

### HIGHLIGHTS

**FUND NEWS** • Fund size \$46 million at end of March 2016

OIL

## Brent and WTI rise slightly over the quarter

The Brent oil price increased by around 6% from \$37.3/bl to \$39.6/bl, whilst WTI oil increased by around 4%, from \$37.0 to \$38.3/bl. The underlying picture for oil prices over the quarter was far more volatile, with Brent and WTI falling as low as around \$28/bl and \$26/bl in mid-February, before recovering in late February and March. The oil market started the year in oversupply and has remained so, with additional production returning from Iran post the lifting of oil export sanctions relating to Iran's nuclear programme. This was well telegraphed. However, the market was encouraged by the rate of US onshore production decline, which has accelerated in recent months, emerging supply declines in other parts of the non-OPEC world, and a provisional agreement led by Saudi and Russia to freeze production at January 2016 levels.

## NATURAL GAS

## US gas price down; gas market is now structurally undersupplied but weather still in control

US natural gas prices were weak in the quarter, down by 16% to just under \$2/mcf, in the face of extremely mild winter weather, which dampened heating demand for gas and has left gas in storage at record high levels.

## EQUITIES

### Energy underperforms the broad market

The main index of oil and gas equities, the MSCI World Energy Index, was up by 5.4% in the first quarter of 2016. The S&P 500 Index was up by 1.3% over the same period.





## CHART OF THE QUARTER - Sharp fall in onshore US oil production

US onshore oil production declined by 155,000 b/day in December 2015 (the latest data point available from the Energy Information Agency - EIA) versus November 2015. This represents the sharpest monthly fall in US production since 1989, and results from the significant decline in the US oil drilling rig count, and which has fallen much further since this data point. Year-on-year onshore oil production is now in decline by around 350,000 b/day. US oil supply is a key component in the global oil market rebalancing equation.

First Quarter 2016 in Review Manager's Comments Performance: Guinness Atkinson Global Energy Fund Portfolio: Guinness Atkinson Global Energy Fund Outlook Appendix: Oil and Gas Markets, Historical Context



# 1. First quarter 2016 in Review

## i) Oil market

### Figure 1: Oil price (WTI and Brent \$/barrel) 18 months Sept 30, 2014 to March 31, 2016



The West Texas Intermediate (WTI) oil price started January at \$37/bbl and traded down over the quarter to a low of \$26/bl before rallying hard to close at \$38.3/bl. WTI averaged \$48.7 in 2015, having averaged \$93.1 in 2014, \$98.0 in 2013 and \$94.1 in 2012.

Brent oil traded in a similar way, opening the quarter at \$37.3/bbl and weakening to a low of \$30/bl before rallying to close at \$39.6/bl. The gap between the WTI and Brent benchmark oil prices has remained compressed. The WTI-Brent spread averaged \$5.8/bbl during 2014, having been well over \$20/bbl at times since 2011.

#### Factors which weakened the WTI and Brent oil prices in the quarter:

**Iranian oil exports resuming** Sanctions over Iranian oil exports were officially lifted on January 16. According to Bloomberg's provisional supply survey for March, Iranian production has now risen to 3.2mn b/day, up 400k b/day versus the December level of 2.8mn b/day. We expect Iranian production to rise by around 500,000 b/day in total, this year.

**Movements in OECD inventories indicate oversupply** Organization of Economic Co-operation and Development (OECD) total product and crude inventories at the end of February (latest data point available) were reported as being down by 6m barrels versus the previous month. This compares to an historic 10 year average decline in inventories in February of 23m barrels. The three month rolling average for changes to inventories indicates continued oversupply of around 1.1m b/day, and all this leaves inventories considerably above the top of the 10 year historic range.



#### Factors which strengthened the WTI and Brent oil prices in quarter:

**Falling onshore US oil production** January 2016 data indicating a fall of 28k b/d after a December 2015 decline of 155k b/d. We note that weekly data for US oil production (through to the end of March) shows declines of around 200k b/d since the start of 2016. We expect US oil production to decline throughout 2016 if oil prices remain at these levels.

**Nine OPEC and three non-OPEC members agree to meet in April** Nine OPEC (Organization of Petroleum Exporting Countries) countries (Saudi Arabia, Kuwait, the UAE, Venezuela, Nigeria, Algeria, Indonesia, Ecuador and Qatar) as well as three non-OPEC countries (Russia, Oman and Bahrain) have officially confirmed their attendance for a joint OPEC/non-OPEC meeting on April 17 in Doha. The meeting has been called to agree a production freeze at January levels and further measures to support oil prices. A production freeze would still require the market to rebalance 'naturally', but it significantly reduces the risk that Saudi and its closest allies dump crude onto the market in 2016, as they did in 2015.

**US oil drilling rig count falls further, plumbing new lows for 2016** The Baker Hughes oil directed rig count continued to roll over during the quarter, falling from 536 rigs on December 31 to 372 at the end of March, a fall of 164 rigs.

#### Speculative and investment flows

The New York Mercantile Exchange (NYMEX) net non-commercial crude oil futures open position (WTI) increased in March, ending the month at 308,000 contracts long versus 206,000 contracts long at the end of February. The current net long position is significantly down from its peak of 460,000 contracts in June 2014. The net short position reduced sharply from 327,000 contracts to 220,000 contracts.



Figure 2: NYMEX Non-commercial net and gross short futures contracts, January 2004 – March 2016

Source: Bloomberg LP/NYMEX/ICE (2016)



### **OECD** stocks

OECD total product and crude inventories at the end of February (the latest data point available) were estimated by the IEA to be 3,027m barrels, down by 6m barrels versus the previous month. The decrease compares to an average 23 million barrel decline that has been witnessed over the last ten years. The three month rolling average for changes to inventories indicates continued oversupply of around 1.1m b/day, and all this leaves inventories considerably above the top of the 10 year historic range.



Figure 3: OECD total product and crude inventories, monthly, 2004 to 2016

### ii) Natural gas market

The US natural gas price (Henry Hub front month) opened March at \$1.71 per Mcf (1,000 cubic feet). The price remained depressed for the first half of the month before rising steadily to close at \$1.96 on March 31. The spot gas price averaged \$2.61/mcf in 2015, which compares to an average gas price in 2014 of \$4.26 (assisted by a very cold 2013/14 US winter). The price averaged \$3.72 over the preceding four years (2010-2013).

The 12-month gas strip price (a simple average of settlement prices for the next 12 months' futures prices) traded in a similar fashion, starting the month at \$2.16 and ending at \$2.44. The strip price averaged \$2.86 in 2015, having averaged \$4.18 in 2014, \$3.92 in 2013, \$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) March 31, 2014 to March 31, 2016

#### Factors which weakened the US gas price in the quarter included:

**Warm winter persists** While March weather was more in line with seasonal averages, the winter of 2015/2016 will be remembered as being exceptionally warm. The weather has been colder than normal in only two of the last 26 weeks while February ended up being 13% warmer than normal. The effect has been nationwide with every single census division witnessing warmer than normal weather conditions since October 2015.

#### Factors which strengthened the US gas price in the quarter included:

**Structurally undersupplied market** Adjusting for the impact of weather in March, the most recent injections of gas into storage suggest the market is, on average, about 2 Bcf/day undersupplied (as indicated by the yellow dots on the graph below). The gas market shifted into structural undersupply in November 2015, but this was trumped in the early part of winter by warmer weather, causing natural gas inventory levels to expand rapidly.

**Onshore gas production flat in December T**he EIA reported that December US onshore natural gas production (the latest data point available) was flat versus the previous month at 78.3 Bcf/day. Year-on-year onshore production is now running at a decline of 1.7 Bcf/day, having been as high as 8 Bcf/day growth at the end of 2014.





Source: Bloomberg LP; Guinness Atkinson Funds (March 2016)

#### • Onshore gas production declined in October

The EIA reported that October US natural gas production (the latest data point available) rose by 0.4 Bcf/day, to 83.9 Bcf/day, versus the previous month. The majority of the increase came from Louisiana (+0.1 Bcf/day) and 'other States' (+0.1 Bcf/day). Year-on-year onshore production growth is now running at 5.2 Bcf/day, having been as high as 8 Bcf/day at the end of 2014.

#### Natural gas inventories

Swings in the supply/demand balance for US natural gas should, in theory, show up in movements in gas storage data. Natural gas inventories at the end of March were reported by the EIA to be 2,468 Bcf. The month on month draw was less than average (due to warm weather), leaving inventories above the top of the five year range.





Source: Bloomberg; EIA (March 2016)



Gas in storage in 2015 started at roughly average levels and stayed that way for the first half of the year, as a combination of rising Marcellus production, slowing 'associated' gas production (a by-product of shale oil production) and increase in coal to gas switching by electric utility companies, worked to keep the market in balance. Over the last few months of 2015, gas in storage expanded at a faster than average rate, as an extremely mild autumn and early winter dampened heating demand. This leaves storage levels in the first quarter of 2016 at above average levels: assuming more normal weather, we expect this overhang to be worked off during the next few months.

# 2. MANAGER'S COMMENTS

# Rebalancing the oil market

What will it take to turn the current oversupply around and bring world oil inventories back to normal levels? We have recent various commentaries on this topic in recent months. Here, we provide a latest overview of the rebalancing equation.

# Why the over supply?

US shale/fracking is the main cause of global oversupply. US onshore oil production peaked in November 1970 at just over 10 m b/day. Production declined steadily until September 2005 when it hit 2.9m b/day. Since then, US onshore oil production rose to a new high of 7.7m b/day in April 2015.

This increase is due to the fracking of shale oil. There are a lot of moving parts to the oil supply and demand equation, but if you distill everything down, this increase in US onshore oil production led to the global imbalance. Saudi Arabia is cited as the prime mover in the collapse of the price of oil, as they announced in November 2014 that they were not going to cut production to defend the price. This may have been the catalyst to the decline, but the fundamental issue of oversupply was already in place.

## Getting production and demand back in balance

As stated, world oil demand is growing at an annual rate of 1.2 million barrels per day, or a 100,000 barrels per day increase in demand per month. World oil inventories grew by 700,000 barrels per day in 2015. All things being equal, meaning no changes in global production, the oversupply would be eliminated in seven months as a result of demand growing. Not surprisingly, all things aren't equal.

The oil price decline is causing a sharp decrease in US onshore oil production. We estimate a monthly decline rate of 80,000 barrels per day, or an annual decline rate of about 1 million barrels of oil per day.

What about other oil producing countries? Following the lifting of economic sanctions on Iran in 2015 the Iranian oil supply has been increasing and we believe will result in a net increase of 500,000 barrels of oil per day in increased production. We expect Iraq, which increased production in 2015, to have no growth in production in 2016. Libya is a bit of a wild card, as political strife has kept production below capacity. We believe Libya has the potential to increase production by about 400,000 barrels per day.



As for the rest of the world, we assume OPEC and the rest of the world (non-OPEC ex US) has no change in production, which is reasonable assuming OPEC is producing at near capacity. The non-OPEC ex US region may actually see a decline in production in 2016 as many older fields, e.g., the North Sea, are in long term decline.

## Adding it all up

- The annual rate of oversupply is 700,000 b/day (i.e., how much inventories have grown, on average)
- Demand is growing at a monthly rate of 100,000 b/day.
- US oil supply is declining at a monthly rate of 80,000 b/day.
- Removing 180,000 b/day every month from the oversupply, means the imbalance will continue for approximately four months.
- Assuming that Iran increases production by an annual rate of 500,000 b/day, the 180,000 b/day oversupply would last for about an additional three months.
- If Libya were to reach its potential it would mean an additional 400,000 b/day which adds an additional three months or so to the imbalance.



## Oil Oversupply & Rebalance



### The storage question

What about the three billion barrels in storage? As it turns out, three billion barrels in storage is not an excessive level of storage, at least when measured against the long term average of 2.7 billion barrels. It will take some time to normalize this surplus, but, historically the peak in inventories has coincided with the trough in oil prices.

## US shale and the fracking response to higher prices

It is safe to assume that any oil price recovery will lead to increased oil production. For non-shale production, the lead times are measured in years. Shale wells are much quicker from drilling to production, and these wells tend to experience very high initial production declines and tend to be largely exhausted in a couple of years. Additionally, there are some logistics around the process including financing, permits, hiring workers, etc. Typically, changes in production lag changes in the rig count by about six months. When the rig count began declining in late 2014, it took over six months for there to be any impact on production. Our view is that as the oil price recovers, it will take six to 12 months for the US shale industry to begin to meaningfully increase production. A leading shale oil developer recently highlighted that it would take eighteen months for the US oil industry to increase production by 500,000 barrels per day, even allowing for a \$65 per barrel oil price.

### Saudi Arabia

It can reasonably be asked why Saudi Arabia doesn't solve the oil imbalance by simply reducing their own production by, say, 10%. Such a move seems to be in their best interest, as the price of oil would move up more than 10% and they could significantly increase their total revenues by selling less. We believe the main reason they don't cut production is that they worry that such a move will be ineffectual, as US shale production will simply fill the gap over time. Further, their strategy likely is meant to send a very strong message to the US shale industry that unbridled growth won't be tolerated. US oil producers cannot act in concert, but oil entrepreneurs and those that finance them will likely be more cautious going forward and that would mean that Saudi Arabia will partially achieve their goal of getting a stronger handle on the supply.

And whilst Saudi is not prepared to cut production unilaterally, the announcement of a provisional freeze to supply, made in February 2016, signals that even they have limited appetite for an oil price sub \$40/bbl.

#### Summary

We expect the oil price to recover once the imbalance is eliminated. Depending upon the factors discussed here, we expect that the oil supply to be balanced sometime before the end of the year.



# 3. Performance – Guinness Atkinson Global Energy Fund

The main index of oil and gas equities, the MSCI World Energy Index, was up by 5.38% in the first quarter of 2016. The S&P 500 Index was up by 1.35% over the same period. The Fund was up by 4.10% over this period (all in US dollar terms).

Within the Fund, the first quarter's stronger performers were Bankers Petroleum, Canadian Natural Resources, Gazprom, Statoil and Tullow. Poorer performers were Unit Corporation, JA Solar, Trina Solar, Valero and Devon Energy.

| Inception date<br>6/30/04  | YTD<br>2016 | 1 year<br>(annualized) | 3 years<br>(annualized) | Last 5<br>years<br>(annualized) | 10 years<br>(annualized) | Since Inception<br>(annualized) |  |  |
|----------------------------|-------------|------------------------|-------------------------|---------------------------------|--------------------------|---------------------------------|--|--|
| Global Energy Fund         | 4.10%       | -21.88%                | -10.23%                 | -10.02%                         | -10.02%                  | 6.16%                           |  |  |
| MSCI World<br>Energy Index | 5.38%       | -14.62%                | -6.22%                  | -4.62%                          | 1.40%                    | 5.57%                           |  |  |
| S&P 500 Index              | 1.35%       | 1.77%                  | 11.77%                  | 11.56%                          | 7.00%                    | 7.36%                           |  |  |

#### Performance as of March 31, 2016

Source: Bloomberg Gross expense ratio: 1.30%

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 <u>www.qafunds.com/performance.asp</u> or call (800) 915-6566.



### 4. Portfolio – Guinness Atkinson Global Energy Fund

In January, we sold two of our energy service companies, Wood Group and Shawcor. We continued to admire both businesses as best in class in their respective specialisms, but with both likely to bear the brunt of the slowdown in large global oil & gas capital spending projects for some time to come, we felt there were better opportunities elsewhere. The decision to sell Wood Group, in particular, was also catalysed by the resilience of its earnings and share price through the downturn, with the stock essentially flat since the start of 2014 versus declines elsewhere.

We purchased one service company, Schlumberger, two integrated oil & gas companies, Imperial Oil and Chevron, and one solar company, Sunpower.

Schlumberger is the global leader in diversified oil and gas service provision. Again, it is a company we have admired for many years, and have been attracted to its impressive returns on capital, but not owned it since before the financial crisis due to its premium valuation. However, Schlumberger's stock price has nearly halved since its peak in 2014, presenting a good opportunity to purchase.

Imperial Oil is, after Suncor, Canada's second largest integrated oil and gas company. Imperial's business is well diversified, comprising oil sands operations (producing bitumen and synthetic crude oil), oil refining and marketing and a chemicals business. The company has exhibited strong capital discipline over many years, contributing to higher than average returns on capital versus its Canadian peers. We believe the company's spread of underlying operations, and well capitalised balance sheets, leaves it well placed to weather the current low oil price environment.

We last owned Chevron in 2014 when we sold it, perceiving it to be the most expensive of the international oil and gas majors. With the stock underperforming its peers in 2015, we now see better value in the stock again versus its peers, hence choosing to include it again in our portfolio.

Our purchase of Sunpower reflected our interest in the growth of the solar sector globally, which we expect to continue in 2016. Sunpower's core business is solar project development in the US, involving both module and system sales. The company also has significant stake in a solar development company, 8point3, which it launched last year as a joint venture with First Solar. The combination of a long-term extension to the incentive tax credit system for solar installations in the US, announced in December 2015, together with a sharp fall in Sunpower's stock price in the middle of January, were the final catalysts for purchasing the stock.



#### Sector Breakdown

The following table shows the asset allocation of the Fund at March 31, 2016.

| (%)                             | 31 Dec<br>2008 | 31 Dec<br>2009 | 31 Dec<br>2010 | 31 Dec<br>2011 | 31 Dec<br>2012 | 31 Dec<br>2013 | 31 Dec<br>2014 | 31 Dec<br>2015 | 31 Mar<br>2016 | Change<br>YTD |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|
| Oil & Gas                       | 96.4           | 96.1           | 93.2           | 98.5           | 98.6           | 95.6           | 95.3           | 94.4           | 94.2           | -0.2          |
| Integrated                      | 53.7           | 47.2           | 41.2           | 39.6           | 39.1           | 39.6           | 37.5           | 40.5           | 44.5           | 4.0           |
| Exploration and<br>production   | 28.7           | 32.0           | 36.9           | 41.5           | 41.6           | 36.8           | 38.1           | 37.0           | 37.5           | 0.5           |
| Drilling                        | 5.2            | 8.4            | 6.3            | 6.0            | 7.4            | 6.8            | 3.1            | 1.7            | 1.2            | -0.5          |
| Equipment and<br>services       | 6.4            | 5.4            | 5.3            | 6.6            | 7.1            | 9.0            | 13.1           | 11.1           | 8.1            | -3.0          |
| Refining and<br>marketing       | 2.4            | 3.1            | 3.5            | 4.8            | 3.4            | 3.4            | 3.5            | 4.1            | 2.9            | -1.2          |
| Coal and<br>consumables         | 2.3            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0           |
| Solar                           | 0.0            | 0.0            | 3.2            | 1.2            | 1.2            | 2.8            | 3.5            | 4.9            | 5.2            | 2.1           |
| Construction and<br>engineering | 0.4            | 0.4            | 0.4            | 0.4            | 0.6            | 0.9            | 0.0            | 0.0            | 0.0            | -0.9          |
| Cash                            | 0.9            | 3.5            | 3.2            | -0.1           | -0.4           | 0.7            | 1.2            | 0.7            | 0.6            | 0.0           |
| Total                           | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          | 1.0           |

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

#### **Guinness Atkinson Global Energy Fund Portfolio**

The table below shows the fund valuation in terms of historical and forward (analyst consensus estimates) price/earnings ratios versus the S&P500 Index.

|                            | 2010       | 2011     | 2012     | 2013     | 2014       | 2015     | 2016 |
|----------------------------|------------|----------|----------|----------|------------|----------|------|
| Guinness Atkinson          | 74         | 7.0      | 7.2      | 70       | <u>0</u> 1 | 10 2     | 21.0 |
| Global Energy Fund P/E     | 7.4        | 7.0      | 7.2      | 7.0      | 0.2        | 10.2     | 51.0 |
| S&P 500 P/E                | 24.6       | 21.4     | 21.3     | 19.2     | 18.2       | 20.5     | 17.4 |
| Premium (+) / Discount (-) | -70%       | -67%     | -66%     | -59%     | -55%       | -11%     | 78%  |
| Average oil price (WTI \$) | \$79.5/bbl | \$95/bbl | \$94/bbl | \$98/bbl | \$93/bbl   | \$49/bbl |      |

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

#### **Portfolio Holdings**

Our integrated and similar stock exposure (c.45%) is comprised of a mix of mid cap, mid/large cap and large cap stocks. Our five large caps are Exxon, Chevron, BP, Royal Dutch Shell and Total. Mid/large and mid-caps are ENI, Statoil, Hess and OMV. At March 31 2016 the median P/E ratios of this group were 17.7x/31.8x 2015/2016 earnings. We also have two Canadian integrated holdings, Suncor and Imperial Oil. Both companies have significant exposure to oil sands in addition to downstream assets.



Our exploration and production (E&P) holdings (c.34%) 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 GICS (Global Industry Classification Standard) approach. The stock here with oil sands exposure is Canadian Natural Resources. The pure E&P stocks have a bias towards the US (Newfield, Devon, Carrizo, Southwestern and QEP Resources), with four other names (Apache, Occidental, Noble, CNOOC and SOCO) having significant international production and two (Enquest and Bankers Petroleum) which are North Sea and European focused respectively. One of the key metrics behind a number of the E&P stocks held is low enterprise value / proven reserves. Almost all of the US E&P stocks held also provide exposure to North American natural gas and include two of the industry leaders (Southwestern and Devon).

We have exposure to four (pure) emerging market stocks in the main portfolio, though one is a half-position. Two are classified as integrateds (Gazprom and PetroChina) and two as E&P companies (CNOOC 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 2.9x 2016 earnings. PetroChina is one of the world's largest integrated oil and gas companies and has significant growth potential and, alongside CNOOC, enjoys advantages as a Chinese national champion. SOCO International is an E&P company with production in Vietnam.

We have useful exposure to oil service stocks, which comprise just under 10% of the portfolio. The stocks we own are split between those which focus their activities in North America (land driller Unit Corp) and those which operate in the US and internationally (Helix, Halliburton and Schlumberger).

Our independent refining exposure is currently in the US in Valero, the largest of the US refiners. 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 two positions of the fund split equally between across three companies: JA Solar, Trina Solar and Sunpower. JA Solar and Trina are both Chinese solar cell and module manufacturers, whilst Sunpower is a more diversified US solar developer. We see them as well placed to benefit from the expansion in the solar market we expect to continue for a number of years.



#### Portfolio at March 31, 2016

| Guinness Atkinson Global Energy Fund 31 March 2016 |       |            |             |                |                |                |                |                |                |                |                 |                |                |
|--|-------|------------|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|
|  |       |            | % of        | 2007<br>Biborg | 2008<br>B'horg | 2009<br>B'horg | 2010<br>B'horg | 2011<br>Piborg | 2012<br>B'horg | 2013<br>B'horg | 2014<br>B'horra | 2015<br>B'horr | 2016<br>B'horg |
| Stock  | Curr. | Country    | % or<br>NAV | mean PER        | mean PER       | mean PER       |
| Integrated Oil & Gas                               |       |            |             |                |                |                |                |                |                |                |                 |                |                |
| Exxon Mobil Corp                                   | USD   | US         | 3.10        | 11.48          | 9.9            | 21.5           | 14.0           | 9.9            | 10.6           | 11.3           | 11.4            | 21.9           | nm             |
| Chevron  | USD   | US         | 3.29        | 10.87          | 8.4            | 18.6           | 10.2           | 7.1            | 7.7            | 8.6            | 9.9             | 26.2           | 71.0           |
| Royal Dutch Shell PLC                              | EUR   | NL         | 3.58        | 4.9            | 5.6            | 11.1           | 7.9            | 5.8            | 5.8            | 7.6            | 6.7             | 14.3           | 21.7           |
| BP PLC   | GBP   | GB         | 2.95        | 4.6            | 3.7            | 6.4            | 4.4            | 4.4            | 5.5            | 6.8            | 8.1             | 14.2           | 28.9           |
|  | EUR   | FK         | 3.14        | 5.4            | 4.4            | 11.2           | 8./            | 7.8            | 7.4            | 8.3            | 8.5             | 10.8           | 10.0           |
| ENI SPA  | EUR   | NO         | 3.30        | 5.2            | 4./            | 9.3            | 7.1            | 0.8            | 0.0            | 10.0           | 12.3            | 57.0           | 135./          |
| Hess Corp  |       | IIS        | 3.85        | 9.4            | 7.1            | 27.5           | 9.7            | 8.4            | 7.9            | 8./            | 9.8             | 21.1<br>nm     | 35.0<br>nm     |
| OMV AG   | FLIR  | ΔΤ         | 3.74        | 4.7            | 3.0            | 27.5           | 6.2            | 7.8            | 5.4            | 6.7            | 8.2             | 73             | 19.6           |
| OWV AS   | LON   | A          | 30.32       | 4.7            | 5.5            | 5.5            | 0.2            | 7.0            | 5.4            | 0.7            | 0.2             | 7.5            | 15.0           |
| Integrated Oil & Gas - Canada                      |       |            |             |                |                |                |                |                |                |                |                 |                |                |
| Suncor Energy Inc                                  | CAD   | CA         | 3.73        | 15.2           | 11.3           | 34.3           | 22.8           | 10.1           | 11.2           | 11.3           | 11.3            | 32.1           | nm             |
| Canadian Natural Resources Ltd                     | CAD   | CA         | 4.63        | 16.6           | 10.8           | 14.6           | 14.5           | 15.2           | 22.1           | 15.7           | 10.2            | 252.7          | nm             |
| Imperial Oil                                       | CAD   | CA         | 3.75        | 13.4           | 10.5           | 21.8           | 18.9           | 11.8           | 10.4           | 13.5           | 11.4            | 24.5           | 75.9           |
|  |       |            | 12.12       |                |                |                |                |                |                |                |                 |                |                |
| Integrated Oil & Gas - Emerging market             |       |            |             |                |                |                |                |                |                |                |                 |                |                |
| PetroChina Co Ltd                                  | HKD   | HK         | 3.44        | 5.3            | 6.8            | 7.3            | 5.8            | 5.7            | 6.6            | 7.3            | 7.2             | 22.4           | 75.6           |
| Gazprom OAO  | USD   | KU         | 3.83        | nm             | nm             | 5.4            | 4.2            | 2.9            | 3.0            | 2.8            | 4.3             | 2.9            | 3.3            |
| Oil & Gas F&P                                      |       |            | 1.27        |                |                |                |                |                |                |                |                 |                |                |
| Anache Corn  | חצוו  | 115        | 3 99        | 5.6            | 4.4            | 8.8            | 5 3            | 41             | 5.1            | 6.0            | 87              | nm             | nm             |
| Occidental Petroleum Corn                          | USD   | US         | 3 15        | 13.0           | 7.4            | 18.4           | 12.1           | 8.2            | 9.9            | 9.9            | 11.8            | 412.2          | nm             |
| OFP Resources Inc                                  | USD   | US         | 1.95        | <br>nm         | nm             | nm             | 10.2           | 8.6            | 11.4           | 10.1           | 10.0            | nm             | nm             |
| Southwestern Energy Co                             | USD   | US         | 1.73        | 12.7           | 5.2            | 5.4            | 4.7            | 4.4            | 5.8            | 4.0            | 3.6             | 48.3           | nm             |
| Devon Energy Corp                                  | USD   | US         | 2.58        | 3.9            | 2.8            | 8.4            | 4.6            | 4.6            | 8.5            | 6.5            | 5.3             | 11.1           | nm             |
| Noble Energy Inc                                   | USD   | US         | 3.64        | 11.5           | 8.9            | 18.6           | 15.2           | 12.0           | 13.7           | 10.2           | 13.4            | 551.1          | nm             |
| Newfield Exploration Co                            | USD   | US         | 3.66        | 10.3           | 10.6           | 6.5            | 7.2            | 8.2            | 13.7           | 18.5           | 18.0            | 45.9           | nm             |
| Carrizo Oil & Gas Inc                              | USD   | US         | 2.03        | 44.2           | 17.2           | 21.0           | 24.3           | 30.1           | 21.2           | 14.0           | 14.0            | 32.3           | 46.0           |
|  |       |            | 22.73       |                |                |                |                |                |                |                |                 |                |                |
| International E&P                                  |       |            |             |                |                |                |                |                |                |                |                 |                |                |
| CNOOC Ltd  | HKD   | HK         | 3.94        | 10.6           | 7.7            | 11.3           | 6.5            | 4.9            | 5.3            | 5.4            | 6.4             | 19.2           | 212.4          |
| Bankers Petroleum Ltd                              | CAD   | CA         | 1.43        | nm             | nm             | 467.2          | 20.6           | 7.4            | 7.1            | 4.9            | 4.3             | 45.2           | nm             |
| Tullow Oil PLC                                     | GBP   | GB         | 1.24        | 8./            | 5./            | 36.8           | 17.8           | 4.1            | 3.6            | 27.4           | nm              | nm             | 99.9           |
| Soco International PLC                             | GBP   | GB         | 7.24        | 19.7           | 21.1           | 13.2           | 18.2           | 11./           | 3.5            | 3.5            | 5.3             | nm             | nm             |
| Drilling   |       |            | 7.05        |                |                |                |                |                |                |                |                 |                |                |
| Unit Corp  | USD   | US         | 1.22        | 1.5            | 1.3            | 3.3            | 2.9            | 2.2            | 2.1            | 2.4            | 2.1             | nm             | nm             |
|  | 000   | 00         | 1.22        | 1.5            | 1.0            | 5.5            | 2.0            |                | 2.2            | 2              |                 |                |                |
| Equipment & Services                               |       |            |             |                |                |                |                |                |                |                |                 |                |                |
| Halliburton Co                                     | USD   | US         | 3.35        | 14.1           | 16.5           | 27.3           | 17.8           | 10.7           | 12.0           | 11.5           | 9.1             | 24.2           | 113.0          |
| Helix Energy Solutions Group Inc                   | USD   | US         | 1.27        | 1.7            | 2.3            | 9.7            | 10.6           | 3.7            | 3.0            | 5.2            | 2.9             | 33.1           | nm             |
| Schlumberger                                       | USD   | US         | 3.30        | 17.6           | 16.4           | 27.1           | 26.7           | 20.4           | 17.6           | 15.5           | 13.3            | 22.0           | 44.1           |
|  |       |            | 7.92        |                |                |                |                |                |                |                |                 |                |                |
| Solar  |       |            |             |                |                |                |                |                |                |                |                 |                |                |
| Trina Solar Ltd                                    | USD   | US         | 1.71        | 13.7           | 8.2            | 6.1            | 3.0            | 368.1          | nm             | nm             | 12.3            | 9.3            | 7.0            |
| JA Solar Holdings Co Ltd                           | USD   | US         | 1.60        | 11.4           | 4.7            | nm             | 1.2            | nm             | nm             | nm             | 9.6             | 4.8            | 5.4            |
| SunPower Corp                                      | USD   | US         | 1.89        | 50.4           | 21.9           | 27.7           | 22.1           | 387.1          | 211.6          | 22.6           | 24.1            | 16.1           | 23.2           |
| Oil & Cas Pafining & Markating                     |       |            | 5.20        |                |                |                |                |                |                |                |                 |                |                |
| Valero Energy Corn                                 | חצוו  | 115        | 2 87        | 8.2            | 11.8           | nm             | 40.4           | 16.1           | 13.1           | 15.6           | 10.5            | 73             | 9.0            |
| valeto Energy corp                                 | 050   | 05         | 2.87        | 0.2            | 11.0           |                | 40.4           | 10.1           | 15.1           | 15.0           | 10.5            | 7.5            | 5.0            |
| Research portfolio                                 |       |            |             |                |                |                |                |                |                |                |                 |                |                |
| Cluff Natural Resources PLC                        | GBP   | GB         | 0.21        | nm              | nm             | nm             |
| EnQuest PLC  | GBP   | GB         | 0.74        | nm             | nm             | nm             | 3.6            | 4.1            | 1.2            | 1.3            | 2.5             | 22.7           | nm             |
| JKX Oil & Gas PLC                                  | GBP   | GB         | 0.43        | 0.5            | 0.7            | 0.7            | 0.8            | 1.0            | 1.3            | 2.5            | 6.8             | nm             | nm             |
| Ophir Energy PLC                                   | GBP   | GB         | 0.11        | nm             | 1.8             | nm             | nm             |
| Shandong Molong Petroleum Machinery Co Ltd         | HKD   | HK         | 0.13        | 6.8            | 4.6            | 12.6           | 4.9            | 6.8            | nm             | nm             | nm              | nm             | nm             |
| Sino Gas & Energy Holdings Ltd                     | AUD   | AU         | 0.25        | nm             | nm             | nm             | nm             | nm             | 58.9           | nm             | 58.9            | nm             | 29.5           |
| WesternZagros Resources Ltd                        | CAD   | CA         | 0.03        | nm              | nm             | nm             |
|  |       |            | 1.91        |                |                |                |                |                |                |                |                 |                |                |
|  |       | Cash       | 0.00        |                |                |                |                |                |                |                |                 |                |                |
|  |       | Cash       | 0.60        |                |                |                |                |                |                |                |                 |                |                |
|  |       | Iotai      | 100         |                |                |                |                |                |                |                |                 |                |                |
|  |       | PER        |             | 79             | 67             | 11.6           | 74             | 70             | 7 2            | 7.8            | 8.2             | 18.1           | 31.0           |
|  |       | Med. PER   |             | 10.3           | 7.2            | 12.6           | 9.7            | 7.8            | 7.7            | 8.6            | 9.6             | 22.4           | 32.5           |
|  |       | Ex-gas PER |             | 7.8            | 6.9            | 12.3           | 7.6            | 7.3            | 7.0            | 7.8            | 8.3             | 16.5           | 26.4           |

#### 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.



The Fund's investment objectives, risks, charges and expenses must be considered carefully before investing. The statutory and summary prospectuses contain this and other important information and can be obtained by calling 800-915-6565 or visiting www.gafunds.com. Read and consider it carefully before investing.

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.

MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets.

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.

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

Free cash flow (FCF) represents the cash that a company is able to generate after laying out the money required to maintain or expand its asset base.

The New York Mercantile Exchange is the world's largest physical commodity futures exchange.

Capital expenditure, or CapEx, are funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment.

Enterprise Value, or EV for short, is a measure of a company's total value, often used as a more comprehensive alternative to equity market capitalization

Standard Deviation (SD) is a measure of the dispersion of a set of data from its mean. The more spread apart the data, the higher the deviation.

Price to book ratio (P/B Ratio) is a ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share.

Opinions expressed are subject to change, are not guaranteed and should not be considered investment advice.

Debt/EBITDA is a measure of a company's ability to pay off its incurred debt. This ratio gives the investor the approximate amount of time that would be needed to pay off all debt, ignoring the factors of interest, taxes, depreciation and amortization.