



**GUINNESS
ATKINSON**
F U N D S

Energy brief



Tim Guinness

December 2010

**Commentary and Review by portfolio manager
Tim Guinness**



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REPORT HIGHLIGHTS

FUND NEWS

- Fund size \$99 million at end of November

OIL

- Oil price moves above \$85
- Global oil demand upgrades from the IEA for 2010 and 2011

NATURAL GAS

- Henry Hub price moves up as winter weather arrives in the US

EQUITIES

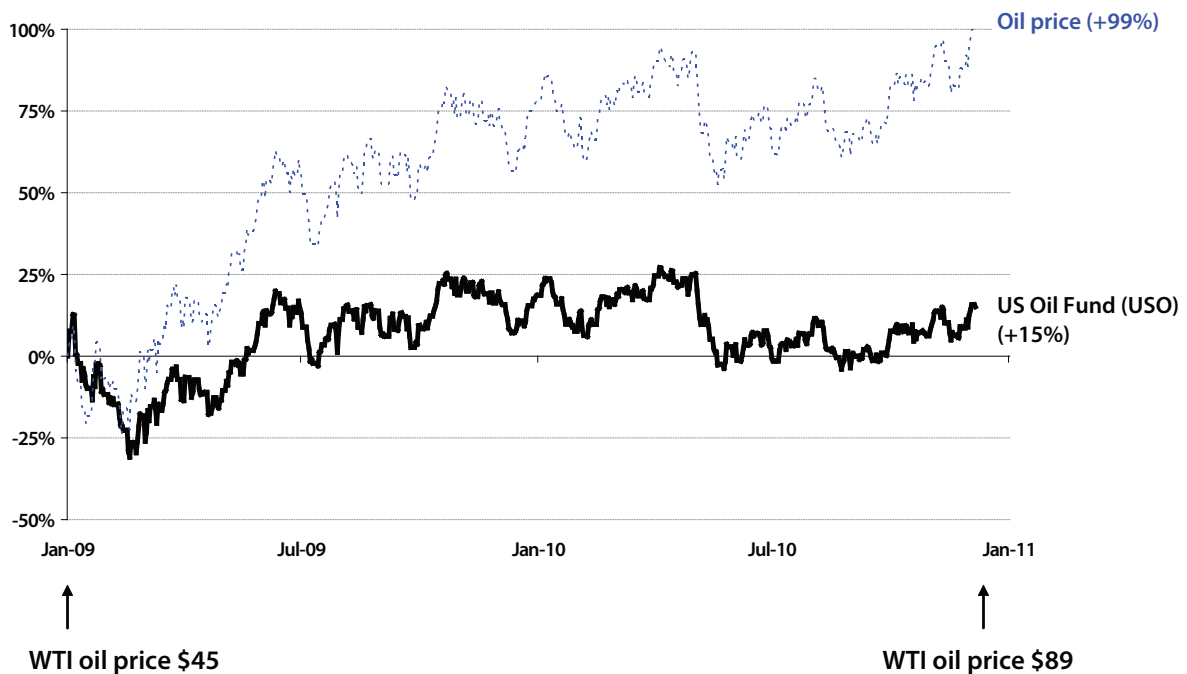
- MSCI World Energy Index up 1.47% in November compared with S&P500 up 0.01%
-

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- ➔ Chart of the Month
- ➔ Oil Market -- November 2010 Review
- ➔ Oil Market -- Outlook
- ➔ Natural Gas Market -- November 2010 Review
- ➔ Guinness Atkinson Global Energy Fund Performance Review
- ➔ Guinness Atkinson Global Energy Fund Portfolio
- ➔ Concluding Comments
- ➔ Appendix: Oil and Gas Markets, Historical Context

Chart of the Month

Contango erodes returns, hence underperformance of US Oil Fund.



Source: Bloomberg, Guinness Atkinson Asset Management (December 2010)

Oil Market – November 2010 Review



Oil price (WTI \$/barrel) 18 months May 30 2009 to November 30 2010

Source: Bloomberg

The West Texas Intermediate (WTI) oil price began November at \$81.43 and moved up to \$87.81 over the first ten days of the month. It then fell back sharply to reach \$80.44 on November 17 before recovering to end the month at \$84.11. WTI has now averaged \$78.59 for the first 11 months of 2010.

Factors that strengthened the WTI oil price in November included:

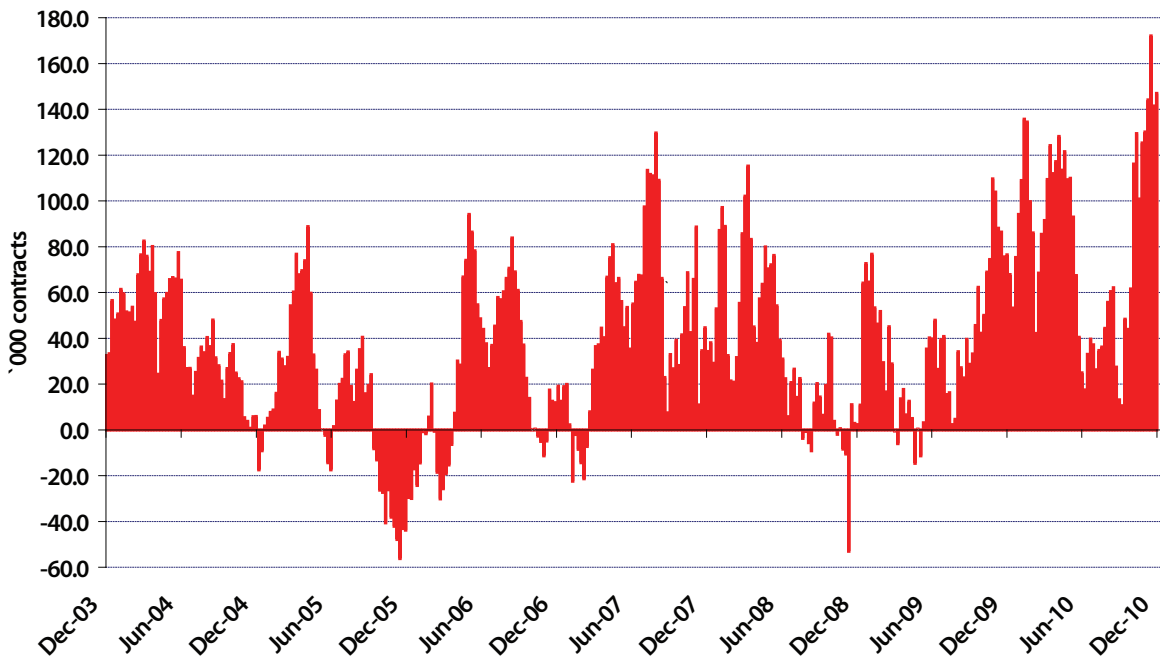
- **Strong oil demand.** The IEA revised up global oil demand for 2010 and 2011 by 0.4m and 0.3m b/day respectively, to 87.3m b/day for 2010 and 88.5m b/day for 2011. The increase in 2010 demand represents accelerated demand in both the OECD (weather-induced demand in the third quarter) and non-OECD (increased demand for LPG and ethane in the Middle East) regions.
- **US economic data.** The Labour Department in the US announced on November 24 that applications for unemployment benefits had declined to 407,000, the lowest level since 2008. WTI rose over 3% on the day.

Factors that weakened the oil price in November included:

- **US dollar strength.** The dollar moved up over 8% versus the euro from 1.42 to 1.30 between 4 November and the end of the month as the Irish debt crisis destabilized the European currency.
- **Inventory levels.** Despite continued upgrades to 2010 OECD demand forecasts, inventory levels remain at record levels both in the US and across the OECD region. The US Department of Energy figures show crude oil stocks at 360m barrels at the end of November, only slightly lower than the twenty-year high reached in 2009. The OECD inventory level at the end of September was also at the high-end of the ten-year range.

Speculative and investment flows

The New York Mercantile Exchange (NYMEX) net non-commercial crude oil futures open position continued two months of strong growth in November. It moved from 125,000 contracts long to 172,000 long, before falling back to end the month at 147,000 long. This suggests that there is a considerable speculative premium in the current oil price.

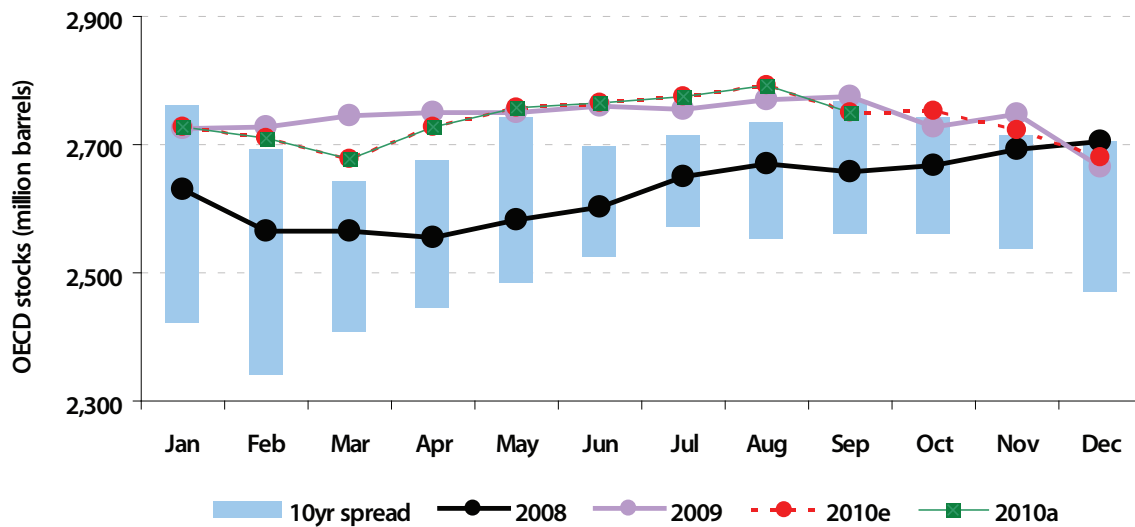


NYMEX Non-commercial net futures contracts: WTI November 2003 – November 2010
Source: Bloomberg/Nymex

OECD Stocks

The September 2010 OECD total crude and product number published in the November IEA Oil Market Report fell by 43 million barrels from 2,793 million barrels, giving a total stock of 2,750 million barrels (vs 2,777 million barrels in September 2009). When expressed as number of days of demand cover (60.0 days), however, we see that we are below the September 2009 level (61.0 days) but above the top of the tight/loose spread of the previous 10 years.

Preliminary indications for the October 2010 OECD total crude and product number (also published in the November IEA Oil Market Report) suggest that total OECD inventories rose by 2 million barrels, giving a total stock of 2,752 million barrels (versus a 5 year average draw for October of 7 million barrels). While the market remains relatively loose at this level, our projections (in red) suggest that the stock level should continue within the 10-year range by the end of the year.



OECD total product and crude inventories – monthly 1998 to 2010

Source: IEA Oil Market Report (November 2010); Guinness Asset Management estimates

Oil Market – Outlook

The table below illustrates the difference between the growth in world oil demand and non-OPEC supply over the last 10 years together with the IEA forecasts for 2010. As things stand, our forecasts for 2010 are very closely aligned to those of the IEA.

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010e IEA	2010e GAM
World Demand	76.7	77.4	77.7	79.3	82.5	84.0	85.2	86.7	86.1	85.0	87.3	87.3
Non-OPEC supply (includes Angola and Ecuador for periods when each country was outside OPEC ¹)	46.2	47.2	48.1	49.1	50.3	50.4	51.3	50.4	49.8	51.7	52.6	52.6
Angola supply adjustment ¹	-0.8	-0.7	-0.9	-0.9	-1.0	-1.2	-1.4	0.0	0.0	0.0	0.0	0.0
Ecuador supply adjustment ¹	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	0.0	0.0	0.0	0.0
Indonesia supply adjustment ²	1.2	1.2	1.1	1.0	1.0	0.9	0.9	1.0	1.0	0.0	0.0	0.0
Non-OPEC supply (ex. Angola/Ecuador and inc. Indonesia for all periods)	46.2	47.3	47.9	48.8	49.8	49.6	50.3	50.9	50.8	51.7	52.6	52.6
OPEC NGLs	3.1	3.4	3.7	3.9	4.2	4.3	4.3	4.3	4.4	4.6	5.1	5.1
Non-OPEC supply plus OPEC NGLs (ex. Angola/Ecuador and inc. Indonesia for all periods)	49.3	50.7	51.6	52.7	54.0	53.9	54.6	55.2	55.2	56.3	57.7	57.7
Call on OPEC-12 ³	27.4	26.7	26.1	26.6	28.5	30.1	30.6	31.5	30.9	28.7	29.6	29.6
Iraq supply adjustment ⁴	-2.6	-2.4	-2.0	-1.3	-2.0	-1.8	-1.9	-2.1	-2.4	-2.4	-2.4	-2.4
Call on OPEC-11 ⁵	24.8	24.3	24.1	25.3	26.5	28.3	28.7	29.4	28.5	26.3	27.2	27.2

¹ Angola joined OPEC at the start of 2007, Ecuador rejoined OPEC at the end of 2007 (having previously been a member in the 1980s)

² Indonesia left OPEC as of the start of 2009

³ Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi, U.A.E. Venezuela

⁴ Iraq has no official quota

⁵ Algeria, Angola, Ecuador, Iran, Kuwait, Libya, Nigeria, Qatar, Saudi, U.A.E. Venezuela

Source: 2000 - 2008 IEA oil market reports; 2009-13 November 2010 Oil market Report

The IEA currently estimate that global oil demand for 2009 was 85.0m b/day, comprising a decline of 2.1m b/day in the OECD and an increase of 1m b/day in non-OECD territories from 2008. This means that when added to declines that have already occurred in the OECD in 2007 and 2008, (1.9m b/day), the total decline in the OECD between 2007 and 2010 will have been c.4m b/day, or 8%. This makes the 2006 - 2009 demand destruction more like that seen in 1974 than in 1980 and towards the less severe end of what we expected.

OPEC

2 years ago at its extraordinary meeting on December 17, 2008, OPEC announced a new quota target of 25.0m b/day with effect from 1 January 2009. This amounted to a 4.2m b/day cut from the actual OPEC-11 September 2008 production level of 29.2m b/day. Since then quotas have remained unchanged.

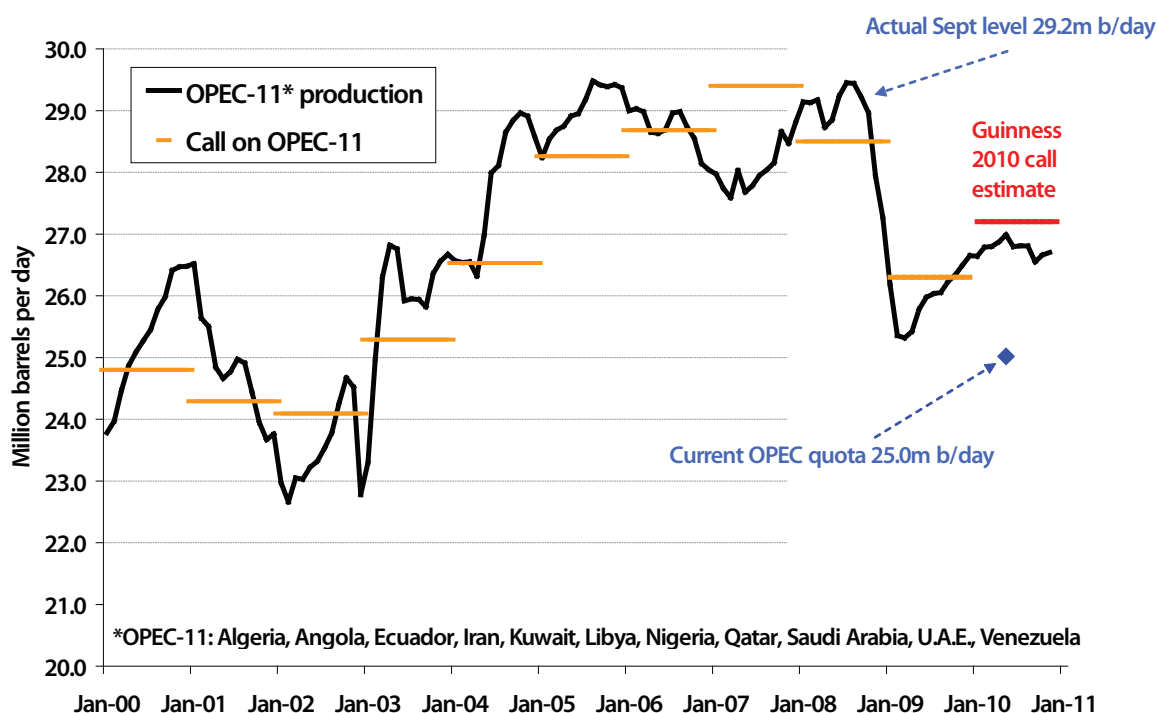
OPEC-11 production for November 2010 has initially been reported as 26.7m b/day, down 80,000 b/day from October. If this proves to be accurate, OPEC November compliance will have been at 2.4m b/day (~57%), down from a peak of around 3.8m b/day (~90%). Iran, Nigeria, Venezuela and Angola continue to be the principal over-producers. We saw a steady pattern from March 2009 until May 2010 of OPEC edging up production to take advantage of oil prices around the \$75-85 range and we have now seen five consecutive months whereby production has remained largely flat. Recent OPEC rhetoric has suggested that they are happy to turn a blind eye to production remaining above the announced quotas for as long as the oil price remains around current levels. It will be interesting to see if these latest data points indicate a change sentiment from the producers or merely a 'bump in the road'.

OPEC met on October 14, 2010 in Vienna, Austria. They kept production quotas unchanged and issued the following statement:

"The Conference reviewed current oil market conditions and future prospects and observed that, whilst economic recovery is underway, there is still considerable concern about the magnitude and pace of this recovery, especially in the major industrialized countries of the OECD. Moreover, whilst there has been some easing of the overhang in crude oil stocks, market fundamentals remain weak, refinery utilization rates are low and product inventories have risen considerably.

Accordingly, based on its detailed analysis of important market drivers, which clearly reveals that the market remains well supplied, and given the persisting significant downside risks to world economic recovery, the Conference decided to leave current production levels unchanged. In taking this decision, the Conference reaffirmed its determination to ensure reliable supply to the market, at reasonable and fair prices, supported by an adequate level of spare capacity for the benefit of the world at large. Indeed, the Organization remains cognisant of the consuming countries' concerns over security of supply and its Members are committed to optimizing the pace of their capacity expansion so that they are able to respond to expected growing global demand and increased calls on OPEC crude in the future. At the same time, Member Countries remain firm in their intention to swiftly respond to any developments which might jeopardize oil market stability and their interests. Therefore, in addition to continual monitoring of supply/demand fundamentals, the Conference agreed to reassess the market situation at its 158th (Extraordinary) Meeting, to be held in Quito, Ecuador, on 11 December 2010."

The 12-member group are scheduled to meet next on December 11, 2010 in Quito, Ecuador.



OPEC apparent production vs call on OPEC 2000 – 2010
 Source: Bloomberg IEA Oil Market Report (November, 2010)

Supply looking forward

The non-OPEC world is struggling to grow production. The growth was 2% per annum between 1998-2003, 1% from 2003-2008 and is forecast 0.5% from 2008-2013 and we believe that has a good chance of not being realized. 2009 turned out a better year than previous years as a number of projects (such as BP's Thunderhorse) that had been long in the making eventually came good. Even so, the outturn at 0.8m b/day was only around two-thirds of the original IEA forecast for non-OPEC supply growth in 2009 of 1.1m b/day (September 2008 estimate).

For 2010, the IEA have in recent months forecast growth in production of between 0.7m and 0.9m b/day. Their current forecast is at the top end of this range, despite the potential of a slowdown in Gulf of Mexico drilling in the aftermath of the April rig explosion.

Looking further ahead we must consider the impact of potential increases in supply from Iraq, an OPEC member that has no formal quota. The question of how big an increase is likely, in what timescale, and the reaction of other OPEC members are all important issues. Our conclusion is that while an increase in Iraqi production may be possible (say, 2-3m barrels over the next 5 years) if it occurs it will be surprisingly easily absorbed by a combination of OPEC adjustment, if necessary, and peaking non-OPEC supply and continuing growth in demand from developing countries of 10-15m bbls/day over the next 10 years. Iraqi production is currently running at 2.4 m bbls/day, down from a high of 3.6m bbls/day in mid 2000. We noted with interest some comments from Core Laboratories at a Simmons International conference we attended in September that Iraqi production would not exceed 3.6m b/d (the previous peak) within the next 5 years because the fields had been so badly damaged under Saddam Hussein.

Demand looking forward

We share the IEA's view that growth in non-OECD demand in 2010 is likely to be greater than the 0.9m b/day in 2009: they forecast non-OECD demand for 2010 at 41.2m b/day (up by around 1.9m b/day (+5%)), driven mainly by higher consumption in China, the Middle East and Latin America. We think this forecast is about right.

Turning to OECD demand, a number of commentators have focused on the fact that 2008 and 2009 are the first two consecutive years of North American oil demand decline since the early 1980's. However, we think the global perspective is more illuminating: the 2007-9 global demand decrease of 1.6m b/day equates to less than 2%, which does not seem very big given the scale of the banking crisis and the global slowdown. And if the IEA's forecast for global oil demand in 2010 is accurate at 87.3m b/day, this year the world will consume more oil than it ever has done (comfortably surpassing the 2007 peak of 86.7m b/day).

Conclusions about oil

From the low of \$31.42 on December 22, 2008 we have seen the oil price (WTI) recover to above \$70 by May 2009, and range trade around \$70-85 for the past 14 months. An oil price at the top end of this range is not particularly supported by the immediate supply/demand and inventories balance which shows that though OPEC cuts match demand destruction, inventories remain high.

The table below illustrates our target oil price estimates against WTI oil prices, and for comparison the rises in percentage terms that we have seen in the period from 2002 to 2009.

	2002	2003	2004	2005	2006	2007	2008	2009	2010e	2011e
Average WTI (\$)	26.1	31.2	41.7	56.6	66.1	72.2	99.9	61.9	70-80	70-90
Change ⁺ y-o-y (\$)*	-	5.1	10.5	14.9	9.5	6.1	27.7	-38.0	+13.1	+5.0
Change ⁺ y-o-y (%)	-	+20%	+34%	+36%	+17%	+9 %	+38%	-38.0%	+21%	+7%

*e = estimate + using midpoint *-year-over-year*

Source: Bloomberg, Guinness Asset Management estimates (December 2010)

Natural Gas Market –November 2010 Review

The US spot natural gas price (Henry Hub, Louisiana) opened November at \$3.35 per Mcf (1000 cubic feet) and traded up through the month to reach \$4.17 at the end of November.

The 12-month gas strip price (a simple average of settlement prices for the next 12 months' futures prices) remained broadly flat through the month: it opened at \$4.31 and fell as low as \$4.10 before closing November at \$4.36.



Henry Hub Gas spot price (\$/Mcf) 18 months – May 30 2009 to November 31 2010

Source: Bloomberg

Factors that weakened the US gas price in November included:

- **Storage levels.** November saw the first small withdrawals from storage as the winter weather arrived, and they were both smaller than the five-year average. 6 Bcf and then 23 Bcf were drawn down, compared with five-year averages of 31 Bcf and 44 Bcf. This leaves the overall storage level at the end of November at 3,814 Bcf, which is 11% above the five-year average of 3,441 Bcf.
- **Production growth.** The most recent data from the Energy Information Administration (EIA) is for September, and shows that natural gas production from the Lower 48 states was up 0.5 Bcf/day in the month. Onshore production was up 0.7 Bcf/day, while Gulf of Mexico production was down 0.2 Bcf/day. This onshore increase means that onshore production has grown in ten of the last twelve months, which we discuss later on.

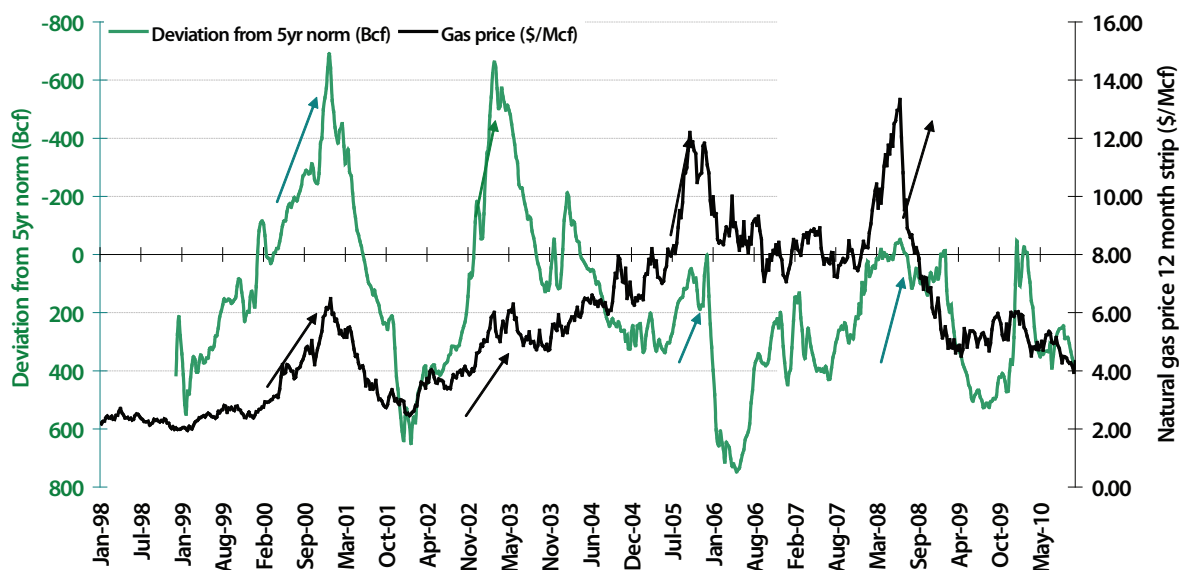
Factors that strengthened the US gas price in November included:

- **Steady rig count.** The Baker Hughes Natural Gas rig count which reached 992 in mid-August fell in November from 967 to 936, before recovering slightly to 953. We continue to look to the exploration and production companies to reduce their capex and drilling activity with gas around \$4.
- **Cold weather.** Although the storage withdrawals were slightly lower than the five-year average, the arrival of cold weather in much of the lower 48 states in the second half of the month acted as a much-needed catalyst for the natural gas price.

Natural gas storage

Swings in the supply/demand balance for US natural gas should, in theory, show up in movements in gas storage data. The following graph shows the 12 month gas strip price (in black) against the amount of gas in storage expressed as the deviation from the 5 year storage average (in green). Swings in storage have frequently been a leading indicator to movements in the gas strip price.

US natural gas price (Henry Hub 12 month strip \$/Mcf) vs deviation from 5yr gas storage norm



Deviation from 5yr gas storage norm vs. gas price 12 month strip

Source: Bloomberg, EIA (December 2010)

The surplus of gas in the second half of 2008 can be seen in gas storage data, with the inflection point in storage occurring in July 2008 and the storage line moving from negative (i.e. deficit) to positive (i.e. surplus) territory at the end of the year. This coincided with the gas strip price falling from a peak of over \$13 in July to around \$6 by the end of the year. The surplus continued to build in the first 8 months of 2009, helping to push the gas strip price below \$5 (from February to September 2009) for the first time since 2003. We have seen two periods of tightening since then: during the 2009/10 winter and, to a lesser extent, the 2010 summer (move up in green line), but both induced by periods of unusually hot or cold weather rather than an improvement in the underlying balance between supply and demand

We have been asserting that the moment when the storage line turns decisively will likely be a coincident indicator for the start of a sustained gas price recovery. With the rig count having moved higher and production increasing, the timing of the recovery is increasingly difficult to pinpoint, but we remain of the view that a move up towards \$6 will eventually occur.

Natural Gas Market - Outlook

Supply & demand recent past

The sharp contraction in the gas price between July 2008 and November 2009 reflects the fact that supply/demand fundamentals changed materially.

The supply side fundamentals for natural gas in the US are driven by 5 main moving parts: onshore and offshore domestic production, net imports of gas from Canada, exports of gas to Mexico and imports of liquefied natural gas (LNG). In 2007 and 2008 onshore production grew at an accelerating pace as gas shales were developed using advances in horizontal drilling and “fracking” techniques; by contrast offshore production and imports from Canada and of LNG were declining.

On the demand side, industrial gas demand and electricity gas demand, each about a third of total US gas demand, are key. Commercial and residential demand, which make up the final third, have been fairly constant on average over the last decade - although yearly fluctuations due to the coldness of winter weather can be marked. Growth in gas market share of the residential and commercial heating market has been balanced by efficiency gains.

Industrial demand tends to trend up and down depending on the strength of the economy; the level of the US dollar; and the differential between US and international gas prices. Until mid-2008 a weaker dollar, high international gas prices and a strong economy saw industrial demand recovering after declining in the first half of this decade. Not surprisingly, 2009 demand was weaker: industrial demand was 20.3 Bcf/day vs 21.8 Bcf/day for 2008. However, this demand reduction was less than we feared and was not accompanied by falls in demand elsewhere. Overall demand for 2009 was down 1-2% year on year (1.1 Bcf/day). Year to date (to September, which is the most recent data point), industrial demand is up 7% year on year and in-line with the 5 year average.

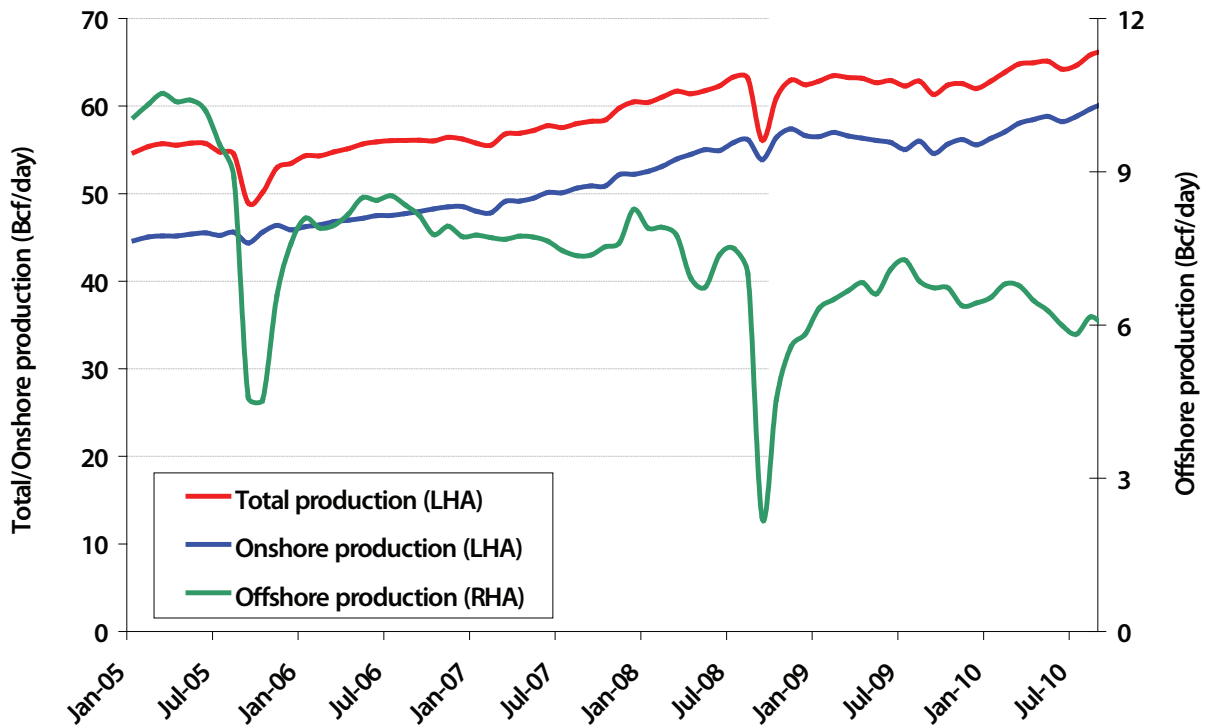
Generally speaking, the majority of incremental electricity demand over the last few years has been met by gas rather than coal, nuclear or hydro power. While electricity demand has grown 1-2% per annum (pa), gas demand for electricity generation has grown by on average 5% pa (1 Bcf/day per year). The numbers for 2009 show small year-on-year growth (3-4%), and the data to September 2010 shows further growth of 1.4 Bcf/day (7%).

Supply Outlook

Fall in Rig Count

While the onshore drilling rig count remains an important driver of gas supply, the picture has become muddled over the past two or three years by the accelerating shift from vertical to horizontal drilling. The sharp drop in the onshore rig count since September 2008, when the rig count dropped from a peak of 1,606 gas land rigs to a trough of 665 rigs in August 2009, contributed to a slowdown in the growth of onshore production, but has so far failed to cause a decline. Why is this? Firstly, the rig count is already recovering, back to 953 at the end of November, but still down substantially from the peak. Secondly, the composition of the rig count has changed, with a shift to more powerful ‘premium’ rigs, some capable of doing twice the work of a smaller ‘conventional’ rig. Therefore, a lower rig count today is producing the same amount of gas as the higher rig count in 2008.

As a result, onshore supply has crept up and is now around 3.4 Bcf/day above the previous peak. But as we mentioned earlier, we do not believe this growth in production will continue with natural gas at \$3-\$4.50 below the marginal cost of supply: either capital spending by the exploration companies will be reduced, or the natural gas price will move up.



US natural gas production 2005 – 2009 (Lower 48 States)
Source: EIA (December 2010)

Liquid natural gas (LNG) arbitrage

The UK national balancing point (NBP) gas price – which serves as a proxy to the European traded gas price – rose from \$7.40 to \$8.40 over the month and remains at a significant premium to the US gas price (almost 100%). US LNG imports rose from 0.8 Bcf/day to 0.9 Bcf/day in November, well down from the 2.3 Bcf/day seen in January.

Canadian imports into the U.S.

In 2009 they were down approximately 9% (around 0.85 Bcf/day) versus 2008. Falling rig counts, a less attractive royalty regime enacted in 2007, and increased demand from Canadian oil sands development are all factors at work here. 2010 Canadian imports are up 1% versus 2009 (and Canadian rig counts have started recovering) but we do not expect imports to pick up significantly.

Demand Outlook

Total US gas demand for 2009 was down 1.1 Bcf/day compared to 2008. This is less than the 5-6 Bcf/day we feared 18 months ago. January-September 2010 demand numbers show a significant jump, with total demand up 5% versus the 5 year average for these months. We know that this was to some extent a cold weather effect in the early part of the year but remain confident that with post-recession industrial recovery, 2010 demand should surprise to the upside.

Other

Relationship between gas price and other energy commodity prices in the US

The oil/gas price ratio (\$ per bbl WTI/\$ per mcf Henry Hub) of 20.2x at the end of November was well outside the more normal ratio of 6-9x. If oil averages, say, around \$80 in 2010 and the relationship between the oil and gas price were to return to its longer-term average of 6-9x, this would imply the gas price increasing back to around \$10 once the gas market has returned to balance. This is quite a thought and a long way away from current market sentiment.

The following chart of the front month US natural gas price against heating oil (No2), residual fuel oil (No5) and coal (Sandy Barge adjusted for transport and environmental costs) seeks to illustrate how coal and residual fuel oil switching provide a floor and heating oil a ceiling to the natural gas price. The gas price has now bounced off the coal price support level, both having declined steeply over the past 12 months, whereas the residual and heating oil prices are well above gas and coal.



Natural gas price (black) vs residual fuel oil (light blue) and heating oil (dark blue) and Sandy Barge (adjusted) (green) 2000 – 2010

Source: Bloomberg LP (December 2010)

Conclusions about U.S. natural gas

We believe the period of extreme relative weakness in the US natural gas price to be nearing an end. Natural gas at around \$4 is below the marginal cost of supply, and as demand recovers this year and the reduced rig count holds back new supply we expect the price to make a meaningful recovery.

Guinness Atkinson Global Energy Fund Performance Review

The main index of oil and gas equities, the MSCI World Energy Index, was up 1.47% over the month of November. The S&P 500 was up 0.01% in November. The Fund was up 1.09% over the month, underperforming the MSCI World Energy Index by 0.38% (all in US dollar terms).

Within the Fund, November's stronger performers were Halliburton, Swift, Newfield, Forest and Hess. Poorer performers were Repsol, Total, ENI, OMV and Statoil.

Performance as of September 30, 2010

Inception date 6/30/04	Full Year 2008	Full Year 2009	1 year (annualized)	Last 2 years (annualized)	Last 5 years (annualized)	Inception to end 2009 (annualized)	Since Inception (annualized)
Global Energy Fund	-48.56%	63.27%	5.20%	3.71%	3.77%	18.44%	16.00%
MSCI World Energy Index	-37.88%	26.98%	2.22%	-1.80%	1.99%	11.93%	9.78%
S&P 500 Index	-37.00%	26.47%	10.18%	1.28%	0.64%	1.65%	2.08%

Source: Bloomberg

Gross expense ratio: 1.42%

Performance as of November 30, 2010

Inception date 6/30/04	Full Year 2008	Full Year 2009	1 year (annualized)	Last 2 years (annualized)	Last 5 years (annualized)	Inception to end 2009 (annualized)	Since Inception (annualized)
Global Energy Fund	-48.56%	63.27%	9.22%	29.07%	6.77%	18.44%	16.51%
MSCI World Energy Index	-37.88%	26.98%	3.67%	12.08%	4.89%	11.93%	10.56%
S&P 500 Index	-37.00%	26.47%	9.94%	17.37%	0.99%	1.65%	2.62%

Performance data quoted represent past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the Fund may be lower or higher than the performance quoted. For most recent month-end and quarter-end performance, visit www.gafunds.com/performance.asp or call (800) 915-6566.

The Fund imposes a 2% redemption fee on shares held for less than 30 days.

Total returns reflect a fee waiver in effect and in the absence of this waiver, the total returns would be lower.

Performance data does not reflect the redemption fee and, if deducted, the fee would reduce the performance noted.

Buys/Sells

In November we sold our holdings of Anadarko and Pioneer and bought Devon Energy, an onshore US and Canada-focused oil and natural gas exploration and production company, which is trading on a low valuation and has cheap reserves. Pioneer had been one of the best performing stocks in the fund this year and we therefore decided to take a profit. Anadarko, which had been affected by the BP Macondo spill in the second quarter this year, had recovered strongly since then and was trading on a relatively high PER of 35x 2011.

In November we also sold our holding in Royal Dutch Shell and bought half-units in each of JA Solar and Trina Solar. Royal Dutch Shell had been the best performing European integrated this year and had thus become the most expensive integrated held in the fund. Trina is a Chinese solar module manufacturer trading on 6.7x earnings (2010) and JA Solar is a Chinese solar cell manufacturer trading on 4.9x earnings (2010). The solar sector had been weak for some time and had witnessed significant write-downs in analyst earnings over a sustained period. However, this trend reversed at the start of 2010 and since then we have seen strong positive momentum in analyst earnings estimates for both 2010 and 2011. We feel we are only at the beginning of this re-rating, however, and see excellent value in both the sector and JA Solar and Trina Solar in particular.

Sector Breakdown

The following table shows the asset allocation of the Fund at November 30, 2010.

(%)	31 Dec 2006*	31 Dec 2007*	31 Dec 2008	31 Dec 2009	30 Nov 2010	Change YTD
Oil & Gas	95.4	103.5	96.4	96.1	94.4	-1.7
Integrated	45.2	66.2	53.7	47.2	41.5	-5.7
Exploration and production	30.3	25.8	28.7	32.0	37.4	5.4
Drilling	9.9	8.1	5.2	8.4	6.8	-1.6
Equipment and services	3.4	3.4	6.4	5.4	5.2	-0.2
Refining and marketing	6.6	0.0	2.4	3.1	3.5	0.4
Coal and consumables	3.3	2.5	2.3	0.0	0.0	0.0
Solar	0.0	0.0	0.0	0.0	3.9	3.9
Construction and engineering	0.0	0.0	0.4	0.4	0.4	0.0
Cash	1.3	-6.0	0.9	3.5	1.3	-2.2
Total	100.0	100.0	100.0	100.0	100.0	0.0

Source: Guinness Asset Management

Basis: Global Industry Classification Standard (GICS)

Guinness Atkinson Global Energy Fund Portfolio

The fund at November 30, 2010 was on P/E ratios versus the S&P 500 Index at 1183.25, as set out in the table. (Based on S&P 500 'operating' earnings per share estimates of \$49.5 for 2008, \$56.9 for 2009, \$81.2 for 2010 and \$90.5 for 2011). This is shown in the following table:

	2007	2008	2009	2010	2011
Fund PER	8.2	7.5	17.1	11.9	10.0
S&P 500 PER	14.3	23.9	20.8	14.6	13.1
Premium (+)/Discount (-)	-43%	-69%	-18%	-18%	-24%
Average oil price (WTI) \$	\$72.2/bbl	\$99.9/bbl	\$61.9/bbl	\$75.1/bbl	\$70-90 est

Source: Standard and Poor's; Guinness Asset Management Ltd

Portfolio Holdings

Our **integrated** and similar stock exposure (c.34%) is comprised of a mix of mid-cap, mid/large-cap and large-cap stocks. Our three large caps are BP, Chevron and Total. Mid/large and mid-caps are ENI, StatoilHydro, ConocoPhillips, Marathon, Hess, Repsol and OMV. At the end of November the median PER of this group was 9.8x 2010 earnings. We have one Canadian integrated holding, Sunco, which merged in 2009 with PetroCanada. The company has significant exposure to oil sands and as a result stands on a relatively high PER.

Our **exploration & production** exposure (c.37%) gives us exposure most directly to rising oil and natural gas prices. We include in this category non-integrated oil sands companies as this is the GICS approach. The stocks here with oil sands exposure are; OPTI Canada, Nexen and Canadian Natural Resources. The pure E&P stocks are all largely in the US (Forest, Newfield, Swift, Chesapeake and Bill Barrett) and two more (Apache and Noble) which have significant international production. One of the key metrics behind four of the E&P stocks held is low enterprise value /proven reserves (Noble, Forest, Swift, and Bill Barrett). All of the E&P stocks held also provide exposure to North American natural gas and include two of the industry leaders (Apache and Chesapeake). In PER terms, the group divides into two: (i) Apache, Chesapeake, Devon, Forest, Newfield and Swift all with quite low forward PERs (8x – 19x 2011 earnings) and (ii) Noble and Bill Barrett with higher forward PERs (19x and 28x 2011 earnings, respectively). We use forward PERs because 2008 and 2009 earnings for this group are heavily distorted by the extreme oil and gas price volatility over this period on one hand and one off items such as reserve writedowns, refinancings and hedging on the other.

We have exposure to five (pure) **emerging market** stocks. Two are classified as integrateds by the GICS (Gazprom and PetroChina) and three as E&P companies (JKX Oil and Gas, Dragon Oil and Afren). Gazprom is the Russian national oil and gas company which produces approximately a quarter of the European Union gas demand and trades on 4.7x 2010 earnings. PetroChina is one of the world's largest integrated oil and gas companies and has significant growth potential and advantages as a Chinese national champion. Dragon Oil is an oil and gas E&P focused on offshore Turkmenistan, in the Caspian Sea and trades on 9.7x 2010 earnings. JKX is a gas focused E&P company with production in the Ukraine and trades on 10.8x 2010 earnings. Afren focuses on offshore West African production and trades on 23.8x 2010 earnings (falling to 5.5x 2011 earnings), We also hold Repsol which is classified as an emerging market integrated although in reality it is a Spain/Argentina hybrid.

We have useful exposure to **North American oil service** stocks. On 2008 earnings they are all trading with PERs of between 4.7 and 17.4 - Transocean (4.7x), Helix (5.8x), Unit (5.9x), Patterson UTI (8.3x), and Halliburton (17.4x). We should caution these are cyclical peak earnings. Looking forward Transocean and Unit are on sub 12x PERs (2011). Haliburton is on 14.0x, Patterson UTI is on 14.7x, and Helix is on 18.0x (2011). We own Halliburton because we think it is the best value of the large service companies; and Patterson gives exposure to improving pricing for land drilling and pressure pumping.

Our independent **refining** exposure is currently in the US in Valero, the largest of the US refiners, which is currently trading at significant discount to book and replacement value and at a valuation level that values its 2005 – 2007 earnings on under 3x.

Our **alternative energy** exposure is currently a single unit split equally between two companies; JA Solar and Trina Solar. Trina is a Chinese solar module manufacture trading on 6.7x earnings (2010) and JA Solar is a Chinese solar cell manufacturer trading on 4.9x earnings (2010).

Portfolio at November 30, 2010

Guinness Atkinson Global Energy Fund 30 November 2010								
Stock	ID_SEDOL 1	Curr.	Country	% of NAV	2008 B'berg mean PER	2009 B'berg mean PER	2010 B'berg mean PER	30/09/2010 Mkt. Cap. (bn USD)
Integrated Oil & Gas								
Chevron Corp	2838555	USD	US	3.38	7.1	15.8	8.9	163.0
BP PLC	0798059	GBP	GB	3.33	4.9	8.5	6.0	126.4
Total SA	B15C557	EUR	FR	3.20	6.0	10.7	8.0	121.0
ENI SpA	7145056	EUR	IT	3.16	5.5	10.9	8.2	86.4
ConocoPhillips	2685717	USD	US	3.40	5.6	16.6	10.2	85.2
Statoil ASA	7133608	NOK	NO	3.29	6.7	12.1	9.2	66.5
Repsol YPF SA	5669354	EUR	ES	3.12	8.2	15.8	10.6	31.4
Marathon Oil Corp	2910970	USD	US	3.43	5.2	18.2	9.8	23.5
Hess Corp	2023748	USD	US	3.49	9.6	36.6	13.9	19.4
OMV AG	4651459	EUR	AT	3.15	4.0	10.4	7.1	11.2
				32.94				
Integrated Oil & Gas - Canada								
Suncor Energy Inc	B3NB1P2	CAD	CA	3.41	10.8	32.6	22.2	50.9
PetroChina Co Ltd	6226576	HKD	HK	3.40	13.0	13.8	11.3	271.0
Gazprom OAO	5140989	USD	RU	1.75	5.5	6.1	4.7	124.2
				5.16				
Oil & Gas E&P								
Apache Corp	2043962	USD	US	3.47	9.6	19.4	11.7	35.6
Devon Energy Corp	2480677	USD	US	3.42	7.1	19.5	11.4	28.2
Chesapeake Energy Corp	2182779	USD	US	3.31	5.9	8.5	7.1	14.8
Noble Energy Inc	2640761	USD	US	3.43	11.5	24.1	20.2	13.1
Newfield Exploration Co	2635079	USD	US	3.53	21.3	13.1	14.6	7.7
Forest Oil Corp	2712121	USD	US	1.73	8.2	17.6	20.3	3.4
Bill Barrett Corp	B04M3T1	USD	US	3.54	14.1	22.7	17.8	1.7
Swift Energy Co	2867430	USD	US	2.41	5.3	180.6	28.8	1.1
				24.83				
Oil & Gas E&P - Canada								
Canadian Natural Resources Ltd	2171573	CAD	CA	3.42	12.1	16.4	16.5	37.7
Nexen Inc	2172219	CAD	CA	3.42	5.6	19.4	13.4	10.6
OPTI Canada Inc	B00R3Q7	CAD	CA	0.14	nm	nm	nm	0.23
Insignia Energy Ltd	B3CJG52	CAD	CA	0.00	nm	nm	nm	0.05
				6.99				
Oil & Gas E&P - Emerging markets								
Dragon Oil PLC	0059079	GBP	GB	1.62	9.5	13.8	9.7	3.6
Afren PLC	B067275	GBP	GB	1.66	nm	162.4	23.8	1.6
JKX Oil & Gas PLC	0469742	GBP	GB	1.61	9.7	10.2	10.8	0.9
Coastal Energy Co	B0L57F7	CAD	CA	0.48	nm	35.7	8.9	0.43
Falkland Oil & Gas Ltd	B030JM1	GBP	GB	0.09	nm	nm	nm	0.30
WesternZagros Resources Ltd	B28C175	CAD	CA	0.03	nm	nm	nm	0.08
Pantheon Resources PLC	B125SX8	GBP	GB	0.09	nm	nm	nm	0.04
				5.59				
Drilling								
Transocean Ltd	B3KFWW1	USD	US	1.01	4.7	5.7	10.8	20.5
Patterson-UTI Energy Inc	2672537	USD	US	2.39	8.4	nm	30.4	2.6
Unit Corp	2925833	USD	US	3.36	5.9	15.2	13.0	1.8
				6.76				
Equipment & Services								
Halliburton Co	2405302	USD	US	3.53	17.4	28.9	18.9	30.0
Trina Solar Ltd	B1L87F3	USD	US	1.60	18.4	13.7	6.6	2.4
Shandong Molong Petroleum Machinery Co Ltd	B00LNZ8	HKD	HK	0.11	8.7	24.0	8.6	0.46
				5.24				
Solar								
JA Solar Holdings Co Ltd	B1QMYF9	USD	US	1.55	178.1	nm	4.9	1.6
Helix Energy Solutions Group Inc	2037062	USD	US	2.38	5.8	24.2	26.0	1.2
				3.93				
Oil & Gas Refining & Marketing								
Valero Energy Corp	2041364	USD	US	3.53	3.6	nm	12.9	9.9
Construction & Engineering								
Kentz Corp Ltd	B28ZGP7	GBP	GB	0.37	17.3	17.0	13.6	0.54
Cash								
				1.26	33.0	33.0	33.0	
			Total	100.00				
				PER	7.5	16.7	11.2	

Research holding

The Fund's portfolio may change significantly over a short period of time; no recommendation is made for the purchase or sale of any particular stock.

Concluding Comments

Looking at the fundamentals for oil, the strength of the recovery in oil demand continues to be impressive in the non-OECD region. China car/vehicle sales have settled at 12 million pa up 66% from two years ago (2008). In the OECD, data points are also now signalling at least a bottoming of demand declines. It is remarkable to note, in fact, that if the IEA's forecast for world oil demand in 2010 up 2.3m b/day proves accurate, this year will already see a new record for oil consumption, surpassing the previous peak in 2007.

On the non-OPEC supply front, the struggle to grow production continues: the forecast from the IEA is for growth in 2010 of 0.9m b/day to be followed by 0.5m b/day in 2011. In the longer run it will suffer if drilling in the Gulf of Mexico is slowed down post the Macondo spill. On the price weakening side of the argument, OECD oil inventories remain loose. There is clearly a tension in the market between this looseness and the improving fundamentals together with trade and commodity index fund buying either as a hedge against a weak dollar or rising inflation or anticipating macro improvement. It is important also to remember that emerging market inventories are totally opaque and may be tight to counterbalance the visible looseness in OECD inventories.

In the US natural gas market it may be that our long predicted snap-back in the US natural gas price has begun. We shall see. In the round, US gas production may have stopped growing as shale gas growth is matched by conventional and offshore declines. Gas storage is still high and other commentators agree that the gas land rig count needs to come off 200 rigs to achieve balance. The higher price we are predicting will occur when supply growth ends and then as demand rising at 1.5 Bcf/d (fuelled principally by electric power generation) works off the gas storage surplus. It is important to remember that as always weather is a wild card.

Recapping :

- The oil price is showing impressive strength and is at the top end of a 12 month \$60-\$90 trading range. We did expect it to spike further but rising investor inflation fears make our conviction here less than it was.
- US natural gas prices which have been weak may now be starting to recover
- Energy equity valuations (the fund is on 2010 and 2011 prospective PERs of 11.5x and 9.5x) are well below the broad market (S&P500 14.3x at 1181 with \$82.8 eps for 2010) (top down/bottom up average consensus)
- Broad market sentiment is now recovering. As stated before, US housing starts cannot languish at 500,000 pa for ever (long run average 1.5 million pa) and motor industry sales must recover from the current 12m pa to the long run 16m pa average and so economic recovery in the US even if long delayed is inevitable and should provide new global growth support picking up any slackening in last 12 month's global growth engine - China.
- The efforts by BP to contain the Macondo oil spill worked – a big energy sentiment depressant has been lifted.

Energy equities represent a good store of value and potential for above average returns if the oil price stabilizes around the level sought by OPEC (\$70 - \$90/ barrel) and the gas price recovers to something approaching the marginal cost of production (\$6-\$7/mcf). We believe this the most plausible scenario.

I also repeat last month's quote on energy equities as an inflation hedge from a paper published recently by the consultant group Cambridge Associates:

"inflationary episodes drag down the real value of investor's assets , and it often takes years to recoup purchasing power. We believe that investors should maintain permanent allocations to inflation-sensitive assets. We also believe commodity-related assets are attractive from a secular perspective..... Many investors have been hesitant to add to such allocations in recent years given valuation concerns. Current conditions present an opportunity to rectify that....."

Overall, the Fund continues to seek to be well placed to benefit from the oil and gas price environment described above and to enable investors to benefit from the recovering picture in energy markets described above.

Commentary for our views on Alternative Energy and Asia markets is available on our website. Please [click here](#) to view.

Performance data quoted represents past performance and does not guarantee future results. Index performance is not illustrative of Guinness Atkinson fund performance and an investment cannot be made in an index. For Guinness Atkinson Fund performance, visit gafunds.com.

The Fund's holdings, industry sector weightings and geographic weightings may change at any time due to ongoing portfolio management. References to specific investments and weightings should not be construed as a recommendation by the Fund or Guinness Atkinson Asset Management, Inc. to buy or sell the securities. Current and future portfolio holdings are subject to risk.

Mutual fund investing involves risk and loss of principal is possible. The Fund invests in foreign securities which will involve greater volatility, political, economic and currency risks and differences in accounting methods. The Fund is non-diversified meaning it concentrates its assets in fewer individual holdings than a diversified fund. Therefore, the Fund is more exposed to individual stock volatility than a diversified fund. The Fund also invests in smaller companies, which involve additional risks such as limited liquidity and greater volatility.

MSCI World Energy Index is the energy sector of the MSCI World Index (an unmanaged index composed of more than 1400 stocks listed in the US, Europe, Canada, Australia, New Zealand, and the Far east) and as such can be used as a broad measurement of the performance of energy stocks. Indices do not incur expenses and are not available for investment.

The S&P 500 Index is a broad based unmanaged index of 500 stocks, which is widely recognized as representative of the equity market in general.

Price to earnings ratio (PER) reflects the multiple of earnings at which a stock sells.

Earnings per share (EPS) is calculated by taking the total earnings divided by the number of shares outstanding.

References to other mutual funds should not be interpreted as an offer of these securities.

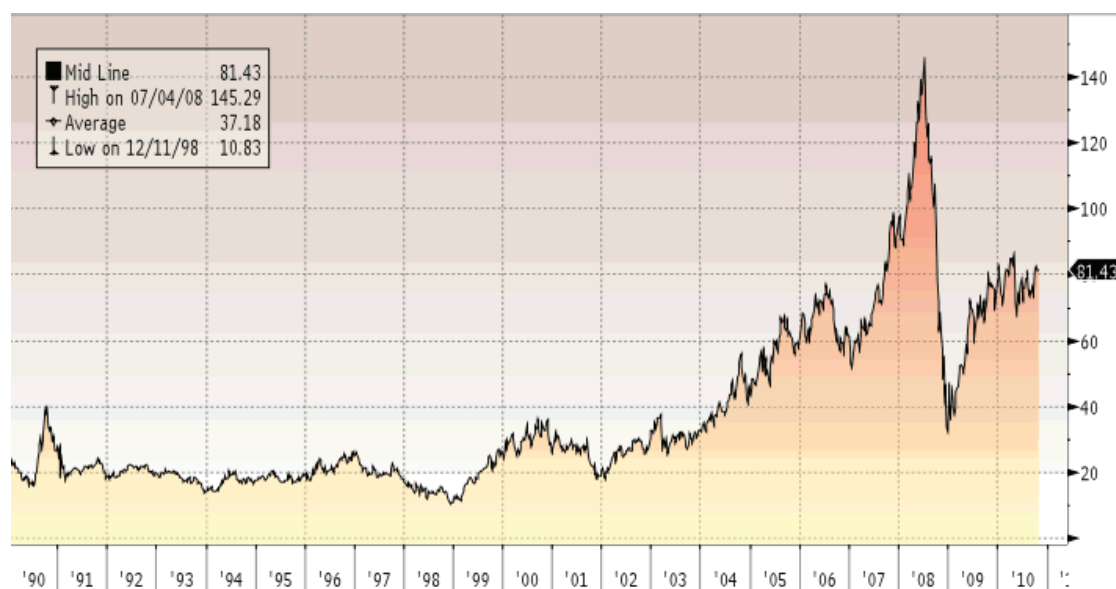
Book Value is the net asset value of a company, calculated by subtracting total liabilities from total assets.

Enterprise value is defined as the market capitalization of a company plus debt minus total cash and cash equivalents.

The Price to Earnings (P/E) Ratio is calculated by dividing current price of the stock by the company's trailing 12 months' earnings per share.

This information is authorized for use when preceded or accompanied by a [prospectus](#) for the Guinness Atkinson Funds. The prospectus contains more complete information, including investment objectives, risks, fees and expenses related to an ongoing investment in the Funds. Please read the prospectus carefully before investing.

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Appendix: Oil and Gas Markets, Historical Context

Oil price (WTI \$) last 20 years.

Source: Bloomberg

For the oil market, the period since the Iraq Kuwait war (1990/91) can be divided into two distinct periods: the first 9-year period was broadly characterized by decline. The oil price steadily weakened 1991 - 1993, rallied between 1994 -1996, and then sold off sharply, to test 20 year lows in late 1998. This latter decline was partly induced by a sharp contraction in demand growth from Asia, associated with the Asian crisis, partly by a rapid recovery in Iraq exports after the UN Oil for food deal and partly by a perceived lack of discipline at OPEC in coping with these developments.

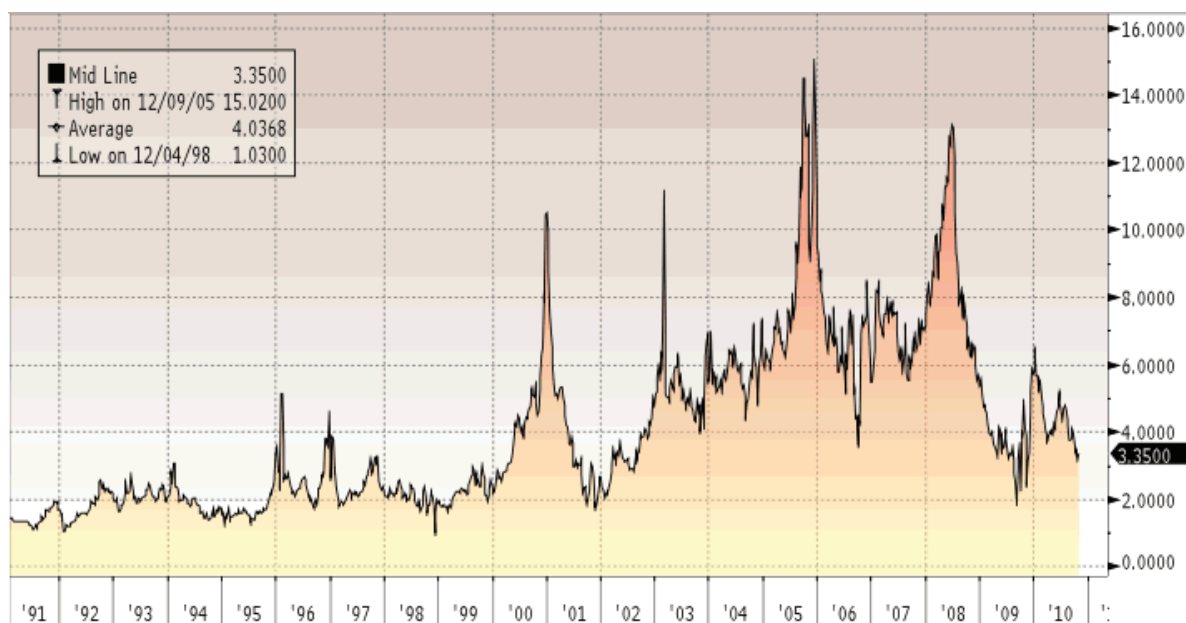
The last 9 years, by contrast, have seen a much stronger price and upward trend. There was a very strong rally between 1999 and 2000 as OPEC implemented 4 m b/day of production cuts. It was followed by a period of weakness caused by the rollback of these cuts, coinciding with the world economic slowdown, which reduced demand growth and a recovery in Russian exports from depressed levels in the mid 90's that increased supply. OPEC responded rapidly to this during 2001 and reintroduced production cuts that stabilized the market relatively quickly by the end of 2001.

Then, in late 2002 early 2003, war in Iraq and a general strike in Venezuela caused the price to spike upward. This was quickly followed by a sharp sell-off due to the swift capture of Iraq's Southern oil fields by Allied Forces and expectation that they would win easily. Then higher prices were generated when the anticipated recovery in Iraq production was slow to materialize. This was in mid to end 2003 followed by a much more normal phase with positive factors (China demand; Venezuelan production difficulties; strong world economy) balanced against negative ones (Iraq back to 2.5 m b/day; 2Q seasonal demand weakness) with stock levels and speculative activity needing to be monitored closely. OPEC's management skills appeared likely to be the critical determinant in this environment.

By mid 2004 the market had become unsettled by the deteriorating security situation in Iraq and Saudi Arabia and increasingly impressed by the regular upgrades in IEA forecasts of near record world oil demand growth in 2004 caused by a triple demand shock from strong demand simultaneously from China; the developed world (esp. USA) and Asia, excluding China. Higher production by OPEC has been one response and there was for a period some worry that this, if not curbed, together with demand and supply responses to higher prices, would cause an oil price sell off. Offsetting this has been an opposite worry that non OPEC production could be within a decade of peaking; a growing view that OPEC would defend \$50 oil vigorously; upwards pressure on inventory levels from a move from JIT (just in time) to JIC (just in case); and pressure on futures markets from commodity fund investors.

Since 2005 we saw a further strong run-up in the oil price. Hurricanes Katrina and Rita that devastated New Orleans caused oil to spike up to \$70 in August 2005, and it spiked up again in July 2006 to \$78 after a three week conflict between Israel and Lebanon threatened supply from the Middle East. OPEC implemented cuts in late 2006 and early 2007 of 1.7 million barrels per day to defend \$50 oil, and with non-OPEC supply growth at best anaemic, demonstrated that it could act as a price-setter in the market, at least so far as putting a floor under it.

Continued expectations of a supply crunch by the end of the decade, coupled with increased speculative activity in oil markets, contributed to the oil price surging past \$90 in the final months of 2007 and as high as \$147 by the middle of 2008. This latest spike was brought to an abrupt end by the collapse of Lehman Brothers and the financial crisis and recession that followed, all of which contributed to the oil price falling back by early 2009 to just above \$30. OPEC responded decisively and reduced output, helping the price to recover in 2009 and stabilize in the \$70-80 range where it sits today.



North American gas price last 19 years (Henry Hub \$/Mcf)

Source: Bloomberg

With regard to the U.S. natural gas market, the price traded between \$1.50 and \$3/Mcf for the period 1991 - 1999. This was followed by two significant spikes up to \$8-10/Mcf, one in late 2000 and one early in 2003. The spikes were caused by very tight supply situations because there is an underlying problem with supply in the rapid depletion of North American gas reserves. On both occasions, the price spike induced a spurt of drilling, which brought the price back down. More recently we have seen another period of very firm (over \$5/Mcf) gas prices followed by a hurricane induced spike. Since the big spike in late 2005, the gas price has traded mainly in the \$6-\$8 range, with a significant move down precipitated by the collapse of Amaranth in 2006, and most recently a new but short-lived spike in 2008 above \$10. In 2009, a very weak period below \$4 as progress achieved in 2007-8 in developing shale plays boosted supply while the 2009 recession cut demand. The response to this has been a dramatic fall in the U.S. gas land rig count, which should lead to a rebalancing in the market by 2010. The effects of this are currently playing out.

North American gas prices are important to many E&P companies. In the short-term, they do not necessarily move in line with the oil price, as the gas market is essentially a local one. (In theory 6 Mcf of gas is equivalent to 1 barrel of oil so \$60 per barrel equals \$10/Mcf gas). It is a regional market more than a global market because LNG imports cannot rapidly respond to increased demand because of the high infrastructure spending needed to increase capacity but that is slowly becoming less true as LNG infrastructure is put in place.