OPEC respond rationally to a tightening oil market

OPEC concluded their formal meeting on Friday June 22nd 2018 with an agreement, in practice, to raise production by around 0.6m b/day. Non-OPEC partners will add a smaller amount of production, albeit undefined. This outcome, which was generally in line with market expectations, was brokered by Saudi to start to address potential extreme tightness in the oil market in the second half of 2018. We see this is another logical step from OPEC towards rebalancing the market and sustaining an oil price that satisfies their own economics needs as well as balancing the supply and demand outlook.

Key Points

- Agreement will add around 0.6m b/day of production from OPEC to the market. While not allocated by country, we think it most likely comes from Saudi, Kuwait, Iraq and the UAE
- Some non-OPEC members, led by Russia, will also increase production, taking the potential increase in overall OPEC and non-OPEC volumes potentially as high as 1m b/day
- There are significant OPEC supply risks in the second half of 2018 with further supply disruptions from Venezuela, Iran and Libya each capable of offsetting OPEC's production increase
- OPEC remain committed to delivering a reasonable oil price to satisfy their own economies but also to incentivise investment in long term projects
- If OPEC are successful and equity markets were to price in a long term oil price of $70/bl, we believe that there would be over 50% upside in the Guinness Global Energy portfolio.

What has been announced?

At the conclusion of their meeting on Friday June 22nd 2018 in Vienna, OPEC's headline announcement was "to strive to adhere to the overall conformity level of OPEC-12, down to 100%, as of 1 July 2018". OPEC had reached "152% conformity" with their 2017 production cuts, and a move to 100% conformity implies an increase in production of around 0.6m b/day.

The quota controls in total, as they stand before today's announcement, can be seen in the table below:

OPEC-12 Quotas, production and Current Compliance

Source: Bloomberg, Guinness Asset Management estimates

	Oct 2016	Jan 2017 quota	May 2018		
(m b/day)	mn b/d	mn b/d	mn b/d	vs quota	Compliance
Saudi	10.54	10.05	10.01	-0.04	108%
Iran	3.70	3.79	3.81	0.02	122%
Iraq	4.56	4.35	4.48	0.13	38%
UAE	3.01	2.87	2.87	0.00	100%
Kuwait	2.84	2.71	2.71	0.00	100%
Venezuela	2.07	1.97	1.44	-0.53	630%
Angola	1.75	1.66	1.53	-0.13	244%
Algeria	1.09	1.04	1.02	-0.02	140%
Qatar	0.65	0.62	0.60	-0.02	167%
Gabon	0.20	0.19	0.20	0.01	0%
Ecuador	0.55	0.52	0.52	0.00	100%
OPEC-12	**31.0**	**29.8**	**29.2**	**-0.58**	**149%**

Today's announcement is straightforward in one sense, recommending a return to 100% compliance, but it does not attempt to allocate future production increases across member countries. We believe that only Saudi Arabia, Kuwait, the UAE and Iraq hold individual spare capacity of more than 100k b/day, therefore these countries will be the ones to increase production. While this can be delivered in the near term, it does use up available spare capacity.

A group of non-OPEC countries also promised production cuts at the start of 2017, totalling just under 0.6m b/day. After OPEC's announcement, the 4th OPEC and non-OPEC Ministerial Meeting was held and concluded with a commitment to "strive to adhere to overall conformity". We believe that this means that Russia will increase production in the second half of 2018 although no official figures were presented. Overall, we believe that a reasonable share of the original cuts have been achieved via natural production decline rather than voluntary reduction and we note that, as a group, these countries delivered only 75% compliance on their quota cuts in May 2018.

Non-OPEC Quotas, production and Current Compliance

Source: Bloomberg, Guinness Asset Management estimates

	Oct 2016	Jan 2017 quota	May 2018		
(m b/day)	mn b/d	mn b/d	mn b/d	vs quota	Compliance
Russia	11.23	10.93	10.97	0.04	87%
Mexico	2.14	2.04	1.90	-0.14	235%
Azerbaijan	0.76	0.72	0.69	-0.04	200%
Khazakhstan	1.65	1.63	1.84	0.21	-940%
Oman	1.01	0.97	1.01	0.03	18%
Others *	1.00	0.95	0.98	0.03	45%
Non-OPEC	**17.8**	**17.2**	**17.4**	**0.14**	**75%**

*Bahrain, Brunei, Malaysia, Sudan and South Sudan

OPEC's current stance towards the global oil market

OPEC's current stance towards the oil market was best characterised by OPEC President Suhail Mohamed Al Mazrouei's introductory remarks. In them, he re-iterated OPEC's commitment to a balanced market, but also to keep the oil price sufficiently high to incentivise longer term investments. Below is a selection of his comments, with our highlighting:

- On the oil market recovery *"Since the last Meeting of the Conference in late November 2017, the oil market situation has further improved. The global economy is strong, oil demand remains robust, the market is evidently rebalancing, and the return of more stability has been welcomed by all stakeholders."*

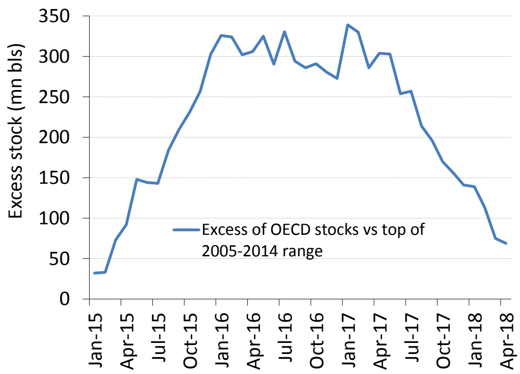
- On providing stability and guardianship *"Our focus today is on reviewing all the market fundamentals to help better understand the market balance and stability we all desire, in the interests of producers, consumers and the global economy. We fully appreciate and take on board the viewpoints and concerns of all industry stakeholders. We are watchful, responsive and fully committed to market stability and global energy security…. we need to continue to tread carefully; none of us want to see the return of the kind of volatility that allows pessimism to return to the markets"*

- On future investments to ensure a balanced market *"So far in 2018, the pace of investment has gradually picked up, but we are still not seeing enough robust investment in long-cycle projects. To put this into some perspective, in the period to 2040, the required global oil sector investment in OPEC's World Oil Outlook is estimated to be $10.5 trillion, with oil demand set to surpass 111 million barrels a day by 2040… It is also important to remember that investments are not only about boosting new production. Oil producers also need to account for natural decline rates… Every effort should be made to avoid a potential supply gap that could present a future serious challenge."*

Why have OPEC raised production?

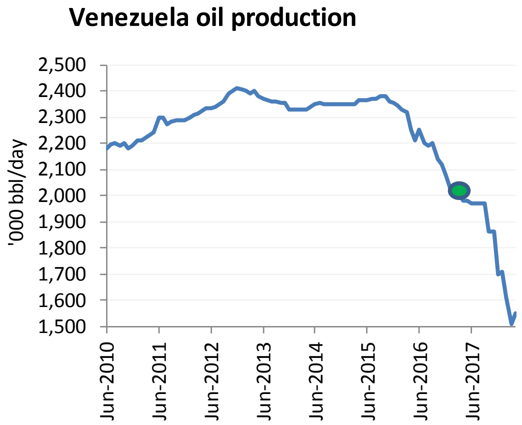
The production cuts put in place by OPEC at the start of 2017 were designed to tighten an oversupplied market and raise oil prices from depressed levels. The cuts took around six months to feed into the physical market, with market tightness emerging in the second half of 2017 and first half of 2018. OECD oil and product inventories, which were sitting around 300m barrels above normal (an excess of around 12%), have declined to around 60m barrels above normal. This coincided with the Brent oil price rallying from around $50/bl twelve months ago to around $80/bl at the end of May.

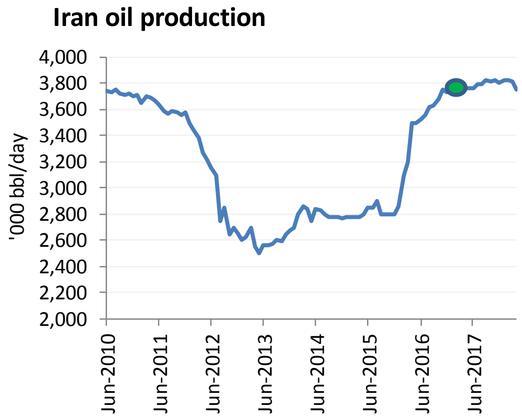
When the 2017 production framework was established, OPEC were relying on the discipline of their own members in adhering to the 1.2m b/day production cuts. That production discipline has been evident throughout, with members rationally embracing the trade-off of lower volumes for higher oil prices which has resulted in much stronger revenues. 0.6m b/day of cuts were promised by non-OPEC countries in support of OPEC's actions, and in practice, we saw around 0.4m b/day of these cuts come through, led by a Russian cut of 0.25m b/day. OPEC would also have been optimistic about oil demand in 2017 and 2018, and that optimism has been rewarded, with healthy demand growth of around 1.5m b/day expected in both years. Meanwhile, the US oil system is growing year-on-year by around 1.2m b/day, a level of growth anticipated by OPEC given where oil prices have been.



Source: IEA; Guinness Asset Management

So far, so good. Since the start of 2018, however, we have seen two OPEC 'wildcards' muddy this picture, one being an actual reduction in supply from Venezuela, the other being the likelihood of lower supply from Iran. In Venezuela, production has fallen to an average of 1.5m b/day, nearly 0.5m b/day less than their quota of 1.97m b/day. Infrastructure issues, weak reservoir management, poor quality control and poor relations with foreign service partners have all contributed to the decline, and there seems little prospect of an improvement in the short-term. In Iran, President Trump's decision to remove sanction waivers in relation to the country's nuclear program, will effectively block Iranian exports to countries that do business with the US. The impact on Iranian oil exports remains unclear, but using previous sanctions as a guide, we expect a decline of at least 0.5m b/day (versus current exports of just over 2m b/day).





Green dot = OPEC quota cut, 1 Jan 2017

Source: Bloomberg; Guinness Asset Management

From a supply perspective, the most recent news concerning both countries is not encouraging. In Venezuela, national oil company PDVSA notified eight international customers that it will not be able to meet its full supply commitments for June, falling well short of the 1.5m b/day PDVSA is obligated to supply. The export picture from Iran remains far from clear, but recent indications suggest that various Asian importers (e.g. India), who supported Iranian crude during the previous round of sanctions, are likely now to bow to US pressure to reduce consumption from Iran. We have also seen European refiners fully wind down their purchases of Iranian crude. This implies that the overall decline in Iranian oil exports may be worse than first anticipated.

Indeed, Saudi oil minister Al-Falih commented on the morning of the OPEC meeting that without any action, the world was facing an oil supply deficit of 1.8m b/day in the second half of 2018.

The Saudi/OPEC game plan

In the face of a much tighter oil market than expected at the start of 2018, OPEC are therefore starting the unwinding that was always promised, but previously signalled for 2019. Indeed, Saudi already indicated its commitment to supporting the stability of oil markets immediately after the U.S. decision in May to withdraw from the Iran nuclear deal, with Saudi's energy ministry making the following statement: "The kingdom will work with major producers and consumers within and outside OPEC to curb the effects of any supply shortages".

What to make of this? We continue to think that Saudi are managing the oil price in a rational fashion. On the one hand, the IMF still forecasting Saudi requiring oil price of $70+ /bl in 2018 in order to close their fiscal deficit to zero. An IPO or private sale of 5% of Saudi Aramco is also still planned: we estimate that the targeted $100bn proceeds can only be achieved at an assumed long-term oil price of $70. These factors underpin Saudi's efforts over the last twelve months to bring Brent back above $70/bl. However, Saudi are also well aware of the risks of over-stimulating non-OPEC supply (especially shorter cycle US shale oil), whilst also the dangers to oil demand growth posed by too sharp an oil price increase.

An increase in OPEC production is therefore logical, and we see it in the interests of energy investors, who we think are best served by a flattening of the oil curve: near-term oil prices stabilising to ensure that there is no oil shock to the world economy, whilst longer dated oil prices firm up, in recognition of the supply challenges caused by chronic underinvestment in non-OPEC outside the US.

Overall, we believe that Saudi/OPEC's long-term objective remains to maintain a 'good' oil price, higher than the current oil futures curve is indicating, and managing the unwinding of OPEC's production quotas is another step on that journey.

Implications of OPEC's actions for oil prices and equities

Consistent with OPEC's longer term plan, we believe that long run oil prices will return to a $60-70/bl range. This is a price which is sufficient for world oil demand and US shale oil to grow while also providing acceptable economics for OPEC countries and sufficient profitability for investment in new oil projects around the world. This would be a 'reasonable' oil price level for all constituents of the global oil market, economic and political.

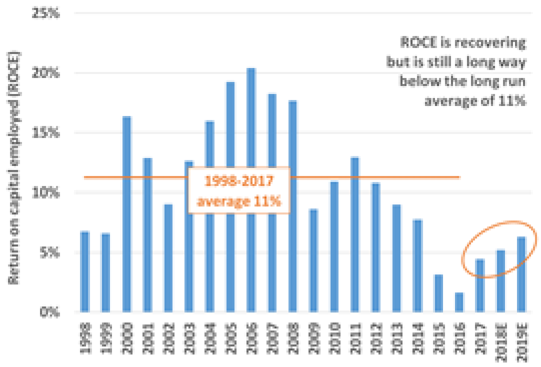
Today, assuming operating and capital costs are held constant, we calculate that our portfolio of energy equities currently offers fair value assuming a long term Brent oil price in the mid to high $50s (i.e. about $5 or so below where long dated Brent oil prices currently are). Looking out two years, while we see downside risk of about 10% if energy equities were to factor in $50/bl long-term and we see around 30% upside at a $60 /bl and more like 60% upside at a $70/bl oil price.
While forecasting oil prices is inherently difficult, we are comfortable that we are seeing positive results from energy companies' recent efforts to control operating and capital costs in order to improve profitability. Our preferred method for monitoring longer term profitability is Return on Capital Employed (ROCE) while we use Free Cash Flow Return on Capital Employed (FCF Return) as our preferred measure of near term profitability movements.

- ROCE is recovering from a low of 2% in 2016 to around 5% in 2018. The long run average for our portfolio is around 11% and we see good reason to believe that profitability will return to around the long run average level, just as it did after 1998 when oil prices last hit a bottom. It takes time for ROCE to improve but we have increasing confidence that this will happen.

- We are comfortable with this because the FCF return has rebounded sharply and is now at above average levels (based on only $55/bl crude oil prices). This is a pre-cursor for improving ROCE.

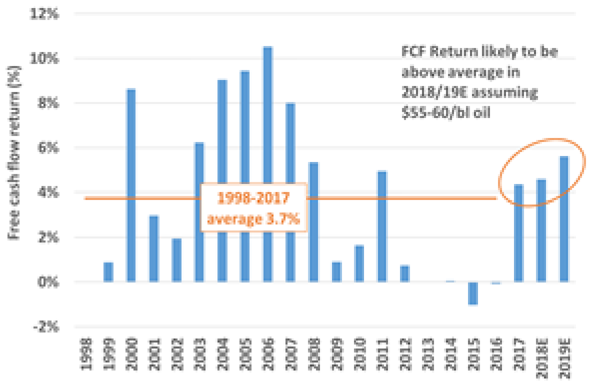
ROCE is recovering but still at a low level

Source: Bloomberg, Guinness Asset Management estimates



FCF Return has recovered sharply

Source: Bloomberg, Guinness Asset Management estimates



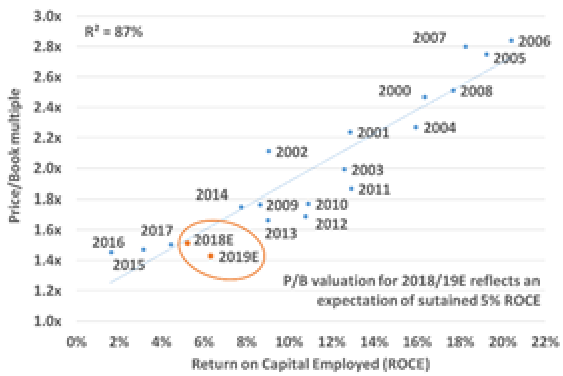
The stock market has historically valued energy companies based on their sustainable levels of profitability (generally a combination of both ROCE and FCF Return) whether it is delivered by self-help improvements or via increases in the long term oil price.

- Current valuation implies that the ROCE of our companies will not improve from the current level. If ROCE improves to 11% and the market were to pay for it sustainably, it would imply an increase in the equity valuation of around 35%.

- Current valuation implies that the FCF Return of the portfolio will fall considerably from current levels. If FCF Return maintains these levels, and the market paid for it sustainably, it would imply an uplift in equity valuation of 40%. Currently, the market remains sceptical that the energy companies will sustain their capital discipline and free cash flow generation.

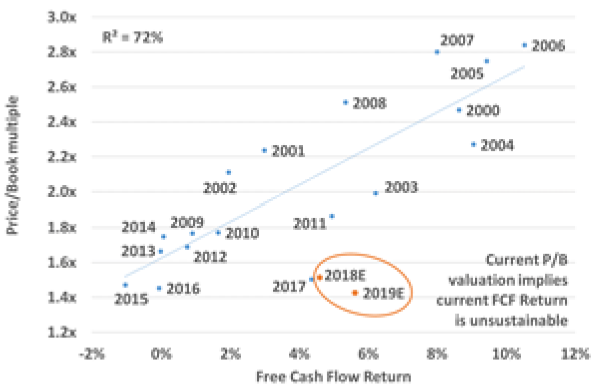
Energy equities are priced as if their ROCE stays at this low level forever

Source: Bloomberg, Guinness Asset Management estimates



Energy equity valuation implies that current FCF Return will not be sustained

Source: Bloomberg, Guinness Asset Management estimates



Ultimately, we see rising profitability for the Guinness Global Energy portfolio stemming from a combination of higher long dated oil prices and sustained capital discipline. After a long period of underperformance relative to the broad market, we see energy equities continuing to play catch-up.

Conclusion

We see the June 22nd announcement from OPEC (and subsequent announcement from non-OPEC partners) as another logical step towards rebalancing the market and sustaining an oil price that satisfies OPEC's own economics needs as well as balancing the supply and demand outlook. Should OPEC be successful, we believe that it will supportive of the free cash flow generation and profitability for the companies in the Guinness Global Energy portfolio.

Why the Guinness Global Energy Fund?

Best in class energy strategy since inception (19 years): annualised returns of 9.8% p.a. (to 31/03/2018in USD)*

Towers Watson on luck and skill: *"To be statistically significant, a performance record should be intact for nearly 15 years."*

LIPPER FUND AWARDS 2014 UNITED KINGDOM — Best Fund over 3 years, Equity Sector Natural Resources

INVESTMENT EUROPE FUND MANAGER OF THE YEAR AWARDS 2013-14 — Best Commodity Fund

The Guinness Global Energy strategy started in November 1998 and has been consistently run and managed by Tim Guinness and the wider team ever since. The portfolio is constructed on a "best ideas" basis in a concentrated manner comprising 30 equally weighted positions of 3.3% each. Our equal weighted approach is a 'Guinness House style' and it provides us with a structural sell discipline, a regular 'top slicing' premium and it keeps life simple so that we can focus our efforts on picking the best energy stocks. Our investment process is based on regular, detailed and disciplined macro analysis (to achieve the best possible understanding of the drivers of energy markets) and intelligent regular screening of all energy equities.

We initially screen for good quality companies that display attractive valuation with positive earnings momentum and then perform detailed due diligence on this group to select our preferred portfolio holdings. Our bias is towards value with cash returns as a preferred valuation methodology. We believe that our approach has been a key factor behind the long term outperformance of the Guinness energy strategy versus the MSCI World Energy Index and our strong performance relative to our peer group of competitor energy funds. We think our competitive edge lies in the following attributes:

■ Consistency of investment philosophy & process	Strategy developed in 1998, applied by the team for 19 years
■ Equally-weighted portfolio	Limits risk, gives concentration and keeps life simple
■ Top-down analysis	Shaping the portfolio towards different energy sectors
■ Value bias	Picking good quality stocks when valuation is attractive and allowing each idea to work
■ Team	Three managers with varied backgrounds and skills
■ Length of track record	According to Towers Watson, "To be statistically significant, a performance record should be intact for nearly 15 years."

Guinness Global Energy portfolio

Single sector	Companies producing or distributing energy
High conviction	Equally-weighted, concentrated portfolio (30 positions)
Low turnover	Buy and hold rather than trading philosophy
Unconstrained	No reference to index
Global	Diversified globally
Investment type	Listed equities (long-only)

**The value of an investment and the income from it can fall as well as rise as a result of market and currency movement; you may not get back the amount originally invested. Past performance is not a guide to future performance.*

Note: Simulated (composite) past performance prior to 31 March 2008, the launch date of this Fund. The Guinness Global Energy investment team has been running global energy funds in accordance with the same methodology continuously since 1998. These returns are calculated using a composite of the Investec GSF Global Energy Fund class A from 31 December 1998 to 29 February 2008 (managed by the Guinness team until this date); the Guinness Atkinson Global Energy Fund (sister US mutual fund) from 1 March 2008 to 31 March 2008 (launch date of this Fund), the Guinness Global Energy Fund class A (1% AMC) from launch to 02.09.08, and the Fund's E class (0.75% AMC) thereafter. *Source: Financial Express, bid to bid basis, total return.*

Guinness Asset Management

Guinness Asset Management provides a range of long-only actively managed funds to individual and institutional investors. Founded in 2003, Guinness is independent and is wholly owned by its employees. We have a variety of specialisms in global sector funds, Asian regional and country funds and global growth and global dividend funds. The Guinness equity funds are in a Dublin OEIC and sit alongside a range of similar SEC-registered funds offered to US investors by our US sister company, Guinness Atkinson Asset Management Inc. Having raised around $1bn in these vehicles, primarily from Family Offices, Private Banks and Wealth Managers, Guinness is now pursuing a new era of growth by presenting its capabilities to Pension Funds and other Institutional Investors.

We believe in: in-house research; intelligent screening for prioritisation of research; well-designed investment processes; concentrated, high conviction portfolios; low turnover; and the avoidance of benchmark constraints. Our in-house global economic and industry research allows us to take an independent view and not be led by the market. Our size and specialist nature also means we have the ability to act quickly and efficiently to any market movements. At heart Guinness Asset Management is a value, or growth at reasonable value, investor. We combine strategic sector-selection with a fundamental screening process to identify specific value-driven stock opportunities.

Please find further details at www.guinnessfunds.com

Guinness Global Energy team

Tim Guinness

Tim founded Guinness Asset Management in 2003 when he left Investec, who then appointed his new company as the outsource manager of the Investec Global Energy Fund. Tim has over 35 years' investment experience. He founded Guinness Flight Global Asset Management Ltd in 1987 and was joint CEO from 1987 to 1999 and a portfolio manager of the Global Equity Fund. After Investec acquired Guinness Flight in 1998, he was Chairman of the company during the transition into Investec, as well as lead manager of the Investec Global Energy Fund. Tim read engineering at Cambridge University and, upon graduation in 1968, completed a Master's Degree in Management Science at the Sloan School M.I.T. in the US.

Will Riley, CA

Will joined Guinness Asset Management in May 2007. Previously Will worked for six years for PricewaterhouseCoopers, first in the London Middle Market Assurance Team, then as a valuation specialist in the Valuation & Strategy division. Will qualified as a Chartered Accountant in 2003 and graduated from the University of Cambridge with a Master's Degree in Geography.

Jonathan Waghorn

Jonathan Waghorn has 21' years' experience in the energy sector. He was a Shell drilling engineer in the Dutch North Sea and worked as an energy consultant with Wood Mackenzie before becoming co-head of Goldman Sachs energy equity research in 2000. He joined Investec Global Energy in 2008 where he helped grow the energy franchise at Investec to a peak of nearly $3.5bn in 2011. Jonathan joined Guinness Asset Management in 2013

Guinness Global Energy Fund is an equity fund. Investors should be willing and able to assume the risks of equity investing. The Fund invests only in companies involved in the energy sector; it is therefore susceptible to the performance of that one sector, and can be volatile. Details on the risk factors are included in the Fund's documentation, available on our website.

The value of an investment and the income from it can fall as well as rise as a result of market and currency movement; you may not get back the amount originally invested. Past performance is not a guide to future performance.

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Documentation The documentation needed to make an investment, including the Prospectus, the Key Investor Information Document (KIID) and the Application Form, is available from the website www.guinnessfunds.com , or free of charge from:-

- the Manager: Link Fund Administrators (Ireland) Ltd, 2 Grand Canal Square, Grand Canal Harbour, Dublin 2, Ireland; or,
- the Promoter and Investment Manager: Guinness Asset Management Ltd, 14 Queen Anne's Gate, London SW1H 9AA.

Residency In countries where the Fund is not registered for sale or in any other circumstances where its distribution is not authorised or is unlawful, the Fund should not be distributed to resident Retail Clients. **NOTE: THIS INVESTMENT IS NOT FOR SALE TO U.S. PERSONS.**

Structure & regulation The Fund is a sub-fund of Guinness Asset Management Funds PLC (the "Company"), an open-ended umbrella-type investment company, incorporated in Ireland and authorised and supervised by the Central Bank of Ireland, which operates under EU legislation. If you are in any doubt about the suitability of investing in this Fund, please consult your investment or other professional adviser.

Switzerland The prospectus and KIID for Switzerland, the articles of association, and the annual and semi-annual reports can be obtained free of charge from the representative in Switzerland, Carnegie Fund Services S.A., 11, rue du Général-Dufour, 1204 Geneva, Switzerland, Tel. +41 22 705 11 77, www.carnegie-fund-services.ch. The paying agent is Banque Cantonale de Genève, 17 Quai de l'Ile, 1204 Geneva, Switzerland.

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