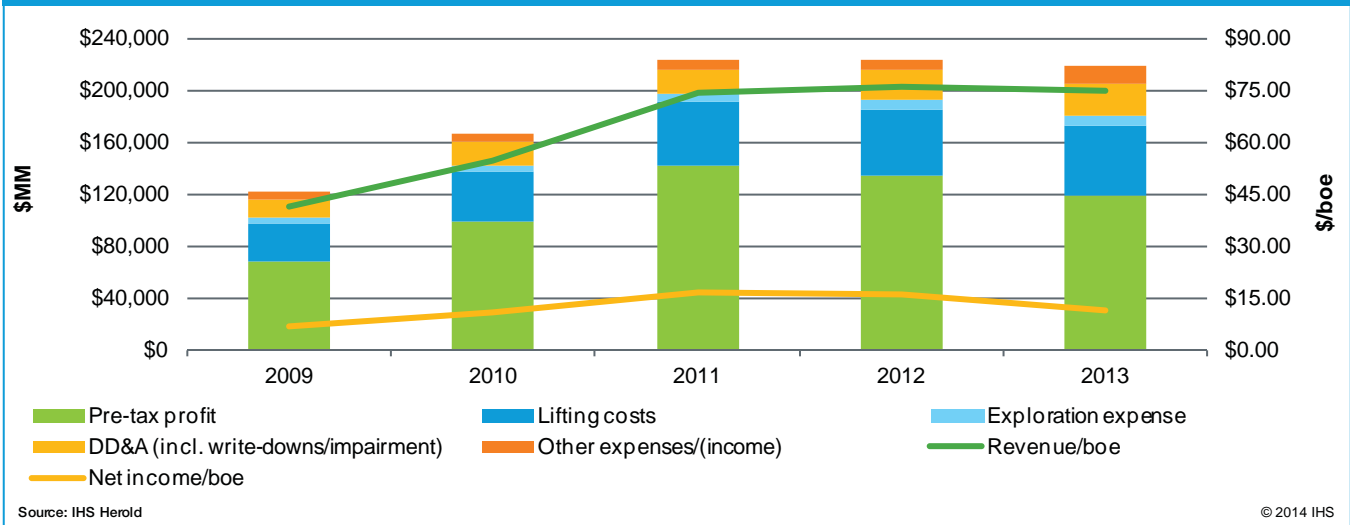
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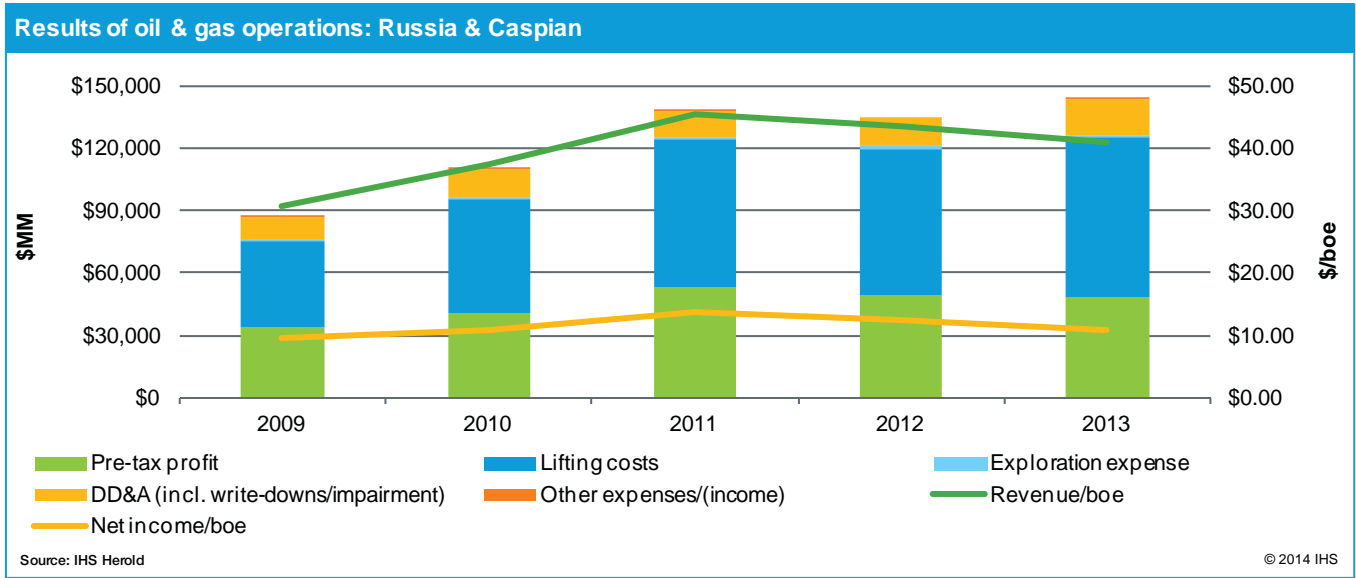
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Results of oil & gas operations: Asia-Pacific



Results of oil & gas operations: South & Central America





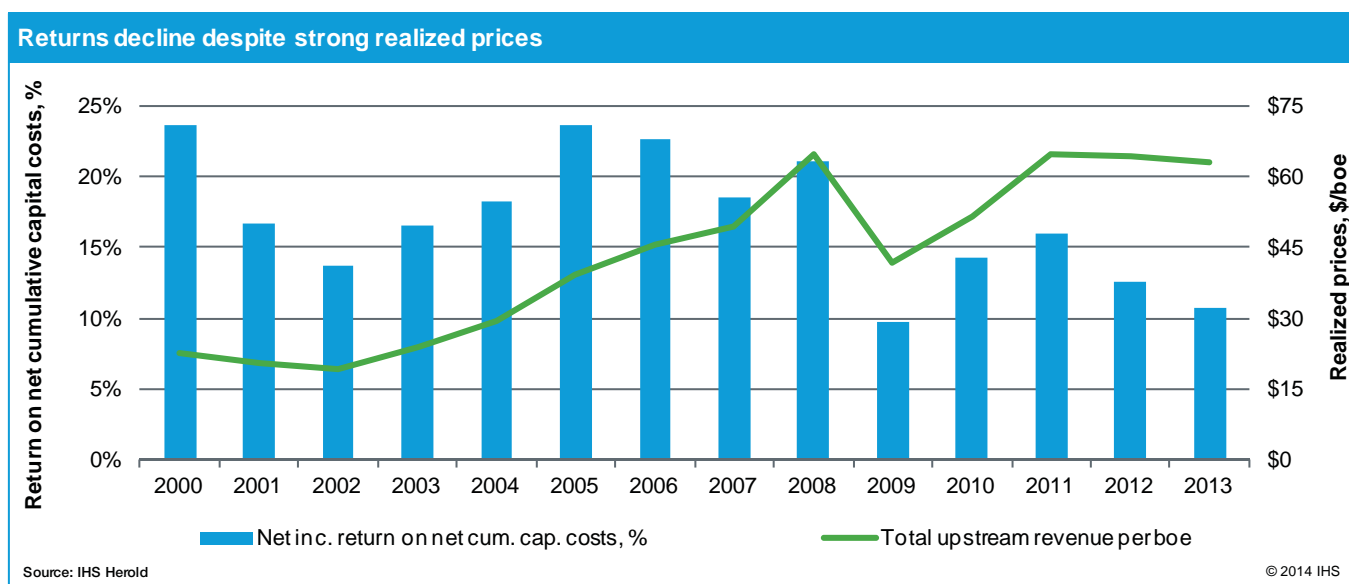
Results of oil and gas operations: What to watch for

Since the financial collapse of late 2008 there has been a divergence between return on cumulative capital cost, a return on assets metric for the upstream oil and gas industry, and realized oil and gas prices. While realized prices hit a low in 2009 and subsequently rebounded, return on cumulative capital cost initially recovered, peaked in 2011 and then headed lower. In 2013, return on cumulative capital cost was less than in 2002, when realized prices were less than \$30/boe. Operating costs have been one of the primary causes of the shrinking margins, which have tripled since 2000. Lifting costs have increased the most. The other cause of diminishing returns is the growth in the asset base. Since 2000, the upstream asset base for the study universe has increased over 400%.

Total average costs in the upstream sector have more than tripled since 2000 to \$50/boe, a more than 9% average annual rate of increase. Total costs reached nearly 80% of realized prices in 2013 compared with 69% in 2000. The only weakness in upstream costs came in 2009, when oil and gas prices sharply declined. Since 2000 costs in all expense categories have increased significantly. Lifting costs rose the most, increasing nearly 12% annually since 2000 and are currently just over \$20/boe. But DD&A rates, including reserve write-downs, followed a similar trajectory, surging to over \$13/boe. Exploration expenses have also increased at a rapid rate to \$2.41/boe. A moderating influence on costs has been the relatively slow rate of gain in corporate income taxes, which grew to nearly \$13/boe in 2013.

At the same time upstream costs were escalating, the amount of capital being invested was surging as well. Cumulative capital costs increased over fourfold since 2000 to \$2.7 trillion. Investment was not curtailed nor moderated despite the deteriorating fundamentals in earnings. The E&Ps were somewhat more aggressive capital spenders than the Integrated Oils, which have had alternative uses for their capital. The E&Ps increased their capital base by 18% annually compared to 15% for the Integrated Oils.

With IHS Energy forecasting weakness in West Texas Intermediate oil prices for 2015 at about \$90/bbl, the prospects for improving returns in the near term are limited to companies proactively making significant cost reductions and limiting capital spending. Post-2016, IHS expects oil prices will rise gradually, which would help bolster returns, provided emphasis is retained on containing costs and judiciously allocating capital.



Results of oil and gas operations: Worldwide

Results of oil and gas operations: Worldwide								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
UNIVERSE*	\$63.03	\$20.17	\$2.41	\$13.08	\$1.61	\$12.82	\$12.99	-
Mid-Con Energy Partners	\$92.66	\$21.74	-	\$17.23	\$0.19	-	\$53.50	1
Calvalley Petroleum	\$108.98	\$31.24	-	\$13.87	-	\$12.70	\$51.17	2
Dragon Oil	\$87.32	\$4.91	-	\$17.93	-	\$17.17	\$47.32	3
Venoco	\$83.58	\$24.22	-	\$14.51	\$0.74	-	\$44.11	4
TengizChevrOil	\$72.84	\$7.18	-	\$4.43	\$0.77	\$18.14	\$42.32	5
Corridor Resources	\$42.37	\$14.73	\$0.02	(\$22.94)	-	\$12.72	\$37.84	6
Oil Search	\$113.74	\$27.10	\$15.95	\$4.90	\$0.56	\$29.91	\$35.33	7
Sasol	\$85.34	\$25.95	\$1.51	\$9.39	-	\$14.87	\$33.62	8
VAALCO Energy	\$105.59	\$40.55	-	\$10.50	-	\$21.28	\$33.26	9
Kinder Morgan Energy Partners	\$89.92	\$22.48	-	\$27.12	\$6.21	\$1.61	\$32.51	10
Aurora Oil and Gas	\$72.11	\$10.60	\$0.09	\$14.59	-	\$16.44	\$30.39	11
Canadian Oil Sands	\$122.83	\$65.07	-	\$14.55	\$4.05	\$9.82	\$29.34	12
Ecopetrol	\$110.83	\$19.84	\$3.24	\$7.22	\$34.24	\$17.13	\$29.16	13
Maurel & Prom SA	\$108.03	\$26.40	-	\$18.24	-	\$34.98	\$28.42	14
Oasis Petroleum	\$86.97	\$17.87	\$0.18	\$24.91	-	\$16.13	\$27.89	15
Sanchez Energy	\$79.66	\$13.69	-	\$34.83	-	\$4.02	\$27.12	16
Vermilion Energy	\$84.49	\$15.78	-	\$19.38	\$1.73	\$20.76	\$26.83	17
Baytex Energy	\$79.40	\$25.31	\$0.60	\$19.17	\$0.41	\$8.23	\$25.69	18
Denbury Resources	\$96.17	\$34.84	-	\$18.71	\$1.92	\$15.04	\$25.66	19
Petrobras	\$85.43	\$32.85	\$3.44	\$11.12	(\$0.03)	\$12.75	\$25.30	20
TransGlobe Energy	\$92.76	\$19.36	-	\$23.26	-	\$25.11	\$25.04	21
Diamondback Energy	\$75.14	\$13.09	-	\$24.63	-	\$13.76	\$23.66	22
Triangle Petroleum	\$81.98	\$16.79	-	\$28.03	\$0.04	\$13.86	\$23.26	23
Freehold Royalties	\$56.88	\$6.15	-	\$19.47	\$0.14	\$8.00	\$23.12	24
Ultra Petroleum	\$23.59	\$7.12	-	(\$6.29)	-	(\$0.07)	\$22.84	25
PetroChina	\$71.46	\$28.50	\$2.94	\$12.12	\$0.54	\$5.54	\$22.79	26
SOCO International	\$101.35	\$20.75	-	\$7.43	\$0.22	\$50.17	\$22.78	27
Dorchester Minerals	\$31.26	\$2.43	-	\$6.24	-	-	\$22.59	28
Warren Resources	\$59.02	\$17.16	-	\$18.39	\$1.05	\$0.05	\$22.37	29
Chevron	\$74.30	\$17.62	\$1.92	\$13.37	\$0.03	\$19.35	\$22.02	30
Northern Oil & Gas	\$79.77	\$17.16	-	\$27.79	-	\$13.03	\$21.77	31
CNOOC	\$91.34	\$28.92	\$6.83	\$22.74	\$0.78	\$10.50	\$21.58	32
Kodiak Oil & Gas	\$83.39	\$17.89	-	\$29.80	-	\$14.13	\$21.58	33
Continental Resources	\$71.46	\$12.38	\$0.70	\$23.67	\$0.06	\$13.30	\$21.35	34
Gran Tierra Energy	\$89.27	\$18.47	-	\$32.97	-	\$16.51	\$21.31	35
OMV AG	\$68.04	\$19.29	\$5.28	\$14.91	(\$0.19)	\$8.42	\$20.34	36
Woodside Petroleum	\$68.12	\$15.56	\$3.64	\$18.25	\$0.47	\$9.96	\$20.22	37
Bonanza Creek Energy	\$69.35	\$12.67	\$0.71	\$23.68	-	\$12.32	\$19.97	38
SandRidge Energy	\$53.89	\$16.25	-	\$16.81	\$1.09	(\$0.22)	\$19.97	39
Bonterra Energy	\$63.50	\$14.16	\$0.29	\$22.88	-	\$6.80	\$19.37	40
Sinopec	\$80.38	\$32.14	\$4.62	\$17.13	-	\$7.38	\$19.12	41
Energy XXI (Bermuda)	\$76.84	\$21.80	-	\$23.95	\$1.97	\$10.15	\$18.98	42
Suncor Energy	\$94.92	\$38.75	\$1.75	\$23.08	-	\$12.44	\$18.89	43
Laredo Petroleum	\$60.17	\$10.84	-	\$20.34	\$0.13	\$10.08	\$18.79	44
PTT E&P Public	\$60.63	\$16.01	\$1.39	\$13.12	(\$0.25)	\$11.67	\$18.70	45
Bankers Petroleum	\$82.27	\$27.10	-	\$17.29	\$0.18	\$19.07	\$18.62	46
QR Energy LP	\$71.90	\$26.64	-	\$17.63	\$1.14	\$9.01	\$17.49	47
Concho Resources	\$68.01	\$13.54	\$3.26	\$24.91	\$0.18	\$8.65	\$17.47	48
Mitsui	\$75.62	\$14.17	\$5.88	\$19.84	-	\$18.54	\$17.20	49

Results of oil and gas operations: Worldwide

	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
EPL Oil & Gas	\$76.88	\$20.53	\$3.01	\$23.08	\$3.21	\$9.95	\$17.08	50
Occidental Petroleum	\$68.90	\$16.31	\$0.92	\$19.26	\$4.05	\$11.36	\$17.00	51
MOL	\$58.70	\$9.46	\$1.84	\$28.38	(\$0.58)	\$2.68	\$16.92	52
FieldPoint Petroleum	\$80.03	\$29.68	\$1.16	\$21.87	\$0.73	\$9.97	\$16.62	53
Exxon Mobil	\$67.66	\$22.20	\$1.55	\$9.18	-	\$18.18	\$16.54	54
Berry Petroleum	\$76.25	\$27.75	\$1.59	\$18.94	-	\$11.51	\$16.47	55
INPEX	\$102.26	\$36.76	\$1.74	\$1.97	-	\$45.54	\$16.25	56
Rosetta Resources	\$45.82	\$8.60	-	\$12.06	-	\$8.98	\$16.19	57
Imperial Oil	\$63.56	\$34.85	\$1.26	\$6.02	-	\$5.26	\$16.17	58
Afren	\$94.69	\$35.03	\$3.58	\$24.17	\$0.40	\$15.53	\$16.00	59
Bellatrix Exploration	\$44.96	\$11.88	-	\$13.30	-	\$4.23	\$15.55	60
Carrizo Oil & Gas	\$53.27	\$7.53	-	\$21.38	\$0.05	\$9.02	\$15.28	61
EOG Resources	\$58.13	\$13.61	\$1.26	\$20.13	-	\$7.93	\$15.20	62
EP Energy	\$41.00	\$10.20	\$1.05	\$14.41	\$0.09	\$0.19	\$15.06	63
Eni S.p.A.	\$70.44	\$12.21	\$4.16	\$14.30	\$4.55	\$20.44	\$14.77	64
Statoil ASA	\$80.26	\$9.04	\$5.05	\$18.00	\$4.63	\$28.64	\$14.71	65
Harvest Natural Resources	\$85.11	\$36.63	\$4.60	\$9.79	-	\$19.43	\$14.65	66
Chaparral Energy	\$60.73	\$17.76	-	\$20.11	-	\$8.48	\$14.38	67
Murphy Oil	\$71.14	\$20.23	\$5.83	\$21.85	\$0.66	\$8.79	\$13.78	68
Callon Petroleum Company	\$72.60	\$16.92	-	\$32.33	-	\$9.80	\$13.54	69
ConocoPhillips	\$61.24	\$20.54	\$2.14	\$13.37	\$0.99	\$10.68	\$13.53	70
Hess	\$80.17	\$22.98	\$8.27	\$23.74	-	\$11.86	\$13.32	71
Stone Energy	\$57.35	\$13.58	-	\$20.80	\$2.00	\$7.73	\$13.23	72
Premier Oil	\$71.31	\$20.37	\$6.48	\$26.72	\$1.73	\$2.88	\$13.13	73
Kosmos Energy	\$100.88	\$11.85	\$28.20	\$27.25	-	\$20.45	\$13.13	74
MDU Resources Group	\$52.22	\$14.04	-	\$17.42	\$0.35	\$7.39	\$13.03	75
Cimarex Energy	\$46.25	\$11.70	-	\$13.88	\$0.19	\$7.50	\$12.98	76
Canadian Natural Resources	\$60.91	\$21.57	-	\$21.52	\$0.76	\$4.09	\$12.96	77
BASF SE	\$34.68	\$6.35	\$2.67	\$4.03	(\$1.53)	\$10.45	\$12.71	78
Approach Resources	\$51.24	\$9.09	\$0.64	\$21.88	-	\$7.27	\$12.36	79
Total	\$67.92	\$22.95	\$2.71	\$12.05	-	\$18.02	\$12.19	80
Abraxas Petroleum	\$56.83	\$23.71	-	\$20.64	-	\$0.31	\$12.17	81
Breitbart Energy Partners	\$60.15	\$23.93	-	\$24.13	-	\$0.08	\$12.01	82
Tullow Oil	\$85.67	\$18.35	\$28.44	\$21.05	\$0.57	\$5.35	\$11.91	83
Noble Energy	\$48.46	\$9.01	\$4.15	\$16.56	-	\$6.85	\$11.89	84
Apache	\$59.07	\$14.94	-	\$22.65	\$0.88	\$8.71	\$11.89	85
BHP Billiton Group	\$53.63	\$16.06	\$2.58	\$14.57	-	\$8.56	\$11.86	86
Whiting Petroleum	\$76.76	\$19.09	\$2.76	\$36.40	-	\$6.66	\$11.85	87
Newfield Exploration	\$56.05	\$18.04	-	\$19.11	-	\$7.11	\$11.79	88
Questar	\$31.72	\$5.37	-	\$8.01	-	\$6.58	\$11.77	89
Pacific Rubiales Energy	\$85.54	\$33.12	-	\$25.50	\$1.26	\$13.99	\$11.66	90
PrimeEnergy	\$56.65	\$27.13	\$0.00	\$11.90	-	\$6.20	\$11.41	91
Energen	\$49.45	\$13.86	\$1.10	\$17.73	\$0.28	\$5.08	\$11.40	92
Lukoil	\$53.32	\$34.15	\$0.73	\$4.60	-	\$2.82	\$11.02	93
ARC Resources	\$46.98	\$13.23	-	\$18.30	\$0.41	\$4.23	\$10.81	94
Marathon Oil	\$68.65	\$17.95	\$5.59	\$15.62	(\$0.90)	\$19.62	\$10.78	95
Salamander Energy	\$90.98	\$16.28	\$31.94	\$21.33	-	\$10.72	\$10.72	96
BP	\$54.37	\$22.67	\$2.99	\$10.80	\$1.84	\$5.83	\$10.23	97
Crescent Point Energy	\$69.44	\$14.94	-	\$38.78	\$0.35	\$5.18	\$10.19	98
Forest Oil	\$36.24	\$8.23	-	\$17.77	\$0.23	(\$0.06)	\$10.07	99
Vanguard Natural Res.	\$34.30	\$11.28	-	\$12.95	-	-	\$10.07	100
Lundin Petroleum AB	\$103.92	\$15.43	\$24.10	\$24.92	-	\$29.48	\$9.99	101
Husky Energy	\$59.18	\$18.70	\$2.38	\$24.03	-	\$4.09	\$9.99	102
Equal Energy	\$26.36	\$7.34	-	\$7.31	\$0.17	\$1.56	\$9.97	103

Results of oil and gas operations: Worldwide								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
BG Group	\$50.85	\$12.17	\$3.08	\$11.30	\$4.01	\$10.39	\$9.91	104
Peyto Expl. & Dev. Unit	\$27.06 \$38.27	\$3.11 \$9.73	-	\$11.37 \$13.31	-	\$3.11 \$5.87	\$9.48 \$9.36	105 106
Cenovus Energy	\$67.95	\$34.95	-	\$16.75	-	\$6.92	\$9.34	107
National Fuel Gas	\$34.94	\$6.78	-	\$11.86	\$0.20	\$6.87	\$9.23	108
Santos	\$68.15	\$16.97	\$3.75	\$17.03	\$15.17	\$6.19	\$9.04	109
Repsol	\$51.73	\$13.92	\$6.77	\$9.82	\$0.28	\$11.95	\$8.99	110
Antero Resources	\$31.27	\$8.84	\$0.71	\$7.33	-	\$5.50	\$8.90	111
BPZ Resources	\$98.41	\$48.43	\$4.25	\$34.99	-	\$2.36	\$8.87	112
Range Resources	\$29.46	\$7.51	\$2.03	\$8.75	-	\$2.53	\$8.64	113
PDC Energy	\$52.86	\$10.95	\$0.95	\$23.91	\$0.64	\$7.90	\$8.51	114
Rosneft Oil	\$39.15	\$22.17	\$0.35	\$6.75	\$0.14	\$1.27	\$8.47	115
Birchcliff Energy	\$32.90	\$8.73	-	\$12.38	\$0.25	\$3.14	\$8.40	116
Anadarko Petroleum	\$49.02	\$12.24	\$4.68	\$15.24	-	\$8.53	\$8.34	117
W&T Offshore	\$54.24	\$16.43	-	\$23.95	\$1.16	\$4.56	\$8.14	118
PetroQuest Energy	\$36.43	\$9.50	-	\$14.24	\$0.35	\$4.32	\$8.02	119
MEG Energy	\$56.06	\$16.86	-	\$18.15	-	\$13.05	\$8.00	120
Chesapeake Energy	\$28.84	\$5.68	-	\$10.59	-	\$4.78	\$7.80	121
Gastar Exploration	\$30.35	\$5.60	-	\$9.94	-	\$7.14	\$7.68	122
Panhandle Oil and Gas	\$28.06	\$6.34	\$0.00	\$10.40	-	\$3.68	\$7.63	123
Endeavour International	\$92.35	\$28.84	-	\$41.17	-	\$14.72	\$7.61	124
Zargon Oil & Gas	\$53.31	\$19.86	\$1.66	\$20.58	\$1.66	\$2.41	\$7.14	125
Tourmaline Oil	\$31.70	\$7.04	-	\$14.32	-	\$3.25	\$7.09	126
Novatek	\$18.89	\$9.23	\$0.03	\$1.14	-	\$1.63	\$6.85	127
Legacy Reserves LP	\$66.64	\$25.66	-	\$34.01	-	\$0.13	\$6.84	128
Long Run Exploration	\$50.82	\$17.90	\$0.03	\$22.35	\$0.74	\$3.06	\$6.73	129
Quicksilver Resources	\$25.44	\$13.61	-	\$2.22	-	\$3.12	\$6.50	130
EnCana	\$29.61	\$12.97	-	\$7.52	-	\$2.69	\$6.43	131
Black Hills	\$36.59	\$13.43	-	\$13.74	-	\$3.25	\$6.17	132
SM Energy Company	\$45.52	\$12.36	\$1.53	\$21.57	-	\$3.88	\$6.16	133
Saratoga Resources	\$84.66	\$36.05	\$1.99	\$24.21	\$5.56	\$10.74	\$6.11	134
Royal Dutch Shell	\$72.97	\$22.25	\$4.75	\$15.09	\$8.39	\$16.44	\$6.05	135
QEP Resources	\$39.80	\$11.33	\$0.23	\$20.34	-	\$1.87	\$6.02	136
Enerplus	\$48.37	\$16.31	-	\$21.32	-	\$4.79	\$5.95	137
Southwestern Energy	\$21.96	\$5.74	-	\$6.72	-	\$3.80	\$5.70	138
Gazprom Neft	\$36.97	\$24.56	\$0.29	\$5.07	-	\$1.35	\$5.69	139
Swift Energy	\$50.11	\$14.15	-	\$27.75	\$0.53	\$2.02	\$5.66	140
Bonavista Energy	\$34.56	\$11.54	-	\$14.61	-	\$2.75	\$5.66	141
Trilogy Energy	\$43.73	\$13.77	\$0.53	\$20.57	-	\$3.43	\$5.43	142
Serinus Energy	\$78.67	\$11.22	-	\$59.42	\$0.25	\$2.36	\$5.42	143
Apco Oil & Gas Int'l	\$49.26	\$28.37	\$1.37	\$6.61	-	\$2.03	\$5.18	144
Cabot Oil & Gas	\$24.63	\$6.00	\$0.26	\$9.45	-	\$3.78	\$5.14	145
EXCO Resources	\$25.07	\$6.81	-	\$13.13	\$0.09	-	\$5.03	146
Parex Resources	\$107.82	\$34.34	-	\$51.67	-	\$16.87	\$4.94	147
Pengrowth Energy	\$48.61	\$19.70	-	\$22.11	\$0.79	\$1.13	\$4.89	148
Clayton Williams Energy	\$76.23	\$20.63	\$1.86	\$45.80	\$0.80	\$2.38	\$4.76	149
PEMEX	\$75.77	\$8.16	\$1.37	\$7.22	\$2.46	\$51.92	\$4.65	150
EQT	\$19.10	\$1.77	\$0.30	\$9.46	-	\$2.99	\$4.58	151
Advantage Oil & Gas	\$28.55	\$7.51	\$0.02	\$12.60	\$0.79	\$3.50	\$4.13	152
YPF	\$43.57	\$25.97	\$0.86	\$9.97	\$0.74	\$2.10	\$3.93	153
DNO ASA	\$35.80	\$8.54	\$0.22	\$20.37	-	\$2.87	\$3.79	154
Loews	\$32.23	\$21.94	-	\$45.38	-	(\$38.56)	\$3.47	155
JKX Oil & Gas	\$50.20	\$25.37	\$0.41	\$15.52	-	\$5.71	\$3.18	156
NuVista Energy	\$32.55	\$14.20	\$0.98	\$13.43	-	\$0.79	\$3.14	157
Gulfport Energy	\$63.66	\$15.70	-	\$28.68	-	\$12.01	\$2.87	158
Devon Energy	\$34.50	\$11.51	-	\$17.49	\$0.44	\$2.23	\$2.83	159

Results of oil and gas operations: Worldwide

	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
GeoMet	\$18.39	\$13.53	-	\$2.71	-	\$0.00	\$2.15	160
CONSOL Energy	\$28.21	\$14.91	-	\$7.99	\$2.30	\$1.15	\$1.87	161
EV Energy Partners	\$33.16	\$11.28	\$0.23	\$19.37	\$0.48	\$0.00	\$1.80	162
Royale Energy	\$22.72	\$16.56	-	\$4.51	-	-	\$1.65	163
Perpetual Energy	\$30.15	\$13.69	\$1.16	\$14.03	-	-	\$1.28	164
Linn Energy	\$46.44	\$12.80	\$0.11	\$32.37	\$0.00	\$0.00	\$1.15	165
Santonia Energy	\$35.10	\$14.23	-	\$19.48	-	\$0.25	\$1.15	166
Rex Energy	\$39.18	\$11.01	\$2.02	\$16.74	-	\$8.62	\$0.78	167
Alta Mesa Holdings	\$67.85	\$15.94	\$5.45	\$43.10	\$2.60	-	\$0.76	168
Constellation Energy Partners	\$29.24	\$14.23	-	\$14.15	\$0.34	-	\$0.51	169
Max Petroleum	\$76.42	\$39.57	\$5.74	\$17.88	\$0.19	\$12.84	\$0.19	170
Global Energy Development	\$87.08	\$40.49	-	\$18.41	\$1.30	\$26.80	\$0.08	171
PostRock Energy	\$25.80	\$15.34	-	\$10.48	-	(\$0.00)	(\$0.01)	172
Pioneer Natural Resources	\$49.81	\$12.23	\$1.48	\$36.00	\$0.18	(\$0.03)	(\$0.04)	173
FX Energy	\$45.00	\$4.97	\$28.09	\$13.12	\$0.12	-	(\$1.30)	174
Goodrich Petroleum	\$40.63	\$9.73	\$4.66	\$27.67	-	-	(\$1.42)	175
Barnwell Industries	\$37.81	\$17.67	-	\$22.18	-	(\$0.59)	(\$1.45)	176
Comstock Resources	\$36.44	\$7.30	\$2.88	\$29.13	-	(\$0.99)	(\$1.88)	177
Escalera Resources	\$24.73	\$11.10	\$0.12	\$16.53	-	(\$1.02)	(\$2.00)	178
Adams Resources and Energy	\$38.19	\$15.56	\$4.38	\$23.96	-	(\$2.00)	(\$3.71)	179
Penn Virginia	\$62.96	\$10.36	\$3.08	\$55.37	-	(\$2.06)	(\$3.79)	180
Bill Barrett	\$39.44	\$11.38	\$0.02	\$34.98	\$0.74	(\$2.93)	(\$4.75)	181
Paramount Resources	\$31.58	\$12.65	\$4.86	\$20.93	\$0.42	(\$1.28)	(\$6.01)	182
Talisman Energy	\$55.12	\$22.48	\$3.75	\$39.68	-	(\$4.39)	(\$6.40)	183
Penn West Petroleum	\$52.33	\$19.83	-	\$40.28	-	-	(\$7.78)	184
Chinook Energy	\$52.52	\$23.57	\$3.45	\$33.09	\$0.82	\$1.62	(\$10.04)	185
Canacol Energy	\$73.95	\$38.30	\$25.72	\$24.43	-	(\$3.78)	(\$10.72)	186
LRR Energy	\$49.65	\$14.41	-	\$45.38	\$0.82	(\$0.01)	(\$10.94)	187
Anderson Energy	\$39.19	\$15.04	-	\$62.95	-	(\$27.32)	(\$11.48)	188
Niko Resources	\$31.26	\$8.87	\$23.80	\$14.93	-	(\$3.72)	(\$12.62)	189
Magnum Hunter Resources	\$37.62	\$14.24	\$19.34	\$21.69	-	(\$4.52)	(\$13.12)	190
Resolute Energy	\$79.46	\$32.17	-	\$68.13	-	(\$7.55)	(\$13.29)	191
WPX Energy	\$24.82	\$14.92	\$5.52	\$25.57	\$0.22	(\$7.82)	(\$13.58)	192
Athabasca Oil	\$56.38	\$16.71	-	\$63.73	\$2.03	(\$5.74)	(\$20.35)	193
Valeura Energy	\$67.02	\$12.51	\$42.14	\$36.93	-	(\$1.82)	(\$22.74)	194
Midstates Petroleum	\$56.76	\$12.16	-	\$80.66	\$0.16	(\$10.82)	(\$25.41)	195
Magellan Petroleum	\$19.06	\$18.97	\$22.29	\$6.54	-	(\$1.73)	(\$27.01)	196
Dune Energy	\$70.95	\$41.79	-	\$63.80	\$8.40	-	(\$43.04)	197
Lightstream Resources	\$71.65	\$15.39	-	\$124.16	-	(\$0.21)	(\$67.68)	198
Halcon Resources	\$80.18	\$19.24	-	\$138.01	-	(\$8.81)	(\$68.27)	199
Carnarvon Petroleum	\$93.93	\$40.37	\$5.67	\$26.38	-	\$142.74	(\$121.22)	200
Gulfsands Petroleum	\$131.01	\$172.26	\$64.62	\$53.97	\$15.00	-	(\$174.84)	201
ZaZa Energy	\$67.40	\$16.15	-	\$821.55	-	(\$227.17)	(\$543.14)	202
Heritage Oil	-	-	-	-	-	-	-	203
Sonde Resources	-	-	-	-	-	-	-	204
Tap Oil	-	-	-	-	-	-	-	205
TransAtlantic Petroleum	-	-	-	-	-	-	-	206
All Integrated & Diversified Oils	\$66.31	\$22.03	\$2.55	\$11.19	\$2.05	\$15.05	\$13.54	-
All E&Ps	\$55.73	\$16.05	\$2.05	\$17.24	\$0.64	\$7.92	\$11.82	-
Regional Integrations	\$65.34	\$22.38	\$2.30	\$10.58	\$1.88	\$14.31	\$14.04	1
Global Integrated Oils	\$67.12	\$21.65	\$2.74	\$11.85	\$2.14	\$15.40	\$13.34	2
Mid-Sized E&Ps	\$59.49	\$17.81	\$2.03	\$20.01	\$1.16	\$6.05	\$12.43	3
Large E&Ps	\$54.46	\$15.69	\$2.02	\$15.27	\$0.53	\$8.62	\$12.33	4
Smallest E&Ps	\$62.77	\$18.15	\$4.40	\$24.06	\$0.56	\$6.04	\$8.90	5
Small E&Ps	\$58.32	\$15.01	\$1.60	\$29.62	\$0.67	\$5.23	\$6.19	6

Results of oil and gas operations: Worldwide

	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
Oil-Weighted companies	\$67.08	\$23.11	\$2.01	\$12.18	\$1.64	\$14.24	\$13.89	1
Balanced companies	\$64.68	\$19.78	\$2.70	\$13.77	\$1.75	\$13.07	\$13.71	2
Gas-Weighted companies	\$35.39	\$10.66	\$1.64	\$10.76	\$0.34	\$4.36	\$7.63	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

¹Excludes the impact of unrealized derivative gains and losses.

²Includes Shipping/Transportation/Handling Expenses, Taxes Other than Income, and Production-Related G&A

³Includes certain non consolidated interests

Source: IHS Herold

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Results of oil and gas operations: United States

Results of oil and gas operations: United States								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
UNIVERSE*	\$49.75	\$14.77	\$1.82	\$18.92	\$1.09	\$4.36	\$8.78	-
Mid-Con Energy Partners	\$92.66	\$21.74	-	\$17.23	\$0.19	-	\$53.50	1
Venoco	\$83.58	\$24.22	-	\$14.51	\$0.74	-	\$44.11	2
Kinder Morgan Energy Partners	\$89.92	\$22.48	-	\$27.12	\$6.21	\$1.61	\$32.51	3
Aurora Oil and Gas	\$72.11	\$10.60	\$0.09	\$14.59	-	\$16.44	\$30.39	4
Oasis Petroleum	\$86.97	\$17.87	\$0.18	\$24.91	-	\$16.13	\$27.89	5
Sanchez Energy	\$79.66	\$13.69	-	\$34.83	-	\$4.02	\$27.12	6
Denbury Resources	\$96.17	\$34.84	-	\$18.71	\$1.92	\$15.04	\$25.66	7
Diamondback Energy	\$75.14	\$13.09	-	\$24.63	-	\$13.76	\$23.66	8
Triangle Petroleum	\$81.98	\$16.79	-	\$28.03	\$0.04	\$13.86	\$23.26	9
Ultra Petroleum	\$23.59	\$7.12	-	(\$6.29)	-	(\$0.07)	\$22.84	10
Dorchester Minerals	\$31.26	\$2.43	-	\$6.24	-	-	\$22.59	11
Warren Resources	\$59.02	\$17.16	-	\$18.39	\$1.05	\$0.05	\$22.37	12
Northern Oil & Gas	\$79.77	\$17.16	-	\$27.79	-	\$13.03	\$21.77	13
Kodiak Oil & Gas	\$83.39	\$17.89	-	\$29.80	-	\$14.13	\$21.58	14
Continental Resources	\$71.46	\$12.38	\$0.70	\$23.67	\$0.06	\$13.30	\$21.35	15
Murphy Oil	\$86.17	\$20.61	\$3.59	\$28.98	\$0.64	\$11.54	\$20.80	16
Bonanza Creek Energy	\$69.35	\$12.67	\$0.71	\$23.68	-	\$12.32	\$19.97	17
SandRidge Energy	\$53.89	\$16.25	-	\$16.81	\$1.09	(\$0.22)	\$19.97	18
Repsol	\$88.72	\$4.27	\$13.17	\$35.23	\$0.12	\$16.75	\$19.18	19
Energy XXI (Bermuda)	\$76.84	\$21.80	-	\$23.95	\$1.97	\$10.15	\$18.98	20
FX Energy	\$78.80	\$47.22	\$6.18	\$5.31	\$1.12	-	\$18.96	21
Laredo Petroleum	\$60.17	\$10.84	-	\$20.34	\$0.13	\$10.08	\$18.79	22
Chevron	\$69.99	\$21.92	\$2.32	\$17.39	(\$0.08)	\$10.31	\$18.13	23
Abraxas Petroleum	\$56.90	\$22.25	-	\$16.53	-	\$0.32	\$17.80	24
EOG Resources	\$63.72	\$14.79	\$0.98	\$20.90	-	\$9.41	\$17.64	25
QR Energy LP	\$71.90	\$26.64	-	\$17.63	\$1.14	\$9.01	\$17.49	26
Concho Resources	\$68.01	\$13.54	\$3.26	\$24.91	\$0.18	\$8.65	\$17.47	27
EPL Oil & Gas	\$76.88	\$20.53	\$3.01	\$23.08	\$3.21	\$9.95	\$17.08	28
FieldPoint Petroleum	\$80.03	\$29.68	\$1.16	\$21.87	\$0.73	\$9.97	\$16.62	29
Berry Petroleum	\$76.25	\$27.75	\$1.59	\$18.94	-	\$11.51	\$16.47	30
Rosetta Resources	\$45.82	\$8.60	-	\$12.06	-	\$8.98	\$16.19	31
EP Energy	\$42.80	\$10.65	\$1.09	\$15.04	\$0.10	\$0.19	\$15.73	32
Carrizo Oil & Gas	\$53.27	\$7.53	-	\$21.38	\$0.05	\$9.02	\$15.28	33
BP	\$62.99	\$20.19	\$1.84	\$13.40	\$7.26	\$5.06	\$15.23	34
Hess	\$79.78	\$23.27	\$6.93	\$26.04	-	\$9.03	\$14.50	35
Chaparral Energy	\$60.73	\$17.76	-	\$20.11	-	\$8.48	\$14.38	36
Callon Petroleum Company	\$72.60	\$16.92	-	\$32.33	-	\$9.80	\$13.54	37
Stone Energy	\$57.35	\$13.58	-	\$20.80	\$2.00	\$7.73	\$13.23	38
Occidental Petroleum	\$64.40	\$18.42	\$1.06	\$20.64	\$4.78	\$6.36	\$13.14	39
MDU Resources Group	\$52.22	\$14.04	-	\$17.42	\$0.35	\$7.39	\$13.03	40
Cimarex Energy	\$46.25	\$11.70	-	\$13.88	\$0.19	\$7.50	\$12.98	41
Noble Energy	\$53.80	\$11.70	\$2.22	\$20.70	-	\$6.72	\$12.47	42
Approach Resources	\$51.24	\$9.09	\$0.64	\$21.88	-	\$7.27	\$12.36	43
Apache	\$57.01	\$14.27	-	\$22.95	\$0.78	\$6.75	\$12.26	44
Breitburn Energy Partners	\$60.15	\$23.93	-	\$24.13	-	\$0.08	\$12.01	45
Whiting Petroleum	\$76.76	\$19.09	\$2.76	\$36.40	-	\$6.66	\$11.85	46
Questar	\$31.72	\$5.37	-	\$8.01	-	\$6.58	\$11.77	47
PrimeEnergy	\$56.65	\$27.13	\$0.00	\$11.90	-	\$6.20	\$11.41	48
Energren	\$49.45	\$13.86	\$1.10	\$17.73	\$0.28	\$5.08	\$11.40	49

Results of oil and gas operations: United States								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
ConocoPhillips	\$56.55	\$23.18	\$2.48	\$13.30	\$0.29	\$6.08	\$11.23	50
Newfield Exploration	\$46.31	\$11.82	-	\$16.84	-	\$6.71	\$10.94	51
Forest Oil	\$36.24	\$8.23	-	\$17.77	\$0.22	(\$0.06)	\$10.08	52
Vanguard Natural Res.	\$34.30	\$11.28	-	\$12.95	-	-	\$10.07	53
Equal Energy	\$26.36	\$7.34	-	\$7.31	\$0.17	\$1.56	\$9.97	54
Unit	\$38.27	\$9.73	-	\$13.31	-	\$5.87	\$9.36	55
National Fuel Gas	\$34.94	\$6.78	-	\$11.86	\$0.20	\$6.87	\$9.23	56
Exxon Mobil	\$44.10	\$16.28	\$1.06	\$13.14	-	\$4.58	\$9.05	57
Antero Resources	\$31.27	\$8.84	\$0.71	\$7.33	-	\$5.50	\$8.90	58
Range Resources	\$29.46	\$7.51	\$2.03	\$8.75	-	\$2.53	\$8.64	59
PDC Energy	\$52.86	\$10.95	\$0.95	\$23.91	\$0.64	\$7.90	\$8.51	60
W&T Offshore	\$54.24	\$16.43	-	\$23.95	\$1.16	\$4.56	\$8.14	61
PetroQuest Energy	\$36.43	\$9.50	-	\$14.24	\$0.35	\$4.32	\$8.02	62
Chesapeake Energy	\$28.84	\$5.68	-	\$10.59	-	\$4.78	\$7.80	63
Gastar Exploration	\$30.35	\$5.60	-	\$9.94	-	\$7.14	\$7.68	64
Panhandle Oil and Gas	\$28.06	\$6.34	\$0.00	\$10.40	-	\$3.68	\$7.63	65
Quicksilver Resources	\$28.48	\$14.37	-	\$3.00	-	\$3.89	\$7.22	66
Marathon Oil	\$68.28	\$20.31	\$9.69	\$26.76	-	\$4.36	\$7.16	67
Legacy Reserves LP	\$66.64	\$25.66	-	\$34.01	-	\$0.13	\$6.84	68
BHP Billiton Group	\$44.61	\$12.97	\$2.14	\$21.60	-	\$1.24	\$6.66	69
Anadarko Petroleum	\$41.05	\$11.01	\$2.43	\$15.59	-	\$5.45	\$6.57	70
Black Hills	\$36.59	\$13.43	-	\$13.74	-	\$3.25	\$6.17	71
SM Energy Company	\$45.52	\$12.36	\$1.53	\$21.57	-	\$3.88	\$6.16	72
Saratoga Resources	\$84.66	\$36.05	\$1.99	\$24.21	\$5.56	\$10.74	\$6.11	73
QEP Resources	\$39.80	\$11.33	\$0.23	\$20.34	-	\$1.87	\$6.02	74
Southwestern Energy	\$21.96	\$5.74	-	\$6.72	-	\$3.80	\$5.70	75
Swift Energy	\$50.11	\$14.15	-	\$27.75	\$0.53	\$2.02	\$5.66	76
Cabot Oil & Gas	\$24.63	\$6.00	\$0.26	\$9.45	-	\$3.78	\$5.14	77
Devon Energy	\$32.91	\$9.41	-	\$14.69	\$0.25	\$3.48	\$5.07	78
EXCO Resources	\$25.07	\$6.81	-	\$13.13	\$0.09	-	\$5.03	79
Clayton Williams Energy	\$76.23	\$20.63	\$1.86	\$45.80	\$0.80	\$2.38	\$4.76	80
EnCana	\$30.55	\$14.08	-	\$9.05	-	\$2.69	\$4.74	81
EQT	\$19.10	\$1.77	\$0.30	\$9.46	-	\$2.99	\$4.58	82
Loews	\$32.23	\$21.94	-	\$45.38	-	(\$38.56)	\$3.47	83
Gulfport Energy	\$63.66	\$15.70	-	\$28.68	-	\$12.01	\$2.87	84
GeoMet	\$18.39	\$13.53	-	\$2.71	-	\$0.00	\$2.15	85
CONSOL Energy	\$28.21	\$14.91	-	\$7.99	\$2.30	\$1.15	\$1.87	86
EV Energy Partners	\$33.16	\$11.28	\$0.23	\$19.37	\$0.48	\$0.00	\$1.80	87
Royale Energy	\$22.72	\$16.56	-	\$4.51	-	-	\$1.65	88
Linn Energy	\$46.44	\$12.80	\$0.11	\$32.37	\$0.00	\$0.00	\$1.15	89
Rex Energy	\$39.18	\$11.01	\$2.02	\$16.74	-	\$8.62	\$0.78	90
Alta Mesa Holdings	\$67.85	\$15.94	\$5.45	\$43.10	\$2.60	-	\$0.76	91
Constellation Energy Partners	\$29.24	\$14.23	-	\$14.15	\$0.34	-	\$0.51	92
PostRock Energy	\$25.80	\$15.34	-	\$10.48	-	(\$0.00)	(\$0.01)	93
Pioneer Natural Resources	\$49.81	\$12.23	\$1.48	\$36.00	\$0.18	(\$0.03)	(\$0.04)	94
Goodrich Petroleum	\$40.63	\$9.73	\$4.66	\$27.67	-	-	(\$1.42)	95
Comstock Resources	\$36.44	\$7.30	\$2.88	\$29.13	-	(\$0.99)	(\$1.88)	96
Escalera Resources	\$24.73	\$11.10	\$0.12	\$16.53	-	(\$1.02)	(\$2.00)	97
Adams Resources and Energy	\$38.19	\$15.56	\$4.38	\$23.96	-	(\$2.00)	(\$3.71)	98
Penn Virginia	\$62.96	\$10.36	\$3.08	\$55.37	-	(\$2.06)	(\$3.79)	99
Bill Barrett	\$39.44	\$11.38	\$0.02	\$34.98	\$0.74	(\$2.93)	(\$4.75)	100
Talisman Energy	\$27.97	\$9.76	\$0.89	\$23.01	-	(\$0.51)	(\$5.18)	101
LRR Energy	\$49.65	\$14.41	-	\$45.38	\$0.82	(\$0.01)	(\$10.94)	102
Magnum Hunter Resources	\$37.62	\$14.24	\$19.34	\$21.69	-	(\$4.52)	(\$13.12)	103

Results of oil and gas operations: United States

	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
Resolute Energy	\$79.46	\$32.17	-	\$68.13	-	(\$7.55)	(\$13.29)	104
WPX Energy	\$24.39	\$14.84	\$5.79	\$26.75	\$0.23	(\$8.48)	(\$14.74)	105
Royal Dutch Shell	\$69.22	\$23.14	\$11.64	\$51.08	\$9.07	(\$9.50)	(\$16.21)	106
Endeavour International	\$19.00	\$16.80	-	\$29.09	-	(\$9.41)	(\$17.48)	107
Midstates Petroleum	\$56.76	\$12.16	-	\$80.66	\$0.16	(\$10.82)	(\$25.41)	108
Petrobras	\$101.92	\$35.17	\$17.48	\$66.75	\$14.70	\$0.40	(\$32.58)	109
Dune Energy	\$70.95	\$41.79	-	\$63.80	\$8.40	-	(\$43.04)	110
Halcon Resources	\$80.18	\$19.24	-	\$138.01	-	(\$8.81)	(\$68.27)	111
ZaZa Energy	\$67.40	\$16.15	-	\$821.55	-	(\$227.17)	(\$543.14)	112
Baytex Energy	-	-	-	-	-	-	-	113
Crescent Point Energy	-	-	-	-	-	-	-	114
Enerplus	-	-	-	-	-	-	-	115
Magellan Petroleum	-	-	-	-	-	-	-	116
VAALCO Energy	-	-	-	-	-	-	-	117
Zargon Oil & Gas	-	-	-	-	-	-	-	118
All Integrated & Diversified Oils	\$57.30	\$18.73	\$3.18	\$20.45	\$2.72	\$3.73	\$8.50	-
All E&Ps	\$47.03	\$13.34	\$1.34	\$18.37	\$0.48	\$4.59	\$8.90	-
Mid-Sized E&Ps	\$53.12	\$14.31	\$0.87	\$17.83	\$0.25	\$5.59	\$14.27	1
Smallest E&Ps	\$49.79	\$13.05	\$0.06	\$22.39	\$1.02	\$2.62	\$10.37	2
Global Integrated Oils	\$58.35	\$19.55	\$3.13	\$19.91	\$3.04	\$3.92	\$8.82	3
Large E&Ps	\$44.49	\$12.95	\$1.56	\$16.75	\$0.50	\$4.72	\$8.01	4
Small E&Ps	\$53.93	\$14.21	\$0.78	\$29.28	\$0.78	\$2.39	\$6.49	5
Regional Integrations	\$50.03	\$13.05	\$3.53	\$24.22	\$0.51	\$2.43	\$6.29	6
Oil-Weighted companies	\$70.22	\$19.08	\$2.53	\$26.20	\$1.68	\$7.09	\$13.64	1
Balanced companies	\$52.00	\$15.88	\$1.99	\$19.55	\$1.24	\$4.42	\$8.92	2
Gas-Weighted companies	\$27.79	\$8.09	\$0.79	\$11.67	\$0.10	\$2.18	\$4.95	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

¹Excludes the impact of unrealized derivative gains and losses.

²Includes Shipping/Transportation/Handling Expenses, Taxes Other than Income, and Production-Related G&A

³Includes certain non consolidated interests

Source: IHS Herold

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Results of oil and gas operations: Canada

Results of oil and gas operations: Canada								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
UNIVERSE*	\$53.61	\$22.50	\$0.98	\$19.48	\$2.21	\$2.50	\$5.94	-
Corridor Resources	\$42.37	\$14.73	\$0.02	(\$22.94)	-	\$12.72	\$37.84	1
Canadian Oil Sands	\$122.83	\$65.07	-	\$14.55	\$4.05	\$9.82	\$29.34	2
Freehold Royalties	\$56.88	\$6.15	-	\$19.47	\$0.14	\$8.00	\$23.12	3
Bonterra Energy	\$63.50	\$14.16	\$0.29	\$22.88	-	\$6.80	\$19.37	4
Imperial Oil	\$63.56	\$34.85	\$1.26	\$6.02	-	\$5.26	\$16.17	5
Bellatrix Exploration	\$44.96	\$11.88	-	\$13.30	-	\$4.23	\$15.55	6
Exxon Mobil	\$62.35	\$31.96	\$3.04	\$7.79	-	\$4.27	\$15.29	7
Marathon Oil	\$91.73	\$59.20	\$0.53	\$14.53	-	\$4.40	\$13.07	8
Canadian Natural Resources	\$58.22	\$20.88	-	\$19.69	\$0.60	\$4.28	\$12.78	9
ARC Resources	\$46.98	\$13.23	-	\$18.30	\$0.41	\$4.23	\$10.81	10
Peyto Expl. & Dev.	\$27.06	\$3.11	-	\$11.37	-	\$3.11	\$9.48	11
Cenovus Energy	\$67.95	\$34.95	-	\$16.75	-	\$6.92	\$9.34	12
Husky Energy	\$58.22	\$18.77	\$2.30	\$24.33	-	\$3.72	\$9.10	13
Birchcliff Energy	\$32.90	\$8.73	-	\$12.38	\$0.25	\$3.14	\$8.40	14
Murphy Oil	\$51.84	\$19.92	\$1.49	\$18.89	\$0.73	\$2.62	\$8.19	15
MEG Energy	\$56.06	\$16.86	-	\$18.15	-	\$13.05	\$8.00	16
EnCana	\$28.74	\$11.96	-	\$6.12	-	\$2.69	\$7.98	17
ConocoPhillips	\$45.11	\$17.05	\$1.94	\$17.56	\$1.12	(\$0.22)	\$7.67	18
Tourmaline Oil	\$31.70	\$7.04	-	\$14.32	-	\$3.25	\$7.09	19
Long Run Exploration	\$50.82	\$17.90	\$0.03	\$22.35	\$0.74	\$3.06	\$6.73	20
Bonavista Energy	\$34.56	\$11.54	-	\$14.61	-	\$2.75	\$5.66	21
Trilogy Energy	\$43.73	\$13.77	\$0.53	\$20.57	-	\$3.43	\$5.43	22
Quicksilver Resources	\$20.04	\$12.26	-	\$0.82	-	\$1.75	\$5.21	23
Pengrowth Energy	\$48.61	\$19.70	-	\$22.11	\$0.79	\$1.13	\$4.89	24
Advantage Oil & Gas	\$28.55	\$7.51	\$0.02	\$12.60	\$0.79	\$3.50	\$4.13	25
NuVista Energy	\$32.55	\$14.20	\$0.98	\$13.43	-	\$0.79	\$3.14	26
Apache	\$31.24	\$16.69	-	\$10.87	\$1.25	\$0.61	\$1.81	27
Perpetual Energy	\$30.15	\$13.69	\$1.16	\$14.03	-	-	\$1.28	28
Santonia Energy	\$35.10	\$14.23	-	\$19.48	-	\$0.25	\$1.15	29
Barnwell Industries	\$37.81	\$17.67	-	\$22.18	-	(\$0.59)	(\$1.45)	30
Devon Energy	\$39.05	\$17.51	-	\$25.47	\$0.98	(\$1.34)	(\$3.56)	31
Royal Dutch Shell	\$70.65	\$29.80	\$2.98	\$22.57	\$22.02	(\$2.20)	(\$4.51)	32
CNOOC	\$66.57	\$44.41	\$0.85	\$25.17	\$0.92	\$0.69	(\$5.46)	33
Chinook Energy	\$38.70	\$21.45	\$1.51	\$20.49	\$1.04	\$0.01	(\$5.79)	34
Paramount Resources	\$31.58	\$12.65	\$4.86	\$20.93	\$0.42	(\$1.28)	(\$6.01)	35
Penn West Petroleum	\$52.33	\$19.83	-	\$40.28	-	-	(\$7.78)	36
Anderson Energy	\$39.19	\$15.04	-	\$62.95	-	(\$27.32)	(\$11.48)	37
Talisman Energy	\$32.51	\$15.26	\$0.48	\$33.29	-	(\$4.11)	(\$12.41)	38
EOG Resources	\$43.39	\$22.01	\$2.78	\$35.35	-	(\$4.32)	(\$12.42)	39
Athabasca Oil	\$56.38	\$16.71	-	\$63.73	\$2.03	(\$5.74)	(\$20.35)	40
Sasol	\$18.24	\$8.88	-	\$60.49	-	-	(\$51.13)	41
Lightstream Resources	\$71.65	\$15.39	-	\$124.16	-	(\$0.21)	(\$67.68)	42
BP	\$25.50	\$63.00	\$42.00	-	\$82.50	(\$39.00)	(\$123.00)	43
Abraxas Petroleum	\$54.24	\$84.00	-	\$191.08	-	-	(\$220.84)	44
Baytex Energy	-	-	-	-	-	-	-	45
Crescent Point Energy	-	-	-	-	-	-	-	46
Enerplus	-	-	-	-	-	-	-	47
Maurel & Prom SA	-	-	-	-	-	-	-	48
Sonde Resources	-	-	-	-	-	-	-	49

Results of oil and gas operations: Canada

	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
Suncor Energy	-	-	-	-	-	-	-	50
Valeura Energy	-	-	-	-	-	-	-	51
Vermilion Energy	-	-	-	-	-	-	-	52
Zargon Oil & Gas	-	-	-	-	-	-	-	53
All Integrated & Diversified Oils	\$64.21	\$28.89	\$2.22	\$17.62	\$5.51	\$3.03	\$6.93	-
All E&Ps	\$48.56	\$19.46	\$0.39	\$20.37	\$0.63	\$2.25	\$5.46	-
Regional Integrations	\$62.58	\$29.08	\$1.19	\$16.40	-	\$5.20	\$10.70	1
Mid-Sized E&Ps	\$54.01	\$21.50	\$0.15	\$20.57	\$0.79	\$3.28	\$7.74	2
Large E&Ps	\$46.99	\$19.64	\$0.43	\$17.88	\$0.63	\$1.94	\$6.47	3
Global Integrated Oils	\$65.98	\$31.08	\$3.12	\$14.43	\$10.16	\$1.23	\$5.97	4
Smallest E&Ps	\$42.92	\$14.64	\$1.59	\$21.02	\$0.35	\$1.17	\$4.16	5
Small E&Ps	\$46.50	\$12.41	\$0.20	\$44.98	\$0.23	\$1.95	(\$13.27)	6
Oil-Weighted companies	\$63.43	\$27.63	\$0.60	\$21.84	\$0.46	\$4.39	\$8.51	1
Gas-Weighted companies	\$29.47	\$10.72	\$0.15	\$11.54	\$0.04	\$1.90	\$5.10	2
Balanced companies	\$51.92	\$22.56	\$1.84	\$17.09	\$4.87	\$0.80	\$4.76	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

¹Excludes the impact of unrealized derivative gains and losses.

²Includes Shipping/Transportation/Handling Expenses, Taxes Other than Income, and Production-Related G&A

³Includes certain non consolidated interests

Source: IHS Herold

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Results of oil and gas operations: Europe

Results of oil and gas operations: Europe								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
UNIVERSE*	\$77.27	\$19.57	\$2.88	\$13.70	\$1.11	\$24.68	\$15.33	-
MOL	\$63.13	\$8.60	\$0.36	\$16.84	(\$0.96)	\$3.14	\$35.15	1
OMV AG	\$65.63	\$20.86	\$2.09	\$11.32	\$0.43	\$5.96	\$24.96	2
BASF SE	\$71.91	\$17.83	\$10.49	\$12.56	(\$3.96)	\$10.04	\$24.95	3
Marathon Oil	\$108.36	\$14.97	\$3.45	\$12.34	-	\$56.19	\$21.42	4
Eni S.p.A.	\$77.98	\$16.08	\$3.59	\$16.59	\$1.30	\$21.05	\$19.37	5
Bankers Petroleum	\$82.27	\$27.10	-	\$17.29	\$0.18	\$19.07	\$18.62	6
Statoil ASA	\$80.58	\$8.89	\$2.19	\$12.84	\$2.03	\$36.24	\$18.38	7
BP	\$84.78	\$29.84	\$5.92	\$22.47	(\$11.76)	\$20.51	\$17.80	8
CNOOC	\$106.68	\$12.39	\$9.82	\$38.69	\$1.06	\$27.49	\$17.23	9
BG Group	\$89.84	\$18.13	\$4.05	\$13.70	\$7.93	\$29.75	\$16.27	10
ConocoPhillips	\$86.87	\$18.97	\$2.18	\$18.03	\$1.61	\$31.20	\$14.88	11
Chevron	\$87.87	\$21.98	\$7.44	\$12.14	\$1.90	\$30.52	\$13.88	12
Total	\$73.49	\$16.71	\$3.57	\$13.46	-	\$26.83	\$12.92	13
Exxon Mobil	\$66.71	\$28.64	\$0.96	\$7.54	-	\$18.23	\$11.35	14
Royal Dutch Shell	\$70.19	\$26.91	\$2.33	\$5.76	\$3.27	\$20.74	\$11.18	15
Endeavour International	\$102.39	\$30.49	-	\$42.83	-	\$18.03	\$11.05	16
Apache	\$101.71	\$29.42	-	\$50.93	\$2.54	\$11.67	\$7.16	17
Hess	\$83.89	\$40.53	\$6.45	\$27.40	-	\$3.40	\$6.11	18
FX Energy	\$42.61	\$1.98	\$29.64	\$13.67	\$0.05	-	(\$2.73)	19
Canadian Natural Resources	\$98.35	\$34.41	-	\$74.78	\$4.74	(\$9.62)	(\$5.96)	20
Repsol	\$120.79	\$13.49	\$93.20	\$73.58	\$3.07	(\$38.02)	(\$24.53)	21
Talisman Energy	\$104.59	\$57.46	\$10.15	\$136.13	-	(\$40.06)	(\$59.09)	22
Heritage Oil	-	-	-	-	-	-	-	23
JKX Oil & Gas	-	-	-	-	-	-	-	24
Lundin Petroleum AB	-	-	-	-	-	-	-	25
Magellan Petroleum	-	-	-	-	-	-	-	26
Murphy Oil	-	-	-	-	-	-	-	27
Serinus Energy	-	-	-	-	-	-	-	28
Suncor Energy	-	-	-	-	-	-	-	29
TransAtlantic Petroleum	-	-	-	-	-	-	-	30
Valeura Energy	-	-	-	-	-	-	-	31
Vermilion Energy	-	-	-	-	-	-	-	32
All Integrated & Diversified Oils	\$74.63	\$19.17	\$2.75	\$11.31	\$1.09	\$24.49	\$15.81	-
All E&Ps	\$96.12	\$22.38	\$3.79	\$30.75	\$1.23	\$26.07	\$11.91	-
Regional Integrations	\$78.26	\$12.09	\$2.99	\$13.69	\$1.74	\$27.90	\$19.85	1
Small E&Ps	\$82.27	\$27.10	-	\$17.29	\$0.19	\$19.07	\$18.60	2
Global Integrated Oils	\$71.29	\$25.70	\$2.53	\$9.12	\$0.49	\$21.35	\$12.10	3
Large E&Ps	\$96.61	\$22.18	\$3.87	\$31.01	\$1.28	\$26.49	\$11.78	4
Smallest E&Ps	\$91.82	\$25.44	\$5.24	\$37.67	\$0.01	\$14.84	\$8.61	5
Mid-Sized E&Ps	-	-	-	-	-	-	-	6
Balanced companies	\$75.71	\$19.39	\$2.43	\$12.27	\$1.21	\$24.87	\$15.53	1
Oil-Weighted companies	\$101.14	\$20.88	\$5.60	\$28.44	\$0.70	\$30.39	\$15.13	2
Gas-Weighted companies	\$80.34	\$24.12	\$16.54	\$38.39	(\$2.69)	(\$2.25)	\$6.24	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

¹Excludes the impact of unrealized derivative gains and losses.

²Includes Shipping/Transportation/Handling Expenses, Taxes Other than Income, and Production-Related G&A

³Includes certain non consolidated interests

Source: IHS Herold

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Results of oil and gas operations: Africa & Middle East

Results of oil and gas operations: Africa & Middle East								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
UNIVERSE*	\$83.05	\$15.05	\$2.95	\$16.99	\$1.68	\$27.54	\$18.85	-
Calvalley Petroleum	\$108.98	\$31.24	-	\$13.87	-	\$12.70	\$51.17	1
VAALCO Energy	\$104.41	\$32.92	-	\$9.54	-	\$21.28	\$40.67	2
Canadian Natural Resources	\$105.31	\$29.43	-	\$20.54	\$1.53	\$13.49	\$40.32	3
Sasol	\$88.71	\$26.84	\$1.41	\$6.38	-	\$15.43	\$38.65	4
Mitsui	\$132.17	\$16.07	\$2.56	\$41.73	-	\$34.09	\$37.73	5
Hess	\$121.41	\$21.27	\$14.68	\$23.55	-	\$34.86	\$27.05	6
CNOOC	\$109.81	\$10.71	\$5.16	\$45.60	\$0.42	\$22.83	\$25.09	7
Apache	\$72.04	\$9.43	-	\$16.20	-	\$21.35	\$25.05	8
TransGlobe Energy	\$92.76	\$19.36	-	\$23.26	-	\$25.11	\$25.04	9
Exxon Mobil	\$105.91	\$22.40	\$1.62	\$18.40	-	\$38.50	\$24.99	10
Chevron	\$98.66	\$14.30	\$1.29	\$17.56	(\$0.13)	\$41.64	\$23.99	11
BP	\$81.05	\$13.54	\$3.23	\$26.38	\$0.74	\$16.06	\$21.10	12
Occidental Petroleum	\$73.66	\$12.42	\$0.70	\$17.80	\$2.95	\$19.13	\$20.66	13
Repsol	\$97.10	\$10.87	\$6.31	\$4.76	\$0.21	\$54.66	\$20.29	14
Statoil ASA	\$90.68	\$10.10	\$4.15	\$34.46	\$1.30	\$20.99	\$19.69	15
Total	\$84.88	\$15.59	\$2.80	\$15.60	-	\$32.64	\$18.25	16
Noble Energy	\$39.12	\$4.29	\$0.36	\$9.64	-	\$6.76	\$18.07	17
Afren	\$94.69	\$35.03	\$3.58	\$24.17	\$0.40	\$15.53	\$16.00	18
Royal Dutch Shell	\$77.43	\$21.99	\$2.87	\$10.33	\$3.39	\$25.04	\$13.81	19
Kosmos Energy	\$100.88	\$11.85	\$28.20	\$27.25	-	\$20.45	\$13.13	20
Eni S.p.A.	\$73.68	\$11.18	\$4.13	\$13.18	\$6.55	\$25.65	\$12.97	21
Marathon Oil	\$35.54	\$4.50	\$1.30	\$2.40	(\$3.07)	\$21.12	\$9.28	22
DNO ASA	\$35.80	\$8.54	\$0.22	\$20.37	-	\$2.87	\$3.79	23
BASF SE	\$93.86	\$12.57	\$4.60	\$8.64	(\$0.67)	\$67.25	\$1.46	24
ConocoPhillips	\$41.53	\$3.35	\$2.80	\$1.05	\$0.25	\$33.60	\$0.47	25
OMV AG	\$50.08	\$15.62	\$19.91	\$22.45	(\$0.03)	(\$0.90)	(\$6.98)	26
Chinook Energy	\$105.06	\$31.65	\$10.85	\$80.98	-	\$7.77	(\$26.19)	27
Harvest Natural Resources	-	-	-	-	-	-	-	28
Heritage Oil	-	-	-	-	-	-	-	29
INPEX	-	-	-	-	-	-	-	30
MOL	-	-	-	-	-	-	-	31
Maurel & Prom SA	-	-	-	-	-	-	-	32
Murphy Oil	-	-	-	-	-	-	-	33
Petrobras	-	-	-	-	-	-	-	34
Serinus Energy	-	-	-	-	-	-	-	35
Tullow Oil	-	-	-	-	-	-	-	36
All Integrated & Diversified Oils	\$87.08	\$16.02	\$3.02	\$17.14	\$2.03	\$29.78	\$19.09	-
All E&Ps	\$68.66	\$11.57	\$2.69	\$16.45	\$0.42	\$19.51	\$18.02	-
Global Integrated Oils	\$90.23	\$17.43	\$2.34	\$17.31	\$0.58	\$32.09	\$20.49	1
Large E&Ps	\$67.09	\$9.63	\$2.12	\$15.44	\$0.45	\$20.72	\$18.73	2
Smallest E&Ps	\$99.85	\$17.62	\$16.53	\$26.34	-	\$20.76	\$18.60	3
Regional Integrations	\$81.56	\$13.57	\$4.20	\$16.84	\$4.57	\$25.75	\$16.64	4
Mid-Sized E&Ps	\$70.84	\$29.28	\$2.25	\$22.52	\$0.36	\$6.25	\$10.19	5
Small E&Ps	-	-	-	-	-	-	-	6
Oil-Weighted companies	\$81.36	\$17.01	\$3.26	\$18.58	\$0.64	\$20.01	\$21.86	1
Balanced companies	\$82.96	\$14.65	\$2.83	\$16.69	\$1.96	\$28.64	\$18.20	2
Gas-Weighted companies	\$103.49	\$12.64	\$4.86	\$14.24	(\$0.17)	\$54.93	\$17.00	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

¹Excludes the impact of unrealized derivative gains and losses.

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³Includes certain non consolidated interests

Source: IHS Herold

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Results of oil and gas operations: Asia-Pacific

Results of oil and gas operations: Asia-Pacific								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
UNIVERSE*	\$73.72	\$25.77	\$3.61	\$13.84	\$0.82	\$8.44	\$21.24	-
Oil Search	\$113.74	\$27.10	\$15.95	\$4.90	\$0.56	\$29.91	\$35.33	1
CNOOC	\$95.01	\$32.52	\$5.94	\$17.94	\$0.79	\$9.86	\$27.96	2
Chevron	\$67.71	\$16.01	\$4.51	\$9.70	(\$1.71)	\$11.52	\$27.67	3
ConocoPhillips	\$78.58	\$15.61	\$1.32	\$12.96	\$2.86	\$18.55	\$27.27	4
Murphy Oil	\$72.59	\$12.35	\$0.81	\$18.72	\$0.48	\$15.21	\$25.03	5
BHP Billiton Group	\$69.24	\$23.15	\$1.46	\$6.70	-	\$15.12	\$22.81	6
Royal Dutch Shell	\$70.78	\$16.69	\$9.28	\$9.91	\$0.94	\$11.39	\$22.57	7
PetroChina	\$71.46	\$28.50	\$2.94	\$12.12	\$0.54	\$5.54	\$21.82	8
Woodside Petroleum	\$68.12	\$15.56	\$3.64	\$18.25	\$0.47	\$9.96	\$20.22	9
PTT E&P Public	\$59.69	\$12.91	\$0.39	\$13.91	\$0.06	\$12.40	\$20.02	10
Mitsui	\$75.01	\$9.25	\$3.51	\$17.20	-	\$25.15	\$19.90	11
Sinopec	\$80.38	\$32.14	\$4.62	\$17.13	-	\$7.38	\$19.11	12
Apache	\$55.21	\$11.04	-	\$17.48	\$1.31	\$7.60	\$17.77	13
BP	\$47.67	\$5.48	\$0.82	\$7.64	\$6.14	\$11.21	\$16.37	14
Talisman Energy	\$74.06	\$19.74	\$4.00	\$17.86	-	\$16.75	\$15.71	15
Newfield Exploration	\$99.00	\$45.44	-	\$29.11	-	\$8.89	\$15.56	16
Total	\$61.06	\$8.30	\$4.33	\$18.33	-	\$15.27	\$14.83	17
Eni S.p.A.	\$60.28	\$17.93	\$13.70	(\$5.36)	\$1.37	\$18.56	\$14.07	18
Salamander Energy	\$90.98	\$16.28	\$31.94	\$21.33	-	\$10.72	\$10.72	19
Exxon Mobil	\$53.15	\$26.91	\$2.29	\$8.32	-	\$5.03	\$10.61	20
Santos	\$68.15	\$16.97	\$3.75	\$17.03	\$15.17	\$6.19	\$9.04	21
Niko Resources	\$31.26	\$8.87	\$23.80	\$14.93	-	(\$3.72)	(\$12.62)	22
Carnarvon Petroleum	\$93.93	\$40.37	\$5.67	\$26.38	-	\$142.74	(\$121.22)	23
Heritage Oil	-	-	-	-	-	-	-	24
Lundin Petroleum AB	-	-	-	-	-	-	-	25
Magellan Petroleum	-	-	-	-	-	-	-	26
Maurel & Prom SA	-	-	-	-	-	-	-	27
Repsol	-	-	-	-	-	-	-	28
Serinus Energy	-	-	-	-	-	-	-	29
Tap Oil	-	-	-	-	-	-	-	30
Vermilion Energy	-	-	-	-	-	-	-	31
All Integrated & Diversified Oils	\$71.71	\$26.81	\$3.43	\$12.89	\$0.49	\$7.36	\$20.72	-
All E&Ps	\$80.00	\$22.52	\$4.19	\$16.77	\$1.85	\$11.80	\$22.87	-
Large E&Ps	\$81.00	\$23.36	\$3.82	\$16.67	\$0.89	\$11.71	\$24.56	1
Regional Integrations	\$73.37	\$28.70	\$3.34	\$13.01	\$0.39	\$6.77	\$21.16	2
Global Integrated Oils	\$59.45	\$12.85	\$4.09	\$12.06	\$1.23	\$11.75	\$17.47	3
Small E&Ps	\$96.49	\$18.65	\$14.98	\$13.95	\$0.12	\$31.66	\$17.13	4
Mid-Sized E&Ps	\$75.52	\$18.79	\$3.30	\$17.85	\$8.09	\$10.94	\$16.55	5
Smallest E&Ps	\$32.94	\$9.71	\$29.45	\$15.24	-	\$0.21	(\$21.67)	6
Oil-Weighted companies	\$85.72	\$31.39	\$4.98	\$17.42	\$0.32	\$9.00	\$22.61	1
Balanced companies	\$69.90	\$25.27	\$3.06	\$11.97	\$0.73	\$7.54	\$21.33	2
Gas-Weighted companies	\$67.03	\$14.80	\$3.53	\$16.22	\$2.67	\$12.50	\$17.31	3

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³Includes certain non consolidated interests

Source: IHS Herold

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Results of oil and gas operations: South & Central America

Results of oil and gas operations: South & Central America								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
UNIVERSE*	\$74.80	\$18.22	\$2.78	\$8.60	\$4.66	\$28.85	\$11.68	-
Ecopetrol	\$110.83	\$19.84	\$3.24	\$7.22	\$34.24	\$17.13	\$29.16	1
Petrobras	\$84.41	\$33.18	\$3.38	\$9.92	\$1.90	\$12.22	\$23.81	2
Gran Tierra Energy	\$89.27	\$18.47	-	\$32.97	-	\$16.51	\$21.31	3
Pacific Rubiales Energy	\$85.54	\$33.12	-	\$25.50	\$1.26	\$13.99	\$11.66	4
BASF SE	\$15.78	\$5.46	\$0.93	\$2.68	(\$5.62)	\$3.28	\$9.06	5
BPZ Resources	\$98.41	\$48.43	\$4.25	\$34.99	-	\$2.36	\$8.38	6
Repsol	\$39.13	\$14.70	\$3.59	\$5.85	\$0.27	\$6.98	\$7.75	7
EOG Resources	\$23.47	\$1.99	\$0.31	\$8.89	-	\$4.69	\$7.60	8
Parex Resources	\$107.82	\$34.34	-	\$51.67	-	\$16.87	\$4.94	9
PEMEX	\$75.77	\$8.16	\$1.37	\$7.22	\$2.46	\$51.92	\$4.65	10
YPF	\$43.54	\$26.06	\$0.80	\$9.89	\$0.75	\$2.09	\$3.95	11
Apco Oil & Gas Int'l	\$49.26	\$28.37	\$2.55	\$12.29	-	\$3.77	\$2.28	12
Global Energy Development	\$87.08	\$40.49	-	\$18.41	\$1.30	\$26.80	\$0.08	13
BP	\$24.18	\$7.29	\$10.01	\$4.66	\$2.18	\$4.35	(\$4.33)	14
Apache	\$31.50	\$15.20	-	\$25.72	\$0.32	(\$3.40)	(\$6.35)	15
Royal Dutch Shell	\$72.39	\$44.81	\$69.39	\$15.48	\$12.00	\$6.87	(\$76.16)	16
CNOOC	-	-	-	-	-	-	-	17
Canacol Energy	-	-	-	-	-	-	-	18
Maurel & Prom SA	-	-	-	-	-	-	-	19
Niko Resources	-	-	-	-	-	-	-	20
All Integrated & Diversified Oils	\$74.98	\$17.99	\$2.86	\$8.00	\$4.80	\$29.53	\$11.79	-
All E&Ps	\$69.77	\$24.58	\$0.53	\$25.12	\$0.73	\$10.12	\$8.67	-
Smallest E&Ps	\$125.48	\$37.19	\$0.78	\$49.42	\$0.04	\$20.34	\$17.71	1
Regional Integrations	\$77.80	\$18.48	\$2.21	\$8.16	\$4.92	\$31.01	\$13.02	2
Mid-Sized E&Ps	\$87.38	\$33.84	-	\$26.05	\$1.29	\$14.29	\$11.91	3
Large E&Ps	\$27.71	\$7.66	\$1.21	\$16.28	\$0.15	\$1.09	\$1.32	4
Global Integrated Oils	\$27.34	\$9.75	\$13.90	\$5.37	\$2.83	\$4.52	(\$9.03)	5
Small E&Ps	-	-	-	-	-	-	-	6
Oil-Weighted companies	\$82.78	\$18.62	\$2.23	\$8.76	\$5.40	\$33.85	\$13.91	1
Gas-Weighted companies	\$34.14	\$12.73	\$3.02	\$5.17	(\$0.99)	\$6.19	\$8.03	2
Balanced companies	\$35.79	\$17.63	\$5.84	\$8.80	\$1.44	\$3.13	(\$1.04)	3

*Universe data for years prior to 2013 includes companies that are now out of business or acquired and therefore are not listed in this table.

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Source: IHS Herold

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Results of oil and gas operations: Russia & Caspian

Results of oil and gas operations: Russia & Caspian								
	Revenues ¹ , \$/boe	Lifting Costs ² \$/boe	Exploration Expense \$/boe	DD&A Expense \$/boe	Other Expenses/ (Income) \$/boe	Income Taxes \$/boe	Net Income ³ \$/boe	Rank
UNIVERSE*	\$40.92	\$21.87	\$0.27	\$4.83	\$0.19	\$2.87	\$10.88	-
Dragon Oil	\$87.32	\$4.91	-	\$17.93	-	\$17.17	\$47.32	1
Chevron	\$72.84	\$7.18	-	\$4.43	\$0.77	\$18.14	\$42.32	2
TengizChevrOil	\$72.84	\$7.18	-	\$4.43	\$0.77	\$18.14	\$42.32	3
Eni S.p.A.	\$59.63	\$7.29	\$0.04	\$4.21	\$3.99	\$15.03	\$29.08	4
BASF SE	\$18.01	\$1.55	\$0.22	\$0.72	\$0.66	\$3.07	\$11.79	5
Lukoil	\$53.85	\$36.49	\$0.29	\$4.24	-	\$2.31	\$10.51	6
ConocoPhillips	\$117.00	\$80.00	-	\$11.00	\$15.00	\$1.00	\$10.00	7
Rosneft Oil	\$39.15	\$22.17	\$0.35	\$6.75	\$0.14	\$1.27	\$8.47	8
BP	\$28.76	\$16.17	\$0.36	\$3.61	\$0.45	\$1.04	\$7.13	9
Novatek	\$18.89	\$9.23	\$0.03	\$1.14	-	\$1.63	\$6.85	10
Gazprom Neft	\$36.97	\$24.56	\$0.29	\$5.07	-	\$1.35	\$5.69	11
Max Petroleum	\$76.42	\$39.57	\$5.74	\$17.88	\$0.19	\$12.84	\$0.19	12
Heritage Oil	-	-	-	-	-	-	-	13
INPEX	-	-	-	-	-	-	-	14
JKX Oil & Gas	-	-	-	-	-	-	-	15
Lundin Petroleum AB	-	-	-	-	-	-	-	16
MOL	-	-	-	-	-	-	-	17
All Integrated & Diversified Oils	\$41.14	\$24.88	\$0.32	\$5.31	\$0.17	\$1.74	\$8.73	-
All E&Ps	\$39.90	\$8.57	\$0.03	\$2.68	\$0.30	\$7.90	\$20.41	-
Mid-Sized E&Ps	\$87.32	\$4.91	-	\$17.93	-	\$17.17	\$47.32	1
Large E&Ps	\$38.94	\$8.58	\$0.02	\$2.37	\$0.31	\$7.72	\$19.94	2
Global Integrated Oils	\$39.76	\$13.93	\$0.27	\$3.81	\$0.53	\$5.31	\$15.92	3
Regional Integrations	\$43.80	\$26.59	\$0.31	\$6.07	\$0.12	\$1.80	\$8.90	4
Smallest E&Ps	\$76.42	\$39.57	\$5.74	\$17.88	\$0.19	\$12.84	\$0.19	5
Small E&Ps	-	-	-	-	-	-	-	6
Balanced companies	\$41.53	\$13.69	\$0.26	\$4.01	\$0.71	\$5.99	\$16.86	1
Oil-Weighted companies	\$45.36	\$24.87	\$0.30	\$5.73	\$0.13	\$2.94	\$11.38	2
Gas-Weighted companies	\$18.76	\$8.14	\$0.06	\$1.08	\$0.09	\$1.84	\$7.55	3

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Notes

General

Totals may not match due to rounding and/or accounting issues related to consolidation of certain subsidiaries and the inclusion of historical companies that have been acquired or are otherwise out of business.

In this report, the abbreviation MM has been used for millions.

NM (Not meaningful) applies to results which are either negative or unusual. NA (Not applicable) means that the measure is not relevant. A “dash” (-) means that no data exists.

Foreign currency amounts were translated using the published average annual and year-end exchange rates.

Companies

This study is based on companies that provide full disclosure of total costs incurred; reserves, reserve changes, and production; and results of upstream operations on a Worldwide basis. Regional data consists only of company disclosed data for each region in the study.

The historical data in this study includes companies that have been acquired over the last five years. Their results have been included in the Worldwide and regional averages, but not in those for the peer groups.

The total of regional results does not equal Worldwide results because of limited regional disclosure by some companies included in the study. For example, BG Group combines results of several areas under “Rest of World.” This “Rest of World” information is excluded from the company’s regional information in this study and included in the company’s Worldwide result totals.

For companies with non-calendar fiscal reporting periods, the year in which their fiscal period ends coincides with the year in this report. Companies with non-calendar fiscal reporting include: Barnwell Industries, BHP Billiton, Canacol Energy, Carnarvon Petroleum, Energy XXI, INPEX Holdings, Magellan Petroleum, Max Petroleum, Mitsui & Co., National Fuel Gas, Niko Resources, Panhandle Oil and Gas, Sasol Limited, and Triangle Petroleum.

One company is included in this study for the first time: YPF S.A.

Upstream

Oil reserve quantities include oil, condensate, and natural gas liquids.

Gas volumes have been converted to barrel of oil equivalent volumes (boe) at 6 Mcf of gas to 1 barrel of oil. In most cases companies report natural gas on a dry basis; i.e. after the extraction of any NGLs.

Exploration costs include geological and geophysical/seismic costs as well as exploration drilling costs.

Reserves basis is proven unless otherwise stated. Significant variations exist in reserve reporting practices from company to company, especially with regard to reserve definitions and accounting reporting practices for companies that do not report along guidelines of the U.S. Securities and Exchange Commission or U.S. GAAP. With regard to companies with petroleum sharing contracts (PSCs), this study uses entitlement reserves whenever possible, but a limited number of companies report working interest reserves only. Reserve disclosure is only available on a proved plus probable basis for the following companies: Afren plc, Dragon Oil plc, Gulfsands Petroleum, JKX Oil & Gas plc, Lundin Petroleum AB, Maurel & Prom SA, Max Petroleum, Premier Oil plc, Salamander Energy plc, Tap Oil Ltd., and Tullow Oil plc.

Canadian reserves are included on a net basis, after the deduction of government and provincial royalties; for some companies certain numbers are estimated due to insufficient disclosure.

In computing Worldwide and regional industry capital expenditures, reserve changes, and the related RRC and FDC averages, data pertaining to certain publicly traded companies which are consolidated into the results of parent, or majority-holding, companies also included in the study have been excluded; e.g. Chesapeake Granite Wash Trust, Imperial Oil, Petrobras Argentina, and Sandridge Permian Trust, Sandridge Mississippian Trust I & II.

Peer groups

Peer groups are based on 2013 year-end reserves using the following criteria:

Large peer group: Total oil & gas reserves are greater than 750 MMboe.

Mid-Size peer group: Total oil & gas reserves are greater than 200 MMboe but less than 750 MMboe.

Small peer group: Total oil & gas reserves are greater than 50 MMboe but less than 200 MMboe.

Smallest peer group: Total oil & gas reserves are less than 50 MMboe.

Oil-weighted peer group: Oil reserves account for greater than 65% of total oil & gas reserves.

Gas-weighted peer group: Gas reserves account for greater than 70% of total oil & gas reserves.

Balance peer group: Oil reserves account for greater than 30% but less than 65% of total oil & gas reserves.

Asset retirement obligation (ARO): AROs are related to the adoption of SFAS 143 which requires the recording of the fair value of liabilities associated with the retirement of long-lived assets. It includes an annual component for liabilities incurred in 2003 and subsequent years, and a cumulative component for all years prior to 2003. Annual AROs may be estimated for companies providing insufficient ARO disclosure or lumping annual ARO with development costs. The annual amount may have a separate component related to proved acquisitions. Costs incurred data includes only annual component liabilities.

boe: Barrels of oil equivalent. Natural gas volumes are converted to barrels at a ratio of 6 Mcf to one barrel of oil.

Cash flow: Cash flow from “Results of Oil & Gas Operations” tables is defined as net income plus exploration costs plus DD&A.

Cash flow margin: Cash Flow / Revenue

DD&A: Depreciation, depletion, and amortization costs, as reported in “Results of Oil & Gas Operations” tables. Includes writedowns/impairments.

Debt-to-total capital: (Total Debt + Volumetric Production Payments + Total Preferred Stock) / (Total Debt + Volumetric Production Payments + Common Shareholders’ Equity + Total Preferred Stock + Deferred Income Taxes + Minority Interest).

Development cost: Costs incurred to obtain access to proved reserves and to provide facilities for extracting, treating, gathering, and storing the oil and gas.

Drill bit: Refers to activities encompassing extensions and discoveries, improved recovery and revisions. In terms of capital spending, it excludes proved acquisitions.

Exploration cost: Costs incurred in identifying areas that may warrant examination and in examining specific areas that are considered to have prospects containing oil and gas reserves. Includes geological and geophysical/seismic costs as well as exploration drilling costs.

Extensions and discoveries: Additions to proved reserves resulting from extensions of previously discovered reservoirs through additional drilling and additions to reserves from discoveries of new fields or new reservoirs in old fields.

Extensions, discoveries, & improved recovery cost (\$/boe): (Total Costs Incurred - Proved Acquisition Cost)/Total Oil and Gas Extensions, Discoveries and Improved Recovery Additions.

Finding cost: Finding cost is computed by taking exploration costs incurred plus unproved acquisition costs as the numerator and dividing by total boe reserve additions from extensions and discoveries. This metric represents the cost of oil and gas reserves added via exploration activities.

Finding and development cost (FDC): Finding and development cost is computed by taking total costs incurred less costs of proved property acquisitions as the numerator and dividing by a denominator comprised of the total oil equivalent (boe) reserve changes for the period associated with extensions and discoveries, revisions in estimates, and improved recoveries, excluding reserve purchases. This statistic measures the per boe cost of oil and gas reserves that were added through the drill-bit. May include annual AROs.

Finding and development (F&D) production replacement percentage: Finding and development rates are calculated by taking total reserve changes for the period associated with extensions and discoveries, revisions in estimates, and improved recoveries as the numerator and divided by the company’s production. This statistic measures the amount of reserves added through the drill-bit as a percentage of the company’s production.

Free cash flow: Free Cash Flow is computed by taking the cash flow as per “Results of Oil & Gas Operations” tables (as defined above, and does not account for certain items such as debt service and corporate overhead) as the numerator

and subtracting finding and development cost incurred (as defined above). This metric represents the approximate amount of cash available after organic investments have been made, which can be deployed to other corporate capital activities (acquisitions, debt service, dividends, etc.).

Government take: Government take is computed using “Results of Oil & Gas Operations” by adding income taxes (usually includes federal & state/provincial) and production-related taxes (e.g. severance, etc.) as the numerator and dividing by a denominator of pre-tax earnings. Since most production information disclosed by companies in the GUPR universe is net of royalty volumes that could be paid in kind, our definition understates true government take to some degree.

Improved recoveries: Changes in reserve estimates resulting from the application of improved recovery techniques and/or changes in well-spacing regulations.

In-situ oil sands/bitumen: Extra-heavy oil deposits primarily in Canada that are produced by wells using various thermal recovery techniques including SAGD (steam-assisted gravity drainage).

Lifting costs: The cost of extracting oil and gas from the reservoir and other related costs; includes production expenses, taxes other than income taxes, shipping/transportation/handling expenses and production related G&A.

Mineable oil sands/bitumen: Extra-heavy oil deposits in Canada that are produced by mining techniques and require further processing and usually upgrading prior to sale to pipeline transport and refinery.

Net-back margin: (Revenue less Lifting Costs) / Revenue.

Net-back per boe: (Oil and Gas Revenue - Lifting Costs) / (Total Oil and Gas Production - Attributable Oil and Gas NCI Production).

Net income: Net income as reported in the “Results of Oil and Gas Operations” in company filings. May include net income from non-consolidated operations as some companies do not provide full results of operations disclosure for their non-consolidated operations. For example: BP plc, Royal Dutch Shell, Total, and others.

Net income margin: Net Income / Revenue.

Net income return on cumulative capital costs: Net Income / Average Cumulative Capital Costs (Proved and Unproved).

Production costs: Expenses associated with operating and maintaining wells and related equipment and facilities.

Profitability per boe: Net income as reported in “Results of Oil & Gas Operations” tables as the numerator, divided by total barrels of oil equivalent produced during the year.

Proved acquisition costs: Cost incurred to purchase proved oil and gas reserves, including production payments payable in kind and all transaction fees (broker’s fees, legal expenses, etc.). Includes acquisition related Asset Retirement Obligations.

Proved oil and gas reserves: Proved oil and gas reserves are the estimated quantities of crude oil, natural gas, and natural gas liquids which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing operating and economic conditions.

Pure finding cost: Pure finding cost is computed by taking exploration cost incurred as the numerator and dividing by total boe reserve additions from extensions & discoveries. Similar to Finding Cost, this metric measures the cost of oil and gas reserves added via exploration drilling activities, exclusive of land acquisition cost.

Recycle ratio: Netback per boe / 1-Year Reserve Replacement Cost per boe

Reserve changes: Reserve changes are the net of extensions and discoveries, revision in estimates, improved recoveries, purchase or sales of reserves in place, and production.

Reserve life (R/P): The reserve life is computed by taking year-end boe proved reserves as the numerator and dividing it by the current year boe production.

Reserve replacement cost (RRC): Reserve replacement cost is calculated by taking total cost incurred (proved and unproved property acquisition cost, exploration cost, and development cost) during the applicable period as the numerator and dividing by the total oil equivalent (boe) reserve changes associated with extensions and discoveries, revisions in estimates, improved recovery, and purchases of proved reserves as the denominator. This statistic measures the per boe cost of adding reserves from all sources.

Reserve replacement (RRR) production replacement percentage: Reserve replacement rates are calculated by taking the total reserve changes for the period as the numerator and dividing by the company's production for the period. This statistic measures the amount of reserves added from all sources as a percentage of the company's production.

Revisions in estimates: These include changes in previous estimates of proved reserves, either upward or downward, resulting from new information obtained from development drilling or production history, or resulting from a change in economic factors.

SEC guidelines: Results reported as required by the U.S. Securities & Exchange Commission (SEC).

Total costs incurred: Costs incurred are the total of property acquisition costs, exploration costs, and development costs. These costs are historical and have not been adjusted for inflation. Annual Asset Retirement Obligations are also included in total costs incurred.

Total shareholder return: This return is calculated by adding the year-end share price and the current year annual dividend per share as the numerator and dividing by the share price at the beginning of the year, then subtracting one from the result.

Unproved acquisition cost: Cost incurred to purchase or lease an unproved property, including cost of lease bonuses, options to purchase, and transaction fees. These costs may also include probable reserves, possible reserves, and infrastructure associated with the properties.

Global Integrateds
BP plc
Chevron Corp.
Exxon Mobil Corp.
Royal Dutch Shell plc
Total S.A.

Regional Integrateds	
BASF SE	OMV AG
BG Group plc	Petrobras
BHP Billiton Group	PetroChina Company Ltd.
Cenovus Energy Inc.	Petroleos Mexicanos
Ecopetrol S.A.	Repsol S.A.
Eni S.p.A.	Rosneft Oil Co.
Gazprom Neft	Sasol Limited
Husky Energy Inc.	Sinopec
Imperial Oil Ltd.	Statoil ASA
Lukoil	Suncor Energy, Inc.
Mitsui & Co., Ltd.	YPF S.A.
MOL	

Large E&Ps
Anadarko Petroleum Corp.
Antero Resources LLC
Apache Corp.
Cabot Oil & Gas Corp.
Canadian Natural Resources
Chesapeake Energy Corp.
CNOOC Limited
ConocoPhillips
CONSOL Energy Inc.
Continental Resources, Inc.
Devon Energy Corp.
EnCana
EOG Resources, Inc.
EQT Corporation
Hess Corp.
INPEX Corporation
Linn Energy LLC
Marathon Oil Corp.
MEG Energy Corp.
Noble Energy, Inc.
Novatek
Occidental Petroleum Co.
Pioneer Natural Resources Co.
PTT E&P Public Co. Ltd.
Range Resources Corp.
Southwestern Energy Co.
Talisman Energy Inc.
TengizChevrOil
Woodside Petroleum Ltd.
WPX Energy

Mid-Size E&Ps	
Afren plc	Oasis Petroleum Inc.
ARC Resources Ltd.	Oil Search Limited
Berry Petroleum Co.	Pacific Rubiales Energy
Bonavista Energy Corporation	PDC Energy
Breitburn Energy Partners	Pengrowth Energy Corp.
Canadian Oil Sands Limited	Penn West Petroleum Ltd.
Cimarex Energy Co.	Peyto Expl. & Dev. Corp.
Concho Resources Inc.	Premier Oil plc
Crescent Point Energy Corp.	QEP Resources, Inc.
Denbury Resources, Inc.	Quicksilver Resources, Inc.
DNO ASA	Rosetta Resources Inc.
Dragon Oil plc	SandRidge Energy, Inc.
Energen Corp.	Santos Ltd.
Enerplus Corp.	SM Energy Company
EP Energy LLC	Tourmaline Oil Corp.
Laredo Petroleum, Inc.	Tullow Oil plc
Murphy Oil Corp.	Ultra Petroleum Corp.
National Fuel Gas Co.	Whiting Petroleum Corp.
Newfield Exploration Co.	

Small E&Ps			
Advantage Oil & Gas Ltd.	Clayton Williams Energy	Legacy Reserves LP	Resolute Energy Corp.
Alta Mesa Holdings, L.P.	Comstock Resources Inc.	Lightstream Resources Ltd.	Rex Energy Corp.
Approach Resources Inc.	Energy XXI (Bermuda) Ltd.	Loews Corporation	Salamander Energy plc
Athabasca Oil Corp.	EPL Oil & Gas Inc.	Lundin Petroleum AB	SOCO International plc
Aurora Oil and Gas Limited	EV Energy Partners, L.P.	Magnum Hunter Resources	Stone Energy Corp.
Bankers Petroleum Ltd.	EXCO Resources, Inc.	Maurel & Prom SA	Trilogy Energy Corp.
Baytex Energy Corp.	Forest Oil Corp.	Midstates Petroleum Co.	Unit Corp.
Bellatrix Exploration Ltd.	Gastar Exploration Ltd.	MDU Resources Group, Inc.	Vanguard Natural Resources
Bill Barrett Corp.	Goodrich Petroleum Corp.	Northern Oil & Gas, Inc.	Venoco Inc.
Birchcliff Energy Ltd.	Halcon Resources Corp.	NuVista Energy Ltd.	Vermilion Energy Inc.
Bonanza Creek Energy Inc.	JKX Oil & Gas plc	Penn Virginia Corp.	W&T Offshore, Inc.
Carrizo Oil & Gas, Inc.	Kinder Morgan Energy Part.	QR Energy LP	
Chaparral Energy, Inc.	Kodiak Oil & Gas Corp.	Questar Corp.	
Clayton Williams Energy	Legacy Reserves LP	Questar Corp.	

Smallest E&Ps			
Abraxas Petroleum Corp.	Dorchester Minerals, L.P.	Long Run Exploration Ltd.	SandRidge Permian Trust
Adams Resources and Energy	Dune Energy Inc.	LRR Energy L.P.	Santonia Energy Inc.
Anderson Energy Ltd.	Endeavour Int'l Corp.	Magellan Petroleum Co.	Saratoga Resources, Inc.
Apco Oil & Gas International Inc.	Equal Energy Ltd.	Max Petroleum plc	Sonde Resources Corp.
Barnwell Industries	Escalera Resources Co.	Mid-Con Energy Partners	Sterling Energy Plc
Black Hills Corp.	FieldPoint Petroleum Corp	Niko Resources Ltd.	Swift Energy Co.
Bonterra Energy Corp.	Freehold Royalties Ltd.	Panhandle Oil and Gas Inc.	Tap Oil Limited
BPZ Resources, Inc.	FX Energy	Paramount Resources Ltd.	TransAtlantic Petroleum Ltd.
Callon Petroleum Company	GeoMet, Inc.	Parex Resources Inc.	TransGlobe Energy Corp.
Calvalley Petroleum Inc.	Global Energy Development	Perpetual Energy Inc.	Triangle Petroleum Corp.
Canacol Energy Ltd.	Gran Tierra Energy, Inc.	PetroQuest Energy Inc.	VAALCO Energy, Inc.
Carnarvon Petroleum Ltd.	Gulfport Energy Corp.	PostRock Energy Corporation	Valeura Energy Inc.
Chesapeake Granite Wash Trust	Gulfsands Petroleum	PrimeEnergy Corp.	Warren Resources, Inc.
Chinook Energy Inc.	Harvest Natural Resources	Royale Energy, Inc.	Zargon Oil & Gas Ltd.
Constellation Energy Partners	Heritage Oil plc	Sanchez Energy Corp.	ZaZa Energy Corp.
Corridor Resources Inc.	Kosmos Energy Ltd.	SandRidge Mississippian Trust I	
Diamondback Energy Inc.	Serinus Energy Inc.	SandRidge Mississippian Trust II	
Corridor Resources Inc.	Helix Energy Solutions	PetroQuest Energy Inc.	
Crimson Exploration Inc.	Heritage Oil plc	PostRock Energy Corp.	

Oil-Weighted			
Abraxas Petroleum Corp.	Crescent Point Energy Corp.	Kosmos Energy Ltd.	QR Energy LP
Afren plc	Denbury Resources, Inc.	Legacy Reserves LP	Resolute Energy Corp.
Approach Resources Inc.	Diamondback Energy Inc.	Lightstream Resources Ltd.	Rosneft Oil Co.
Athabasca Oil Corp.	DNO ASA	Lukoil	Sanchez Energy Corp.
Aurora Oil and Gas Limited	Dragon Oil plc	Lundin Petroleum AB	SandRidge Permian Trust
Bankers Petroleum Ltd.	Ecopetrol S.A.	Magellan Petroleum Co.	Sasol Limited
Baytex Energy Corp.	Energen Corp.	Marathon Oil Corp.	Sinopec
Berry Petroleum Co.	Energy XXI (Bermuda) Limited	Maurel & Prom SA	SOCO International plc
Bonanza Creek Energy Inc.	EP Energy LLC	Max Petroleum plc	Suncor Energy, Inc.
Bonterra Energy Corp.	FieldPoint Petroleum Corp	MEG Energy Corp.	Tap Oil Limited
BPZ Resources, Inc.	Gazprom Neft	Mid-Con Energy Partners	TengizChevrOil
Callon Petroleum Company	Global Energy Development PLC	Murphy Oil Corp.	TransAtlantic Petroleum Ltd.
Calvalley Petroleum Inc.	Gran Tierra Energy, Inc.	Northern Oil & Gas, Inc.	TransGlobe Energy Corp.
Canadian Natural Resources Ltd.	Gulfsands Petroleum	Oasis Petroleum Inc.	Triangle Petroleum Corp.
Canadian Oil Sands Limited	Halcon Resources Corporation	Occidental Petroleum Co.	Tullow Oil plc
Carnarvon Petroleum Ltd.	Harvest Natural Resources	Pacific Rubiales Energy Corp.	VAALCO Energy, Inc.
Carrizo Oil & Gas, Inc.	Heritage Oil plc	Parex Resources Inc.	Venoco Inc.
Cenovus Energy Inc.	Hess Corp.	Pengrowth Energy Corp.	Whiting Petroleum Corp.
Chaparral Energy, Inc.	Husky Energy Inc.	Penn West Petroleum Ltd.	Zargon Oil & Gas Ltd.
Clayton Williams Energy	Imperial Oil Ltd.	Petrobras	
CNOOC Limited	Kinder Morgan Energy Partners	Petroleos Mexicanos	
Continental Resources, Inc.	Kodiak Oil & Gas Corp.	PrimeEnergy Corp.	

Gas-Weighted			
Adams Resources and Energy	EQT Corporation	NuVista Energy Ltd.	Santos Ltd.
Advantage Oil & Gas Ltd.	Escalera Resources Co.	Oil Search Limited	Serinus Energy Inc.
Antero Resources LLC	EXCO Resources, Inc.	Panhandle Oil and Gas Inc.	Sonde Resources Corp.
BASF SE	Forest Oil Corp.	Perpetual Energy Inc.	Southwestern Energy Co.
Birchcliff Energy Ltd.	FX Energy	PetroQuest Energy Inc.	Talisman Energy Inc.
Black Hills Corp.	GeoMet, Inc.	Peyto Expl. & Dev. Corp.	Tourmaline Oil Corp.
Cabot Oil & Gas Corp.	Goodrich Petroleum Corp.	PostRock Energy Corp.	Ultra Petroleum Corp.
Chesapeake Energy Corp.	JKX Oil & Gas plc	PTT E&P Public Co. Ltd.	Valeura Energy Inc.
Comstock Resources Inc.	Loews Corporation	Questar Corp.	Woodside Petroleum Ltd.
CONSOL Energy Inc.	Mitsui & Co., Ltd.	Quicksilver Resources, Inc.	WPX Energy
Constellation Energy Partners	National Fuel Gas Co.	Repsol S.A.	
Corridor Resources Inc.	Niko Resources Ltd.	Royale Energy, Inc.	
EnCana	Novatek	Santonia Energy Inc.	

Balanced			
Alta Mesa Holdings, L.P.	ConocoPhillips	Magnum Hunter Resources Corp.	Royal Dutch Shell plc
Anadarko Petroleum Corp.	Devon Energy Corp.	Matador Resources Co.	Salamander Energy plc
Anderson Energy Ltd.	Dorchester Minerals, L.P.	McMoRan Exploration Co.	SandRidge Energy, Inc.
Apache Corp.	Dune Energy Inc.	MDU Resources Group, Inc.	Saratoga Resources, Inc.
Apco Oil & Gas Int'l Inc.	Endeavour International Corp.	Midstates Petroleum Co.	SM Energy Company
ARC Resources Ltd.	Enerplus Corp.	MOL	Statoil ASA
Barnwell Industries	Eni S.p.A.	Newfield Exploration Co.	Stone Energy Corp.
Bellatrix Exploration Ltd.	EOG Resources, Inc.	Noble Energy, Inc.	Swift Energy Co.
BG Group plc	EPL Oil & Gas Inc.	OMV AG	Total S.A.
BHP Billiton Group	Equal Energy Ltd.	Paramount Resources Ltd.	Trilogy Energy Corp.
Bill Barrett Corp.	EV Energy Partners, L.P.	PDC Energy	Unit Corp.
Bonavista Energy Corporation	Exxon Mobil Corp.	Penn Virginia Corp.	Vanguard Natural Resources
BP plc	Freehold Royalties Ltd.	Petrobras Argentina S.A.	Vermilion Energy Inc.
Breitburn Energy Partners L.P.	Gastar Exploration Ltd.	PetroChina Company Limited	W&T Offshore, Inc.
Canacol Energy Ltd.	Gulfport Energy Corp.	Pioneer Natural Resources Co.	Warren Resources, Inc.
Chesapeake Granite Wash Trust	INPEX Corporation	Premier Oil plc	YPF S.A.
Chevron Corp.	Laredo Petroleum, Inc.	QEP Resources, Inc.	ZaZa Energy Corp.
Chinook Energy Inc.	Linn Energy LLC	Range Resources Corp.	
Cimarex Energy Co.	Long Run Exploration Ltd.	Rex Energy Corp.	
Concho Resources Inc.	LRR Energy L.P.	Rosetta Resources Inc.	
Chinook Energy Inc.	Husky Energy Inc.	PetroChina Company Ltd.	
Cimarex Energy Co.	INPEX Corp.	Pioneer Natural Resources Co.	
CNOOC Ltd.	Laredo Petroleum Holdings Inc.	Premier Oil plc	

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