GUINNESS ATKINSON FUNDS

Energy brief


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Commentary and Review by portfolio managers
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REPORT HIGHLIGHTS

FUND NEWS

• Fund size $70 million at end of January

OIL

• Brent down slightly to $107; Brent/WTI gap narrows

Brent declined from $111 to $107 while WTI declined a dollar, from $98 to $97. US demand has started strongly in 2014 (up 4% year on year), helping global oil inventories to tighten a little.

NATURAL GAS

• US gas price up sharply on very cold weather

Henry Hub gas was up strongly during the month, ending December at $4.94, having peaked at over $5.50 during the month as unusually cold weather boosted heating demand. Underlying market looks slightly undersupplied.

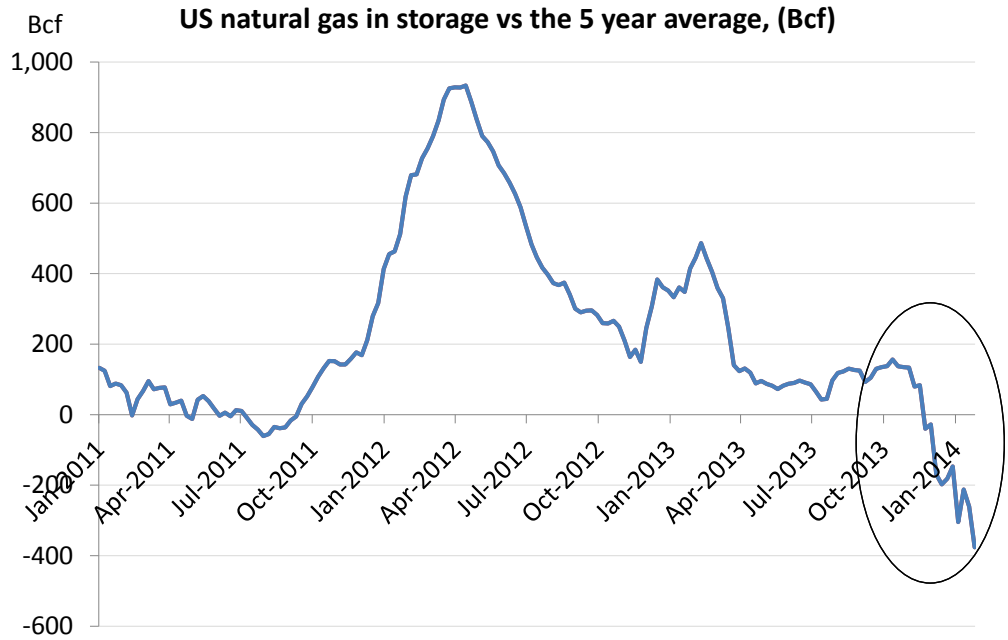
EQUITIES

• Energy outperforms the broad market

The MSCI World Energy Index fell in January by 6.1%, underperforming the MSCI World Index which fell by 3.77% (all in US dollar terms).

Chart of the Month

Natural gas in storage plummets as cold weather bites; positive for price



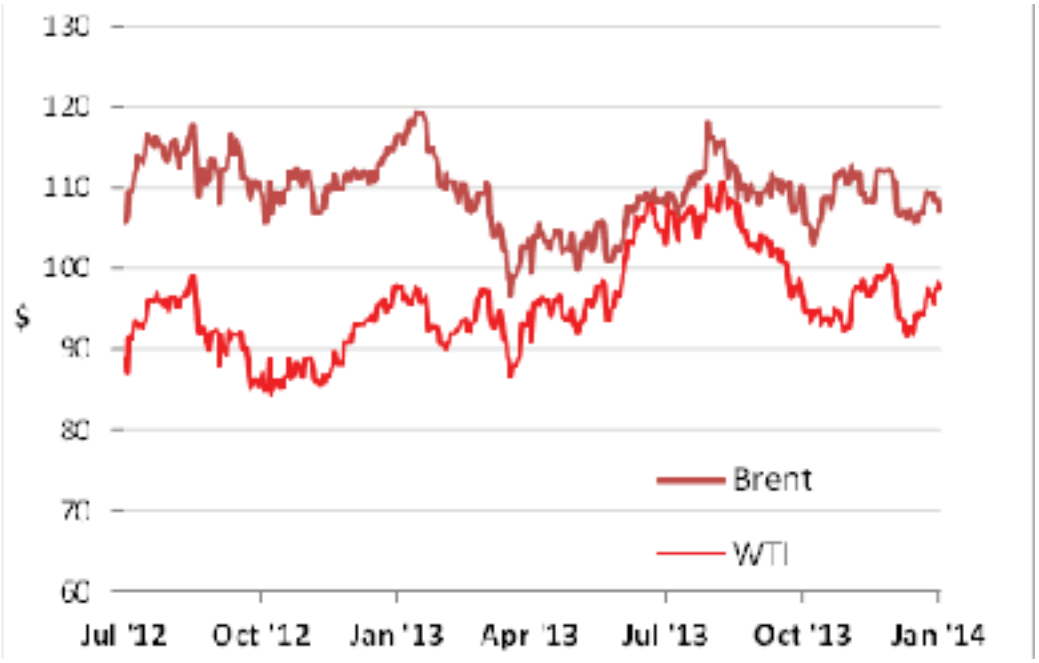
Source: Bloomberg LP; Guinness Atkinson Funds (as of 1/31/14)

The start of 2014 has seen some exceptionally large draws of gas from US natural gas storage as very cold weather across the country has increased heating demand. Gas in storage is now 17% below the 5 year average (2007-11). This has pushed the front month gas price up (as we write) to $5.36/mcf, the highest level for 4 years. The 12 month forward curve has also risen, giving US natural gas producers the ability to lock in prices at well above 2013 levels.

1. January 2014 Review

Oil market

Figure 1: Oil price (WTI and Brent $/barrel) 18 months July 31, 2012 to January 31, 2014



Source: Bloomberg LP

The Brent oil price was a little weaker, declining from $110.82 to $107.20 over the month. The gap between the WTI and Brent benchmark oil prices therefore declined during the month from around $12/bl to around $10/bl. The spread, caused by high stock levels and infrastructure bottlenecks resulting from increased US onshore production, has been as high as $20+ but was generally been narrower in 2013 following pipeline capacity expansions which have allowed inventory levels in Cushing, Oklahoma. The WTI-Brent spread averaged $10.7/bl during 2013.

Factors which strengthened the WTI and Brent oil prices in January:

- **Tightening global oil inventories**

Organization for Economic Co-Operation and Development (OECD) inventories of crude and product stocks for December 2013 (the latest data point available) were estimated by the International Energy Agency (IEA) at 2,564 million barrels, implying a larger than normal decline of 96 million barrels during November and December. If this fall in inventories is confirmed it represents the second largest November-December decline in the last 10 years (only 2010 was higher). The overall level of inventories now sits just below the mid-point of the 10 year range, having started 2013 close to the top of the range.

- **Improving US oil product demand data**

Consistently stronger demand data for US crude oil products is emerging. The 4 week average 'US petroleum products supplied' data registered a 3.8% year-over-year (yoy) growth rate in January, having consistently been above 4% yoy for the last two months of 2013. The IEA currently forecast US growth of just 0.4% in 2014, so the longer the higher growth rate sustains, the more likely it becomes that US and global oil demand will be revised higher.

Factors which weakened to the WTI and Brent oil prices in January:

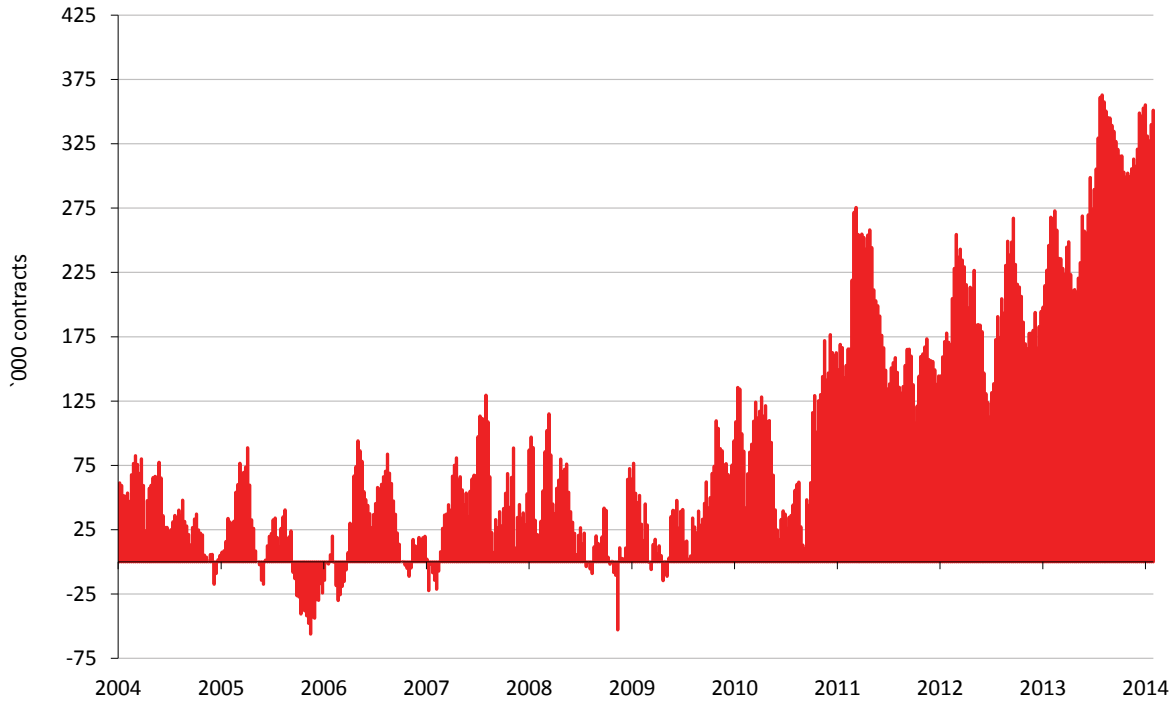
- **Small recovery in production from Libya**

Libyan production recovered slightly in January, averaging 0.5m b/day (versus 0.2m b/day in December 2013). Production was running at 1.4m b/day in the middle of 2013 but collapsed later in the year as regional tensions emerged. There is hope that production will soon be up to 0.6m b/day as, in particular, the large El Sharara field comes back into production having been blocked by local tribesmen since the end of October. If Libyan production does recover further this year, we expect the rise to absorbed by other members of Organization of the Petroleum Exporting Countries (OPEC), especially Saudi, Kuwait and United Arab Emirates (UAE).

Speculative and investment flows

The New York Mercantile Exchange (NYMEX) net non-commercial crude oil futures open position fell slightly in January, ending the month at 351,000 contracts. We regard a net long position of 351,000 contracts to still be relatively high – any unwinding is likely to dampen the WTI price.

Figure 2: NYMEX Non-commercial net futures contracts: WTI January 2004 – January 2014



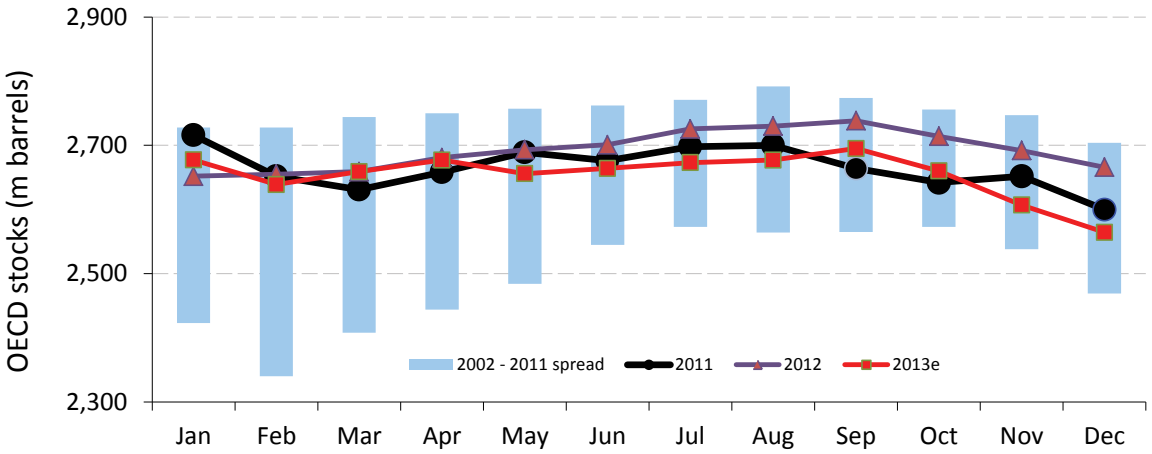
Source: Bloomberg LP/NYMEX (February 2014)

OECD stocks

OECD total crude and product stocks for December 2013 (published in the January 2014 IEA Oil Market Report) were estimated at 2,564 million barrels, implying a larger than normal decline of 96 million barrels during November and December. If this fall in inventories is confirmed, it represents the second largest November-December decline in the last 10 years (only 2010 was higher).

Total OECD inventories now sit just below the middle of the 10 year high-low range and below the levels seen in 2011 and 2012. We believe that OPEC would like to manage supply so that OECD inventories remain comfortably within the 10 year range: a further tightening could prompt to Saudi et al to raise production.

Figure 3: OECD total product and crude inventories, monthly, 1998 to 2013



Source: IEA Oil Market Reports (January 2014 and older)

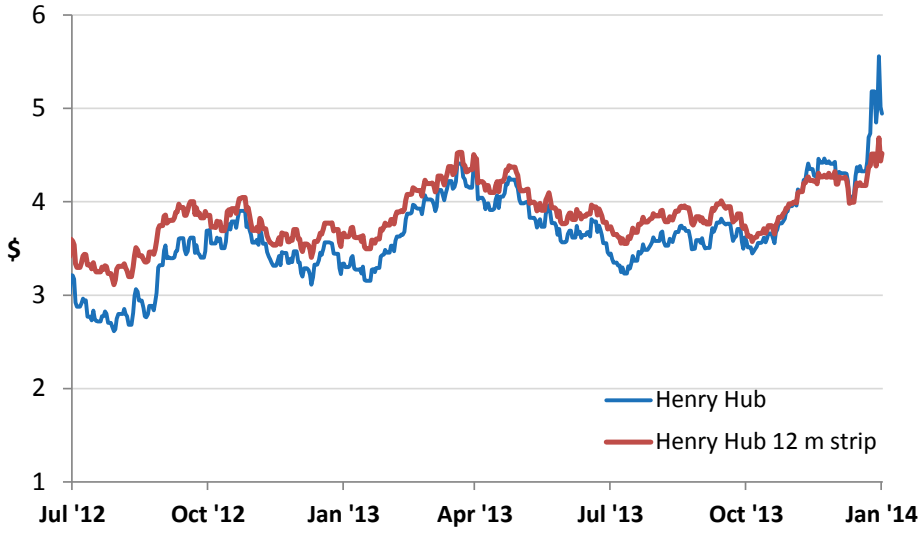
2. Natural Gas Market

The US natural gas price (Henry Hub front month) started January at $4.23 per Mcf (1000 cubic feet), and steadily increased during the month as cold weather persisted and the outlook for further cold weather increased. A peak of $5.56/mcf was reached on 29 January 2014 before ending the month at $4.94.

The spot gas price is now sharply higher than the low of $1.84 reached in April 2012. The price averaged $3.73 in 2013, well above the 2012 average of $2.75 but down on the 2010 and 2011 averages of $4.38 and $4.00 and significantly below the average in each of the previous 5 years (2005-2009).

The 12-month gas strip price (a simple average of settlement prices for the next 12 months' futures prices) also rose steadily through the month, from $4.19 to $4.52. The strip price averaged $3.92 in 2013, having averaged $3.28 in 2012, $4.35 in 2011, $4.86 in 2010 and $5.25 in 2009.

Figure 4: Henry Hub Gas spot price and 12m strip ($/Mcf) July 31, 2012 to January 31, 2014



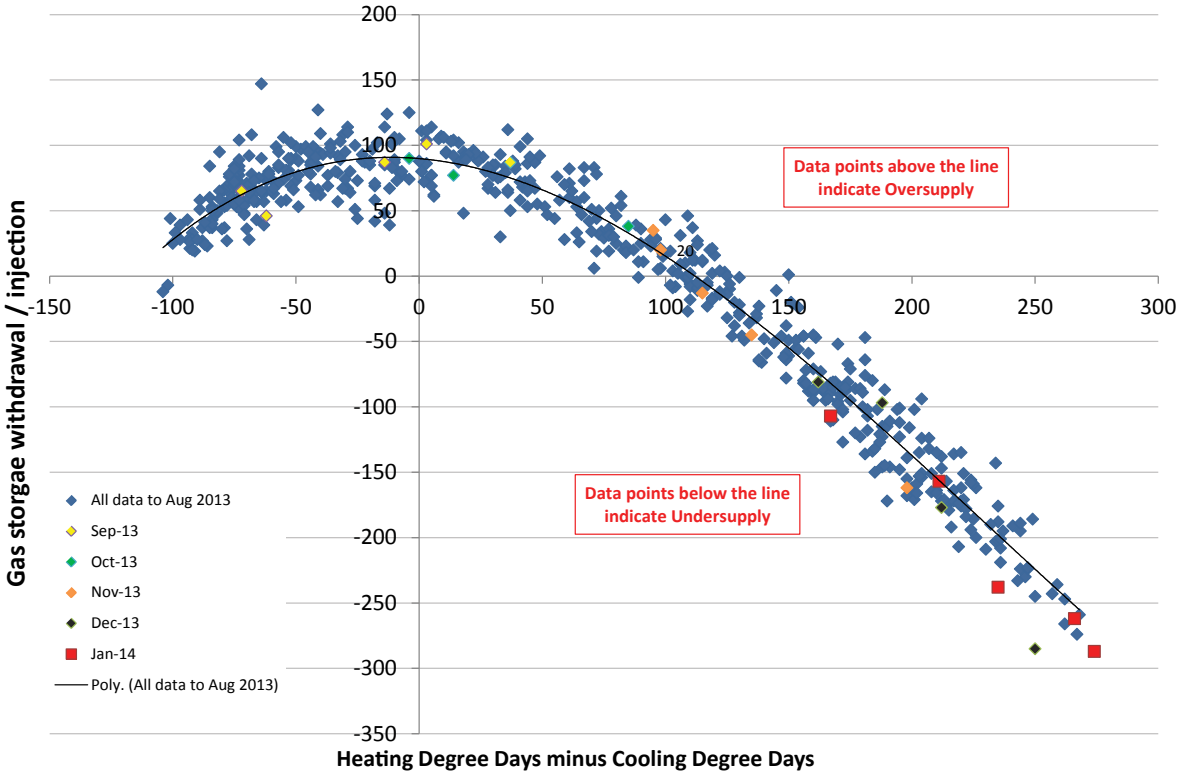
Source: Bloomberg LP

Factors which strengthened the US gas price in January included:

- **Cold weather across the US**

The extremely cold weather in the US continued through January, resulting in sharply higher gas demand for heating. During the month, the US witnessed a record weekly natural gas inventory draw (of 287 bcf for the week ending on January 10) and the expectation is that there will be further cold weather in the United Sates. While the positive effect of cold weather on demand is only a temporary factor, the resulting tightening of gas inventories (which now sit around 17% below their 5 year average (2007-2011)) is a useful prop for the price going into 2014. We note that, on a weather adjusted basis, the US natural gas market is slightly undersupplied (see below).

Figure 5: Weather adjusted US natural gas inventories



- **Low levels of electric power generation switching from coal to natural gas**

The October data (latest available) from the Energy Information Agency indicated that total US natural gas production (Lower 48 States) was up, rising by 0.7 Bcf/day month-on-month. Total onshore production rose by 0.9 Bcf/day month-on-month, implying that offshore production declined slightly. Year-on-year production is up by 1.5 Bcf/day (0.7%), lower than the 3.0 Bcf/day (4.3%) growth reported over the previous 12 months: the depressed price and low rig count is having some effect here.

Factors which weakened the US gas price in January included:

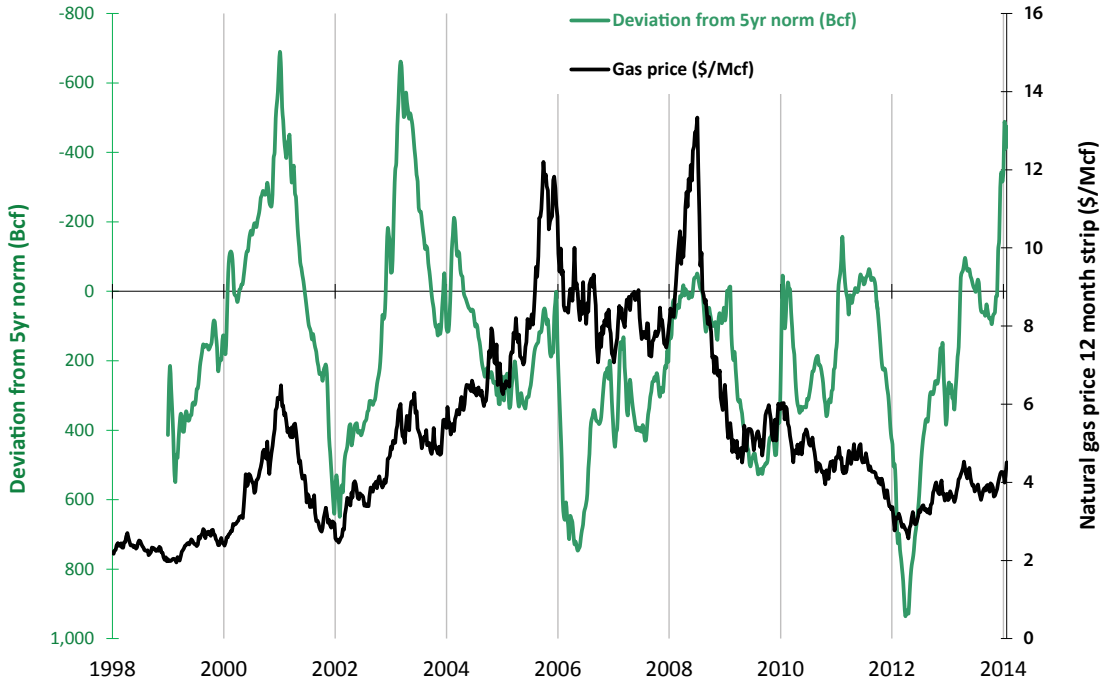
- **US onshore production**

The November data (latest available) from the Energy Information Agency indicated that total US natural gas production (Lower 48 States) was up, rising by 1.1 bcf/day month-on-month, setting another production record at 75.95 bcf/day. Total onshore production rose by 0.9 Bcf/day month-on-month, implying that offshore production declined slightly. Year-on-year production is up by 2.2 bcf/day (3.0%) and is driven primarily by production growth from the Marcellus.

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.

Figure 6: Deviation from 5yr gas storage norm vs gas price 12 month strip (H. Hub $/Mcf)



Source: Bloomberg, EIA (January 2014)

The surplus of gas in the second half of 2008 and 2009, a result of oversupply during the recession, 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 over this 18 month period. This coincided with the gas strip price falling from a peak of over $13 in July to below $5. An unusually cold 2009/10 winter boosted demand and pushed the gas storage level back into balance, only for oversupply to persist again for much of the rest of 2010. A cold 2010/11 winter followed by a hot 2011 summer tightened storage again, with storage levels staying around the 5 year average for much of this period.

The very mild 2011/12 winter (in combination with rising production) caused gas storage levels to balloon to record levels, driving prices down to their lowest levels for a decade. Since then, coal-to-gas switching and shut ins and the sharp rig count drop have worked in the other direction, seeing gas prices rising from their sub $2 lows in April 2012 to around $4.0 at the end of 2013. Most recently, gas in storage has tightened considerably, though much of this can be attributed to an extremely cold 2013/14 winter rather than a structural tightening. We wait to see whether coal regains power generation market share as a result of the higher gas price although note that many coal fired power plants will start to be decommissioned from 2015.

We watch movements in gas storage closely as a tightening from here, weather adjusted, is likely to be a coincident indicator for the start of a sustained gas price recovery.

3. Manager's Comments

This month we repeat and expand on some of the 'big picture' thoughts on the energy markets that appeared in our outlook for energy piece published separately. What might the next 12 months hold for us as investors in, and interested observers of, the energy markets?

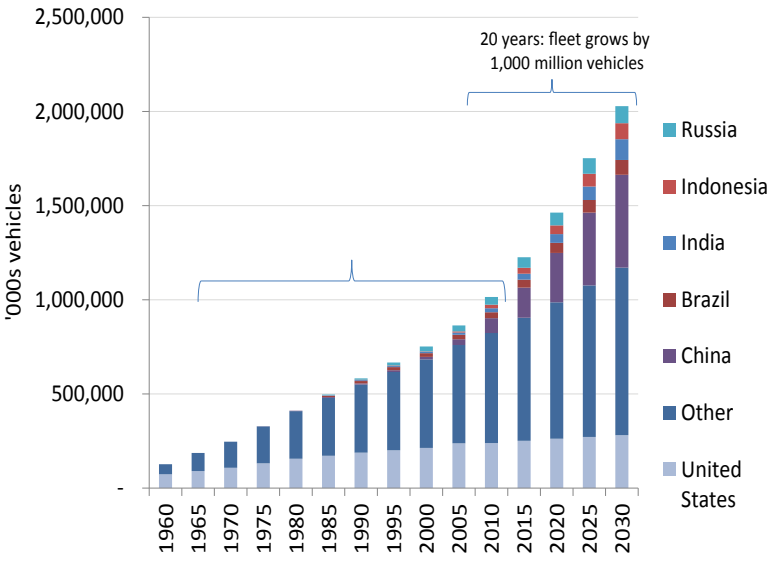
Crude oil

In terms of the crude oil markets, we continue to think commentators are over-focussed on US shale oil production growth and the prospect of US "energy independence". The main impact is that it is good news for the US balance of payments. As regards likely impact on the oil price it is just one supply and demand factor. Growth in US shale oil production of 5-6m b/day between 2009 and 2017 is comparable in size to the growth in Former Soviet Union (FSU) oil production of 5m b/day from 7.3m b/day to 12.3m b/day over 8 years between 1998 and 2006, during which the oil price rose from $10/bbl to $66/bbl! Our suspicion is that commentators will soon start focusing on the fact that shale oil production growth is slowing down as the decline rate treadmill begins to overwhelm fraccing productivity gains.

A minimum WTI oil price of $80 appears to be a critical requirement for new unconventional investment, and Bakken oil prices were below that level for most of November 2013. If new oil growth is plentiful, we would see a good chance of substantially weaker WTI oil prices as US inventories build amid a ban on oil exports. One of the key discussion points in 2014 will be: "to export oil or not to export oil?". Over to you, Mr. Obama...

As we have stated before, this 'shale revolution' in the US is a production surge just like the development of the Gulf of Mexico and North Sea and Alaska in the 1980s in response to the 1970s price hike. However, there is one huge difference: back then oil demand from the OECD economies had exploded from 1950 to 1973. They were at the end of a 25 year journey adopting the motor vehicle; impetus was fading and demands naturally then corrected as prices jumped.

World vehicle population



Source: DoE; Guinness Atkinson Asset Management

Now, however, the picture is different. China's per capita demand for oil has not yet even reached that of the OECD at the beginning of the 1950s. We expect two decades of unrelenting oil demand growth to come while the Chinese vehicle fleet moves from 100 million now to 400 million by 2030, and India and several other developing economies follow about ten years behind. The world car fleet explosion helps to explain rather simply the reason why global demand for oil has been in a strong upward trajectory.

Looking ten years forward to 2024, we continue to see 10 to 13m b/day of global demand growth (emerging economies growing at 12-15m b/day, less 2m b/day of demand decline from the OECD) and muted supply growth (made up of barrels per day growth of perhaps 2-3m from the US, 1-2m from Iraq, 1m from Africa, 1.75m from Brazil, 1.25m from Canada, 1m from the Caspian, and some mature basin declines). If you doubt us, remember that Canada, for example, only grew its oil production by 1.3m b/day from 2002 to 2013 despite all the effort to develop its oil sands. Please note we are being 1m b/day more optimistic about US shale oil than the EIA (they are predicting 2m b/day of growth from here). And we may also be too optimistic on our non-US oil growth expectations.

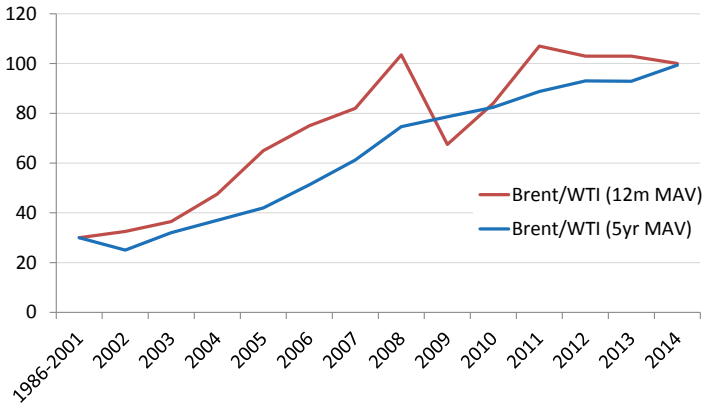
When assessing the prospects for global supply as a whole, it is important to remember that the starting point each year is a fall of around 4.5m b/day (5% of total supply) as existing basins decline. This is quite some hurdle to overcome year after year.

For two years we have commented that Saudi, the UAE and Kuwait stand at center stage of the oil market and that they would manage whatever the US, China or Eurozone economies threw at them. That continues to be our view. We also see them coping with whatever Iran, Libya and Iraq throw at them in the future. So our view is much the same as last year, in that oil will trade mostly in the $90 – $110 range, with Brent towards the top end of this range and WTI at around a $10 discount to Brent.

The mid-point of this range is $100/bl, which equates to global crude oil demand spend at around 4.3% of world GDP. This is more or less what the world has paid on average for its oil the last 40 years. It is a level that should not bring the world economy to a grinding halt and it is a price that, from OPEC's point of view, probably looks fair. They will strive to achieve it and bear in mind, Saudi's 2014 national budget will be balanced if the oil that the country exports is sold at $102/bl. It is also likely that it will rise from here gradually at something like inflation or higher, leading to closer to $150/bl oil prices by the end of the decade. We show our view in the context of the recent past using inflation-adjusted oil prices:

Oil price (inflation adjusted)

	1986-2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014 *Est*
WTI	30	33	38	49	66	75	82	104	68	84	99	94	98	95
Brent	30	32	35	46	64	75	82	103	67	84	115	112	108	105
Brent/WTI (12m MAV*)	**30**	**33**	**37**	**48**	**65**	**75**	**82**	**104**	**68**	**84**	**107**	**103**	**103**	**100**
Brent/WTI (5yr MAV)	30	25	32	37	42	51	61	75	79	82	89	93	93	99



Source: Bloomberg; Guinness Atkinson Asset Management
**MAV = Moving Average*

This optimistic view is influenced by the fact that we feel that the recovery in the US economy continues and that China will continue to transition to a 'consumption' growth phase of development. The European recovery may not come until 2015, but we think it should eventually come to pass.

Natural Gas

Next, we turn our attention to North American natural gas markets. We could see a usefully tighter gas market in 2014 than in 2013 if US gas demand continues to grow at c1.5bcf/day p.a. (split broadly equally between electricity demand, industrial on-shoring demand and net export demand, i.e. Mexico exports up, Canada imports down).

The principal imponderable left is how much coal-to-gas switching remains to unwind. We are still cautious about this alleviation of supply tightness and can see the market balancing, rather than being short, for another year as this totally unwinds. But it does seem clear to us that in 2015, i.e. in 12-18 months, some combination of a rising gas price and rising gas drilling rig count is likely.

We have been guilty in the past of expecting a quick balance of the gas market as a result of the collapse in the natural gas drilling rig count. And we may be guilty again of over-optimism about how much the gas price will rise before the market rebalances. Nonetheless, we are increasingly comfortable with forecasting gas above $4/mcf in 2014 and above $5/mcf in 2015. The asymmetry in the upper and lower confidence levels in the recent EIA chart shown below is also supportive of this view.

Henry Hub natural gas price scenarios (US$/mcf)

Source: EIA (2/4/2014)

The US Department of Energy is predicting flat natural gas production in 2014. This may be slightly optimistic, but a point some commentators are failing to grasp is that given associated gas production from shale oil wells is growing at c 2bcf/d pa and Marcellus shale gas production is growing at 2-3bcf/d pa, the implication has to be that all other US gas production is declining by around 4-5bcf/d pa. This is due of course to the effect of the dramatic decline in the ex-Marcellus gas rig count from over 900 to under 250 rigs in less than 2 ⅔ years.

International gas demand will continue to be very robust, with emerging economies again (and particularly China) being most responsible. China's consumption of gas has grown from 2.5bcf/day in 2000 to 15bcf/day in 2013 (one fifth of the consumption of the US) and we expect it to exceed 40bcf/day by 2020, on a trajectory to exceed US consumption around 2030. Global demand, now 330bcf/day, will rise to 400bcf/day by 2020 if the last ten years are repeated (4.1% pa growth in the developing world; 1.45% pa growth in the developed world).

Given this demand strength backdrop we see no reason why the global gas price will not remain firm and continue to be priced off oil in long-term supply contracts. The need for very large up-front expenditures on pipelines or LNG facilities to supply much of global demand growth is one reason why this is likely to continue. We also believe that US LNG exports, likely to be 6bcf/day by 2020, will be easily absorbed by the growing non-OECD gas demand.

Energy equities

With regard to the bigger commodity cycle discussion, we will repeat again what we said last year. The more likely evolution of the commodity cycle is that the demand for infrastructure commodities (copper, aluminium, iron ore) may well level off and prices weaken as productive capacity is added and China moves from 'investment-led' growth to 'consumption-led' growth. Typically, however, the next stage of the cycle is that commodities that are in growing demand by consumers (such as energy and agricultural commodities) continue to remain firm and even strengthen further.

Lastly, when we look at energy equity valuations, we see that the Guinness Atkinson Global Energy Fund, based on consensus estimates, is trading on a 2014 PE ratio of 11.0x at January 31 2014; well below the broad market's 2014 PE of 14.6x, as represented by the MSCI World Index. The PE discount is 25%, giving a potential upside versus the broad market of around 35% when energy PEs close the gap with the broad market; history indicates they could potentially close the gap when the current oil price and long-run market expectations for the oil price come together. The oil price chart above says to us that $100 oil is around where that could happen. This represents a little bit more than tripling in the real oil price from the cheap oil 1985-2002 period.

There are other ways of thinking about value. Along with low PEs we find several other metrics indicating the attractiveness of energy equities relative to the broad market; measures such as price-to-book and enterprise value to proven reserves (for the large caps). One approach we increasingly favour over the above is based on the cash flow return on investment methodology (CFROI) developed by HOLT. The chart below shows an estimate of upside for all the energy companies with a market capitalisation today of over $1bn that have a track record in HOLT going back to 1998.

HOLT energy sector median upside/(downside)

Source: CSFB HOLT; Guinness Atkinson Asset Management

As can be seen the HOLT metric is registering that energy equities appear around 25% cheap. Historically this has been a good entry point for investors wanting good relative and/or absolute performance. It is not foolproof but given the sense check that energy equities are on a c.11x PE multiple referred to above, it looks like a good one to us.

Energy equities have been one of the better inflation hedges. If we see dollar inflation of 30/50% over the next decade (that's just 2.7-4.1% per annum (pa),it will be surprising if oil and gas prices do not rise by a comparable percentage over that time frame. We would expect energy equities to perform very well in this environment.

4. Performance – Guinness Atkinson Global Energy Fund

The main index of oil and gas equities, the MSCI World Energy Index, was down by 6.1% in January. The MSCI World Index was down by 3.77% over the same period. The Fund was down by 3.98% over this period, outperforming the MSCI World Energy Index by 2.12% (all in US dollar terms).

Within the Fund, December's stronger performers were Ultra Petroleum, Bill Barrett, Penn Virginia, Soco International and Trina Solar. Poorer performers were Chevron, OMV, PetroChina, Stone Energy and Helix Energy Solutions.

Performance as of January 31, 2014

Inception date 6/30/04	Full Year 2009	Full Year 2010	Full Year 2011	Full Year 2012	Full Year 2013	1 year (annualized)	Last 2 years (annualized)	Last 5 years (annualized)	Since Inception (annualized)
Global Energy Fund	63.27%	16.63%	-13.16%	3.45%	24.58%	11.25%	8.22%	16.37%	12.83%
MSCI World Energy Index	26.98%	12.73%	0.71%	2.54%	18.98%	5.21%	5.81%	11.39%	9.69%
S&P 500 Index	26.47%	15.06%	2.09%	15.99%	32.36%	21.50%	19.07%	19.15%	6.95%

Performance as of December 31, 2013

Inception date 6/30/04	Full Year 2009	Full Year 2010	Full Year 2011	Full Year 2012	Full Year 2013	1 year (annualized)	Last 2 years (annualized)	Last 5 years (annualized)	Since Inception (annualized)
Global Energy Fund	63.27%	16.63%	-13.16%	3.45%	24.58%	24.58%	13.48%	16.33%	13.43%
MSCI World Energy Index	26.98%	12.73%	0.71%	2.54%	18.98%	18.98%	10.26%	11.71%	10.50%
S&P 500 Index	26.47%	15.06%	2.09%	15.99%	32.36%	32.36%	23.63%	17.69%	7.40%

Source: Bloomberg
Gross expense ratio: 1.35%

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 or call (800) 915-6566.

The Fund imposes a 2% redemption fee on shares held for less than 30 days. Performance data does not reflect the redemption fee and, if deducted, the fee would reduce the performance noted.

5. Portfolio – Guinness Atkinson Global Energy Fund

Buys/Sells

There were no buys or sells in January.

Sector Breakdown

The following table shows the asset allocation of the Fund at **January 31, 2014.**

(%)	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012	31 Dec 2013	31 Jan 2014	*Change YTD*
Oil & Gas	**103.5**	**96.4**	**96.1**	**93.2**	**98.5**	**98.6**	**95.6**	**94.4**	*-1.2*
Integrated	66.2	53.7	47.2	41.2	39.6	39.1	39.6	38.1	*-1.5*
Exploration and production	25.8	28.7	32.0	36.9	41.5	41.6	36.8	37.2	*0.4*
Drilling	8.1	5.2	8.4	6.3	6.0	7.4	6.8	7.0	*0.2*
Equipment and services	3.4	6.4	5.4	5.3	6.6	7.1	9.0	8.5	*-0.5*
Refining and marketing	0.0	2.4	3.1	3.5	4.8	3.4	3.4	3.6	*0.2*
Coal and consumables	**2.5**	**2.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Solar	**0.0**	**0.0**	**0.0**	**3.2**	**1.2**	**1.2**	**2.8**	**3.1**	**0.3**
Construction and engineering	**0.0**	**0.4**	**0.4**	**0.4**	**0.4**	**0.6**	**0.9**	**1.0**	**0.1**
Cash	**-6.0**	**0.9**	**3.5**	**3.2**	**-0.1**	**-0.4**	**0.7**	**1.5**	**0.8**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**0.0**

Source: Guinness Atkinson Asset Management
Basis: Global Industry Classification Standard (GICS)

Guinness Atkinson Global Energy Fund Portfolio

The Fund at January 31, 2014 was on an average price to earnings ratio (PE) versus the S&P 500 Index at 1,782 as set out in the table. (Based on S&P 500 'operating' earnings per share estimates of $56.9 for 2009, $83.8 for 2010, $96.4 for 2011, $96.8 for 2012, $108.0 for 2013 and $122.2 for 2014). This is shown in the following table:

	2009	2010	2011	2012	2013
Fund PER	16.4	10.6	10.3	11.4	12.1
S&P 500 PER	31.8	21.6	18.7	18.7	17.4
Premium (+) / Discount (-)	*-48%*	*-51%*	*-45%*	*-39%*	*-30%*
Average oil price (WTI $)	$61.9/bbl	$79.5/bbl	$95/bbl	$94/bbl	$98/bbl

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

Portfolio Holdings

Our integrated and similar stock exposure (c.38%) is comprised of a mix of mid cap, mid/large cap and large cap stocks. Our five large caps are Exxon, BP, Chevron, Royal Dutch Shell and Total. Mid/large and mid-caps are ENI, Statoil, Hess and OMV. At January 31 2014 the median PE ratio of this group was 9.5x 2014 earnings. We have one Canadian integrated holding, Suncor. The company has significant exposure to oil sands and stands on an attractive PE of 10.6x 2014 earnings given the company's good growth prospects.

Our exploration and production holdings (c.35%) give 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 Global Industry Classification Standard (GICS) approach. The stock here with oil sands exposure is Canadian Natural Resources. The pure exploration and production (E&P) stocks are all largely in the US (Newfield, Devon, Chesapeake, Carrizo, Stone, Penn Virginia, Ultra, QEP and Bill Barrett) and three more (ConocoPhillips, Apache and Noble) which have significant international production. One of the key metrics behind a number of the E&P stocks held is low enterprise value / proven reserves. All of the E&P stocks held also provide exposure to North American natural gas and include two of the industry leaders (Devon and Chesapeake). In PE terms, the group divides roughly into two: (i) ConocoPhillips, Apache, Chesapeake, Devon, Newfield, Carrizo, Ultra and Stone all with quite low PEs (10x – 17x 2014 earnings); and (ii) Noble, Bill Barrett, Penn Virginia and QEP with higher PE ratios. However, all look reasonably attractive on EV/EBITDA multiples.

We have exposure to four (pure) emerging market stocks in the main portfolio, though two are half-positions. Two are classified as integrateds by the GICS (Gazprom and PetroChina) and two as E&P companies (Dragon Oil and SOCO International). Gazprom is the Russian national oil and gas company which produces approximately a quarter of the European Union gas demand and trades on 3.0x 2014 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 company focused on offshore Turkmenistan in the Caspian Sea and trades on 7.3x 2014 earnings. SOCO International is an E&P company with production in Vietnam and exploration interests across East Africa in Angola, Democratic Republic of Congo and the Republic of Congo.

We have useful exposure to oil service stocks, which comprise around 16% of the portfolio. The stocks we own are split between those which focus their activities in North America (land drillers Patterson and Unit on 22.3x and 12.6x 2014 earnings) and those which operate in the US and internationally (Helix, Halliburton and Shawcor on 12x – 14x 2014 earnings).

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. Valero has a reasonably large presence on the US Gulf Coast and is benefitting from the rise in US exports of refined products seen in recent times.

Our alternative energy exposure is currently a single unit split equally between two companies: JA Solar and Trina Solar. Both were loss making in 2012 and 2013 due to sharp falls in solar prices during the year but are expected to return to profitability during 2014. Trina is a Chinese solar module manufacturer and JA Solar is a Chinese solar cell manufacturer. Some measure of their continued recovery potential may be indicated by their 2010 PEs of 4.1x and 1.2x respectively.

Portfolio at January 31, 2014

Guinness Atkinson Global Energy Fund 31 January 2014

Stock	ID_ISIN	Curr.	Country	% of NAV	2006 B'berg mean PER	2007 B'berg mean PER	2008 B'berg mean PER	2009 B'berg mean PER	2010 B'berg mean PER	2011 B'berg mean PER	2012 B'berg mean PER	2013 B'berg mean PER	2014 B'berg mean PER
Integrated Oil & Gas													
Exxon Mobil Corp	US30231G1022	USD	US	3.13	14.07	12.7	10.9	23.7	15.4	10.9	11.7	12.5	12.0
Chevron Corp	US1667641005	USD	US	3.00	14.3	12.7	9.8	21.8	12.0	8.3	9.1	10.1	10.1
Royal Dutch Shell PLC	GB00B03MLX29	EUR	NL	3.45	8.7	6.9	8.0	15.9	11.2	8.3	8.2	10.9	9.8
BP PLC	GB0007980591	GBP	GB	3.27	7.1	7.1	5.7	10.0	6.9	6.9	8.5	10.6	9.2
Total SA	FR0000120271	EUR	FR	3.34	7.7	7.8	6.8	12.2	9.1	8.2	7.8	8.7	8.5
ENI SpA	IT0003132476	EUR	IT	3.19	6.0	6.5	6.0	11.8	8.9	8.6	8.4	13.2	11.2
Statoil ASA	NO0010096985	NOK	NO	3.45	7.9	10.8	8.1	14.8	11.1	9.6	9.0	9.9	9.8
Hess Corp	US42809H1077	USD	US	3.23	13.7	12.6	10.3	39.4	14.6	12.6	12.8	13.2	16.2
OMV AG	AT0000743059	EUR	AT	3.01	6.3	6.1	5.0	12.9	8.0	10.1	7.0	8.7	7.9
				29.06									
Integrated Oil & Gas - Canada													
Suncor Energy Inc	CA8672241079	CAD	CA	3.09	14.8	15.4	11.5	34.6	23.1	10.2	11.4	11.5	10.7
Canadian Natural Resources Ltd	CA1363851017	CAD	CA	3.50	25.0	17.3	11.2	15.2	15.0	15.8	23.0	16.2	13.0
				6.59									
Integrated Oil & Gas - Emerging market													
PetroChina Co Ltd	CNE1000003W8	HKD	HK	2.76	7.4	7.2	9.2	9.8	7.9	7.7	8.9	8.5	8.0
Gazprom OAO	US3682872078	USD	RU	3.16	nm	nm	nm	5.2	4.1	2.8	2.9	3.0	3.2
				5.91									
Oil & Gas E&P													
ConocoPhillips	US20825C1045	USD	US	3.09	6.55	6.71	6.09	17.95	10.96	7.64	11.38	11.57	10.75
Apache Corp	US0374111054	USD	US	3.05	11.0	9.3	7.2	14.4	8.6	6.8	8.4	9.8	11.0
Bill Barrett Corp	US06846N1046	USD	US	1.26	19.8	28.9	10.3	16.5	13.8	15.9	528.5	nm	37.4
QEP Resources Inc	US74733V1008	USD	US	1.26	nm	nm	nm	nm	22.4	18.9	24.9	22.4	18.6
Ultra Petroleum Corp	CA9039141093	USD	US	1.35	16.7	21.0	9.0	13.3	10.7	9.4	13.0	14.9	10.7
Devon Energy Corp	US25179M1036	USD	US	3.32	9.4	8.5	6.0	16.4	10.0	9.8	18.3	13.9	9.7
Chesapeake Energy Corp	US1651671075	USD	US	3.46	7.5	8.4	7.6	10.9	9.2	9.6	55.5	16.3	12.5
Noble Energy Inc	US6550441058	USD	US	2.86	32.9	22.9	17.7	36.8	30.1	23.7	27.2	20.1	18.2
Newfield Exploration Co	US6512901082	USD	US	2.81	7.1	7.7	7.9	4.9	5.4	6.1	10.2	13.7	13.8
Stone Energy Corp	US8616421066	USD	US	1.64	11.2	6.0	5.5	13.5	15.2	8.0	11.2	10.9	15.8
Carrizo Oil & Gas Inc	US1445771033	USD	US	1.61	57.9	58.7	22.8	27.9	32.3	40.0	28.2	18.3	16.4
Penn Virginia Corp	US7078821060	USD	US	1.95	6.6	6.6	4.6	nm	nm	nm	nm	nm	38.2
Trinity Exploration & Production PLC	GB00B8JG4R91	GBP	GB	0.42	nm	nm	nm	nm	nm	nm	nm	4.4	16.4
Ophir Energy PLC	GB00B24CT194	GBP	GB	0.30	nm	nm	nm	nm	nm	nm	nm	nm	nm
Triangle Petroleum Corp	US89600B2016	USD	US	0.27	nm	nm	nm	nm	nm	nm	nm	nm	12.5
Pantheon Resources PLC	GB00B125SX82	GBP	GB	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Cluff Natural Resources PLC	GB00B6SYKF01	GBP	GB	0.33	nm	nm	nm	nm	nm	nm	nm	nm	nm
				#N/A									
Oil & Gas E&P - Emerging markets													
Dragon Oil PLC	IE0000590798	GBP	GB	1.67	27.2	16.2	13.4	19.5	14.1	7.6	7.7	8.7	7.4
Soco International PLC	GB00B572ZV91	GBP	GB	1.64	63.8	58.7	63.1	39.3	54.2	35.0	9.7	10.5	9.8
JKX Oil & Gas PLC	GB0004697420	GBP	GB	0.97	2.3	1.9	2.3	2.5	2.8	3.3	4.5	6.9	6.6
WesternZagros Resources Ltd	CA9600081009	CAD	CA	0.32	nm	nm	nm	nm	nm	nm	nm	nm	27.1
Sino Gas & Energy Holdings Ltd	AU000000SEH2	AUD	AU	0.18	nm	nm	nm	nm	nm	nm	205.0	102.5	nm
				4.78									
Drilling													
Patterson-UTI Energy Inc	US7034811015	USD	US	3.55	6.4	10.1	10.9	nm	37.9	11.9	14.4	21.7	22.9
Unit Corp	US9092181091	USD	US	3.45	7.4	8.8	7.3	19.0	16.4	12.2	12.0	13.5	12.5
				7.00									
Equipment & Services													
Halliburton Co	US4062161017	USD	US	3.03	22.4	19.3	22.6	37.4	24.4	14.7	16.5	15.8	12.4
Helix Energy Solutions Group Inc	US42330P1075	USD	US	2.64	7.2	6.1	8.4	35.2	38.6	13.6	11.0	18.9	12.6
ShawCor Ltd	CA8204391079	CAD	CA	2.76	32.5	25.4	21.0	22.3	32.6	55.7	18.2	11.2	13.5
Shandong Molong Petroleum Machinery Co Ltd	CNE1000001N1	HKD	HK	0.08	8.9	6.2	4.1	11.4	4.4	6.2	nm	nm	nm
				8.52									
Solar													
Trina Solar Ltd	US89628E1047	USD	US	1.61	nm	20.5	12.3	9.1	4.4	550.0	nm	nm	24.2
JA Solar Holdings Co Ltd	US4660902069	USD	US	1.47	10.4	27.9	41.4	nm	1.2	nm	nm	nm	68.4
				3.08									
Oil & Gas Refining & Marketing													
Valero Energy Corp	US91913Y1001	USD	US	3.58	6.2	6.6	9.4	nm	32.2	12.8	10.5	12.5	8.6
				3.58									
Construction & Engineering													
Kentz Corp Ltd	JE00B28ZGP75	GBP	GB	1.00	nm	42.3	42.8	42.2	29.1	22.0	18.5	16.0	12.2
			Cash	1.50									
			Total	#N/A									
				PER	10.3	10.2	9.1	16.0	10.4	10.1	11.3	12.0	11.0
				Med. PER	9.1	9.7	9.1	15.9	12.0	9.9	11.4	12.5	12.3
				Ex-gas PER	10.3	10.2	9.7	17.0	10.3	10.1	10.3	11.2	10.4

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.

For more information on the factors affecting the global energy market read our Global Energy Outlook.

Commentary for our views on Alternative Energy and Asia markets is available on our website. Please click here to view.

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. The Fund's focus on the energy sector to the exclusion of other sectors exposes the Fund to greater market risk and potential monetary losses than if the Fund's assets were diversified among various sectors. The decline in the prices of energy (oil, gas, electricity) or alternative energy supplies would likely have a negative effect on the funds holdings.

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.

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.

MSCI World Index is a capitalization weighted index that monitors the performance of stocks from around the world.

One cannot invest directly in an index.

Price to earnings (P/E) ratio (PER) reflects the multiple of earnings at which a stock sells and is calculated by dividing current price of the stock by the company's trailing 12 months' earnings per share.

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

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

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

EV/EBITDA is EV divided by "Earnings Before Interest, Taxes, Depreciation and Amortization" (EBITDA)

Cash Flow Return on Investment (CFROI) is a valuation model that assumes the stock market sets prices on cash flow, not on corporate earnings. It is determined by dividing a company's gross cash flow by its gross investment

CFROI is a proprietary metric prepared by HOLT, a division of Credit Suisse. CFROI is a registered trademark of Credit Suisse AG or its affiliates in the United States and other countries. For more information on HOLT, a corporate performance and valuation advisory service of Credit Suisse, please visit their website at https://www.credit-suisse.com/investment_banking/holt/en/ index.jsp

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, charges and expenses related to an ongoing investment in the Fund. Please read the prospectus carefully before investing.

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