

AMITY INSIGHT

THE ENERGY PARADOX

Meeting expected demand whilst tackling climate change

AMITY INSIGHT: THE ENERGY PARADOX

“

Climate change is now an unavoidable business issue. If the world is to reduce the risk of catastrophic global warming there will have to be a huge reallocation of capital away from fossil fuels and towards low emission energy sources.

”

**FT Leader,
12th September 2016**

By Neville White

Head of SRI Policy & Research, EdenTree Investment Management Limited

The COP21 Paris climate talks in December 2015 resulted in the first Pan-Global agreement on climate since Kyoto in 1997. The breakthrough in Paris, led by joint action from the US and China, brought 196 countries into 'common cause' on climate action via 196 country commitments or 'Intended Nationally Determined Contributions' (INDCs). Paris confirmed a determination to keep atmospheric warming to within two degrees of pre-industrial temperatures, and to set a more ambitious and aspirational target of keeping to within one and a half degrees.

There is still much to do, but coming into force within a year, COP21 potentially sets the world on an agreed path towards transition, mitigation and adaptation. At the same time, the energy sector, as this Insight shows, is largely maintaining its long-held narrative that fossil fuels will be the primary source of energy for decades to come, and at least until beyond the mid-century point.

The sector argues, not unreasonably, that the requirement to provide energy for a potential nine billion human population will see coal and

oil survive as the only viable and abundant energy sources. This is the 'energy paradox': The need to reconcile a tough response to climate change whilst providing energy continuity at a time of acute population growth.

This Insight brings together much of the thinking and action that we at EdenTree have invested in climate change during 2016 – what is an appropriate investor response to climate change, what are the drivers that could result in 'stranded assets' and what will add value for clients?

We also update our Insight from 2013 on fracking, and take a look at what drove China to come to the table in Paris.

The energy sector narrative around future fossil fuel demand has not materially changed, but we show how in our view, the energy sector is now trailing behind strong public policy commitments that could lead to forced change.

We believe we are well placed to respond to the investment demands of climate change, and as always we invite feedback and comment on this Insight.

ENERGY DEMAND OUTLOOK

The 'Energy paradox' appears acute if corporate energy outlooks are considered. Long-term energy outlooks are published by many of the leading trans-national oil groups, with most maintaining a commitment to fossil fuel exploration and exploitation to at least 2040 and beyond. Many of these scenarios are potentially incompatible with a two degree carbon constrained world. Where companies recognise climate change at all, it is in the main through adaptation rather than constraint.

BP's Energy Outlook exemplifies this paradox. They project energy demand continuing to rise to the mid-century point, with up to 60% of additional need being met from fossil fuels¹. In their outlook in 2035, up to 80% of total energy supplies come from fossil fuels with gas accounting for much of this growth (gas in their projection only finally replaces coal as the predominant energy source in the 2030s²).

Coal overall slows to 0.5% growth per annum with gas only overtaking coal as late as 2035. China accounts for 50% of all coal supply by 2035³. Coal demand is projected to fall dramatically in OECD countries, but to remain resilient in emerging and non-OECD territories where it is both cheap and abundant.

In BP's outlook, renewables constitute the overall fastest growing energy source, quadrupling by 2025. However, they view integrating intermittent supply beyond 30% of the total energy supply as representing a built-in constraint to the renewables sector that will ultimately prove self-limiting in terms of growth potential⁴.

1. BP Energy Outlook 2016 Edition www.bp.com

2. *ibid* BP

3. *ibid* BP

4. *ibid* BP

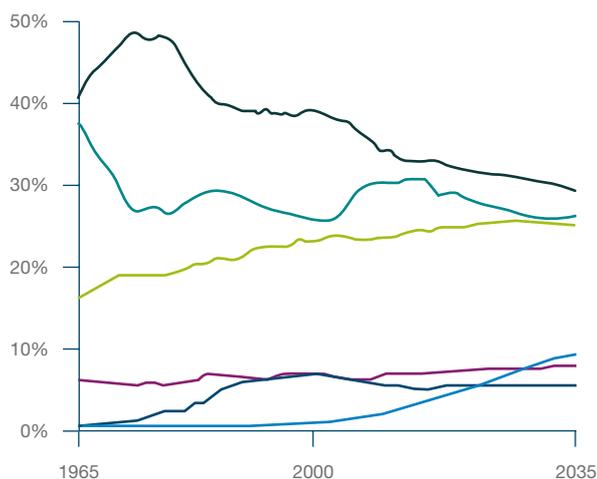


Overall BP places considerable emphasis on improvements in energy intensity and efficiency. Although they project emissions growth of 20% by 2035, the fall in energy intensity effectively ‘decouples’ emissions growth from GDP growth⁵.

However, BP alongside its peers, model on the basis of expected macro-economic indicators. To constrain emissions within a two degree scenario requires an unprecedented pace of transition, which the scenarios do not model.

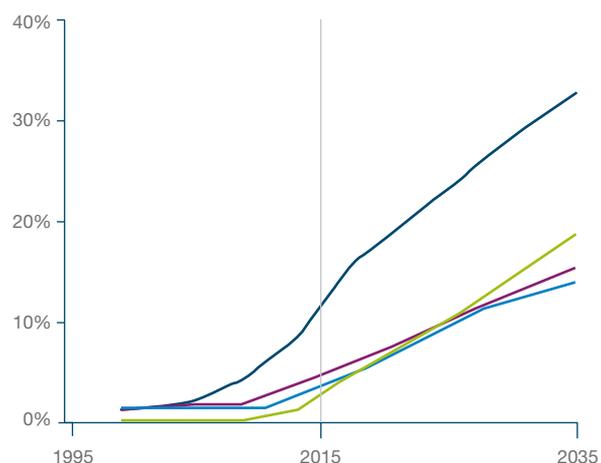
The US supermajor, ExxonMobil provides an energy outlook to 2040 whereby 80% of global demand will be met by coal and oil as far out as 2040⁶. Exxon sees emissions peaking in the 2030s before falling back due to energy efficiency gains⁷. Coal, in Exxon’s projections, will supply 30% of need in the 2040s compared to 40% in 2014⁸.

SHARES OF PRIMARY ENERGY



*includes biofuels
Source: BP

RENEWABLES SHARE OF POWER GENERATION



Source: BP

The current scenario projects no electric revolution in vehicle transportation as late as 2040, with traditional petroleum gas products accounting for two-thirds of supply⁹. For Exxon oil remains the world’s primary feedstock fuel almost to the mid-century point; essentially as far as transport is concerned, Exxon poses a ‘no-change’ scenario and only a moderate change scenario as regards industrial demand.

5. ibid BP

6. ExxonMobil ‘Outlook for Energy: Journey to 2040’ www.exxonmobil.com

7. ibid ExxonMobil

8. ibid ExxonMobil

9. ibid ExxonMobil

ALTERNATIVE VIEWS

French energy major, Total, is the only significant transnational oil player so far to break ranks with its peers.

Gas will form up to 60% of Total's energy mix by 2035, with a progressive move away from oil¹⁰. Remarkably, Total is almost alone in positing a strong 'transition scenario' in which it moves broadly towards gas and renewables as its core business, already becoming the world's second largest solar player by revenue, with 6GW of installed power and 1.3GW in production. Investing in solar and biomass, Total had ceased all coal based operations by the close of 2016.

will come from the strong increase in renewables generation, rather than adaptation or falling energy intensity as posed by BP and Exxon.

For the IEA, the world's 'carbon budget' is shrinking rapidly. This is usually defined as the volume of permissible greenhouse gas emissions allowable to keep global warming to within two degrees of pre-industrial warming. Without affirmative action, the world will face climate catastrophe by 2040 as the 'budget' runs out. It also makes the point that impact must be measured across the total demand side – power, transport and residential – if the two degree scenario is to be met.

WORLD'S REMAINING CARBON BUDGET Source: IEA

Today — 2020 — 2025 — 2030 — 2035 — 2040



The IEA (International Energy Agency) has an interesting view on the energy paradox. It projects falling cost as a key driver in renewables growth, with both oil and gas becoming less competitive over time. In the IEA's view, renewables will account for 50% of additional global generation by 2040 – a view diametrically at odds with Exxon¹¹. Renewables will overtake coal in global generation as early as 2030 owing to incentives and public policy decisions¹². For the IEA, decoupling of emissions from growth

The IEA therefore buys into the concept that transition, rather than mitigation and adaptation will increasingly drive decision making and investment in the period to 2035.

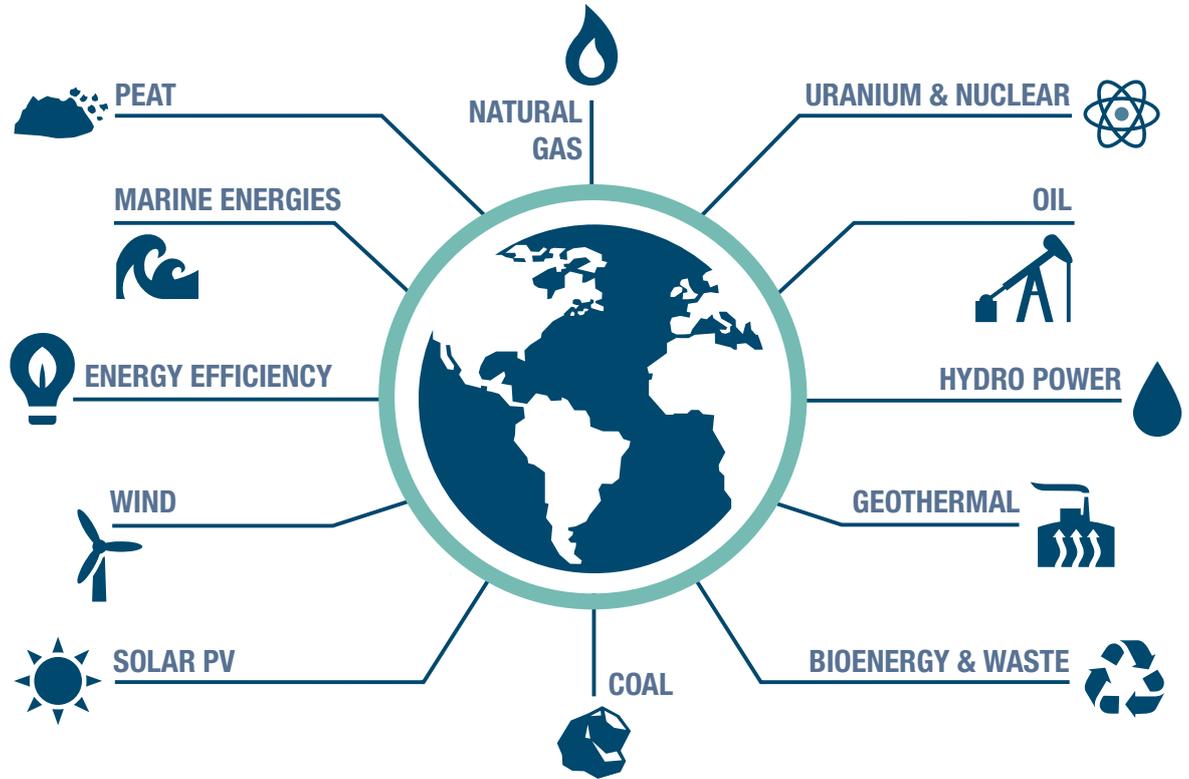
“We cannot claim to be providing solutions to climate change while continuing to produce or market coal, the fossil fuel that emits more greenhouse gas than any other.”

Patrick Pouyanné, Chairman and Chief Executive Total SA

10. Total www.total.com
11. *ibid* IEA
12. *ibid* IEA

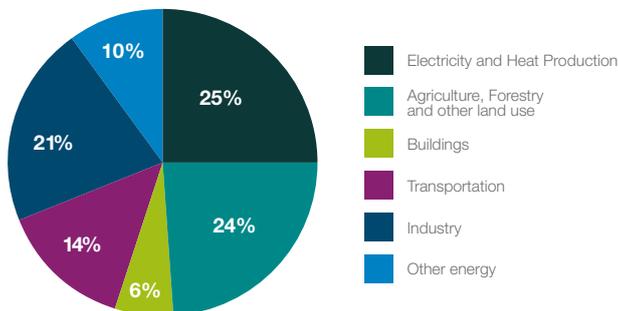
RELATIVE ENERGY INTENSITY OF ENERGY SOURCES

The modern world has a range of options from which energy can be generated.



Power generation accounts for roughly 25% of global GHG emissions, with agriculture, forestry and land accounting for 24%, industry 21%, and transport 14%¹³

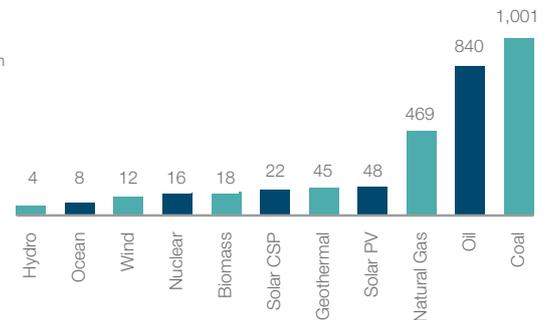
GLOBAL GREENHOUSE GAS EMISSIONS BY ECONOMIC SECTOR



Source: US Environment Protection Agency

THE CARBON INTENSITY OF ELECTRICITY GENERATION

(All figures in g CO₂e/kwh)



Source: IPCC

Growth in the demand for electricity is projected to increase by 43% over two decades¹⁴ – squaring this projected growth with containing emissions is in essence the ‘energy paradox’. All studies show lignite and coal to have the highest GHG emissions intensity, with gas widely viewed as a preferable ‘transition’ fuel. Nuclear, biomass and renewables all have significantly lower GHG intensity, with nuclear on a ‘lifecycle basis’ preferable to gas over time.

13. US Environment Protection Agency www.epa.gov

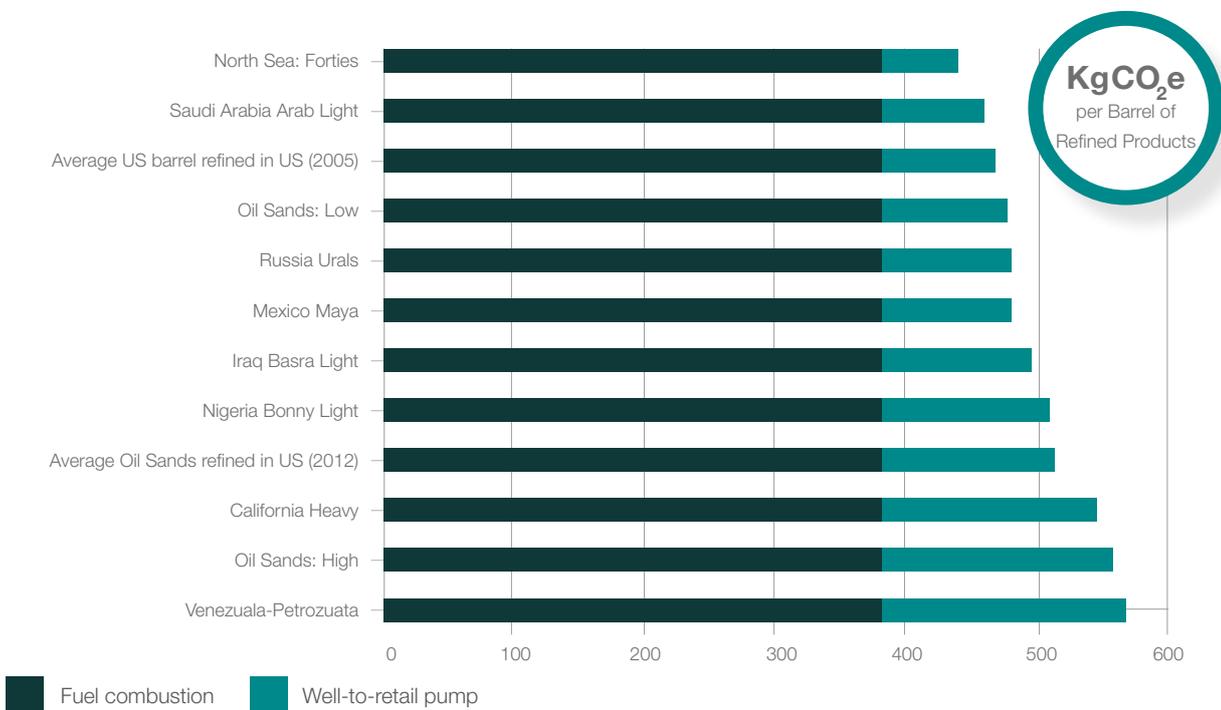
14. *ibid* IEA

A NOTE ON OIL SANDS

Oil sands comprise heavy, bitumen based deposits and are highly energy intensive in terms of extraction and production.

Whilst present in many territories, they have been extracted principally in Alberta, Canada which holds around 70% of total reserves¹⁵. In Canada, deposits are

either shallow enough to be mined in open-cast fashion or are extracted via Steam Assisted Gravity Drainage (SAGD) method whereby bitumen is softened via the steam injection at depth. The latter method is water and energy intensive, whilst shallow open-cast mining has led to wide-scale environmental despoliation.



Source: Natural Resources Canada, Government of Canada

On a life-cycle basis, Albertan oil sands (also known as ‘tar sands’) emit more carbon than Brent crude¹⁶. Analysis suggests Canadian oil sands are between 8-24% higher in carbon intensity than conventional, lighter crudes¹⁷. Although Canada has set ambitious emission

reduction targets, the sector remains a ‘climate outlier’. Many of the world’s largest oil and energy companies have (or had) oil sands in their inventory including BP, Shell, Statoil and Total, however these have come under considerable economic pressure as oil prices declined.

15. See Natural Resources Canada quoting IHS Cera April 2011 Special Report

16. Ibid Natural Resources Canada

17. US Department of Energy Argonne National Laboratory study quoted at www.phys.org

STRANDED ASSETS THEORY

Stranded Assets Theory is associated with the concept of premature or unexpected write-offs or revaluation of assets.

In 2010, the Cancun Agreement presented the idea of a 'carbon budget' to remain within the two degree scenario. The 'budget' represents a fraction of the embedded carbon that exists in the unexploited inventories of major energy companies. 80% of the total calculated embedded carbon must remain unburnt so the theory goes, leading to the concept of the assets being devalued and becoming 'stranded'. For investors, the theory points to future risk should companies fail to transition and diversify away from a pure fossil fuel model as outlined earlier in the Insight assuming they will not be allowed fully to exploit their reserves.

Climate think-tank Carbon Tracker, has gone further by suggesting that much of the implied capital spend to replace reserves will be misspent as much of the carbon cannot be burned. Their analysis of expected capital spend by the oil supermajors suggests that as much as \$357bn (or 65%) is dedicated to high cost projects that may never make a return¹⁸. For instance 40-62% of BP's proposed production capex between now and 2025 requires an oil price in excess of \$75bbl to make a return. Exxon, Shell and Total are in a similar range¹⁹.

All long-term energy scenarios, as we have seen, project only modest challenges to their historic narrative. A carbon budget model suggests this 'business as usual' approach may be illusory with up to 80% of assets becoming stranded as the world transitions away from fossil fuels. The carbon budget model is explicitly rejected by the energy sector, which maintains efficiency will drive lower emissions without challenging the essential near century long hegemony of hydrocarbons.

According to the World Energy Outlook, total current reserves, if exploited would represent over three degrees of warming. Current capex plans suggest up to \$6.7 trillion could be invested in unburnable assets given their business models are focused on reserve

“**Capital spent on finding and developing more reserves is largely wasted ... the top 200 oil and gas companies have allocated up to \$674bn in the last year for finding and developing more reserves ... much of this risks being wasted.**”

CARBON TRACKER

replacement²⁰. A further indicator is the potential effect on markets – the London and Moscow exchanges for instance are particularly skewed towards oil and energy, with London the world's largest stock exchange for potential emissions arising from coal.

18. Carbon Tracker Oil & Gas Majors Fact Sheets www.carbontracker.org

19. *ibid* Carbon Tracker

20. IEA World Energy Outlook www.iea.org

FOSSIL FUEL DIVESTMENT

The concept of a carbon budget and the resulting stranded assets theory has focused investor concerns.

Over half of our 2015 client enquiries related to climate change, fossil fuel divestment and fossil fuel free portfolios. We responded by publishing an SRI Expert Brief, looking at Fossil Fuel Divestment. The campaign has attracted strong support among colleges and church groups as

well as, for instance, the Guardian's *'Keep it in the Ground'* Campaign.

Whilst at a simplistic level divestment from coal and oil reserves redirects capital away from hydrocarbon production, it leaves open to question significant contributors to climate change outside of these core sectors, e.g. airlines, car manufacturers, power generation, steel making and chemicals.

“The potential financial risks attaching to Climate Intensive Assets ... are of such a nature and magnitude that they should at least be considered and assessed by any prudent charity trustee

Christopher McCall QC



Nevertheless we do view embedded carbon as an inherent and material risk to portfolios and in another part of this Insight we will look at how we have approached the subject and the course of action taken.

We note too, the concerns clients rightly have about climate change and the potential responsibilities of Trustees for instance to ensure

climate risk is taken into account. This view was supported by a ground-breaking legal opinion in 2016 that concluded that investment in climate intensive assets is likely to be irreconcilable for environmental, health and poverty related charities, and potentially incompatible for others where the consequences of climate change may lead to the erosion or 'stranding' of assets over time.

CLIMATE & INVESTMENT

2016 was the first year in human history that atmospheric carbon exceeded 400ppm for every month of the year. 2013 was the last year in which carbon was measured at below 400ppm for the entire year²¹.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	402.52	404.04	404.83	407.42	407.70	406.81	404.39	402.25	401.03	401.57	403.53	404.48
2015	399.98	400.28	410.54	403.28	403.96	402.80	401.31	398.93	397.63	398.29	400.16	401.85
2014	397.85	398.01	399.77	401.38	401.78	401.25	399.10	397.03	395.38	396.03	397.28	398.91
2013	395.55	396.80	397.43	398.41	399.78	398.61	397.32	395.20	393.45	393.70	395.16	396.84
2012	393.12	393.86	394.40	396.18	396.74	395.71	394.36	392.39	391.11	391.05	392.98	394.34

Source: US department of Commerce, National Oceans and Atmospheric Administration

The average concentration of atmospheric carbon has risen from 316ppm in 1959, the first complete year of measurement and overall represents a 40% increase since pre-industrial times when the average concentration was assessed as 280ppm (1750-1850)²².



The impact of warming can already be seen in rising sea levels, the contraction of Arctic sea ice (13% reduction since the 1970s²³), the increasing prevalence of extreme weather events and ocean acidity affecting marine ecology. All current scenarios are modelled to keep atmospheric carbon below 450ppm (two degrees), the level at which 'catastrophic climate change' is widely believed to be irreversible. Global average temperatures are already 1.46°C above pre-industrial averages²⁴.

21. US Department of Commerce National Oceanic & Atmospheric Administration (Mauna Loa Hawaii CO₂ record)

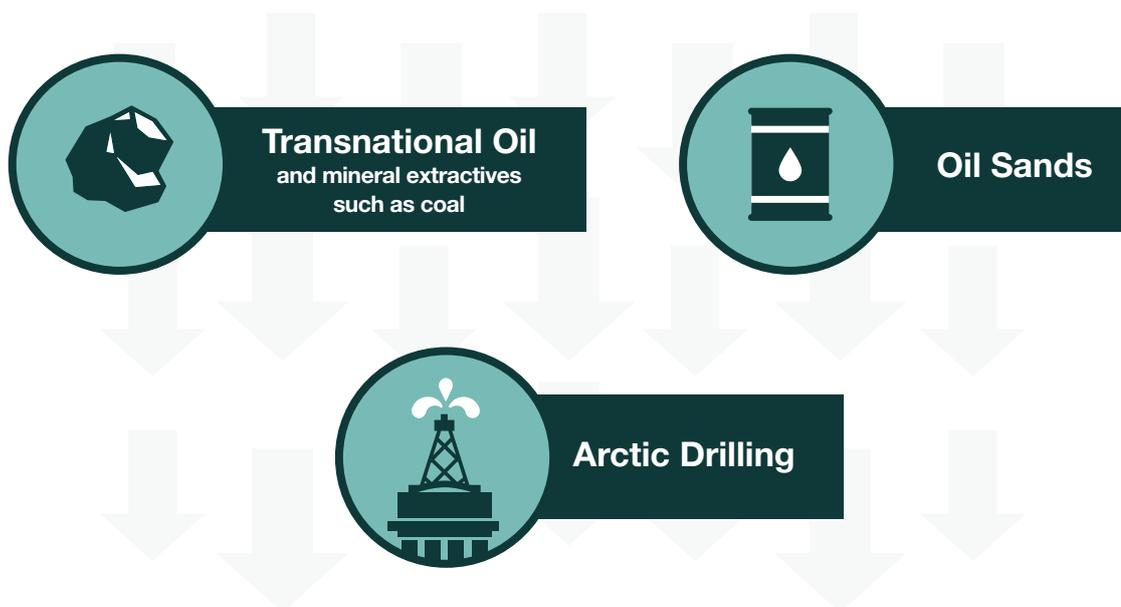
22. CDIAC (Carbon Dioxide Information Analysis Center); US Department of Energy www.cdiac.ornl.gov

23. NSIDC (National Snow & ice Data Center (University of Colorado) www.nsidc.org

24. Scientific American 20 April 2016 www.scientificamerican.com

CLIMATE & INVESTMENT

In our view the long-term effects of climate change will have a material impact on society and business. The Amity process leans positively towards portfolios being lower carbon in that they already avoid:



Recognising climate as an emerging long-term investment risk, we decided to commission portfolio carbon footprints of our Amity equity funds.

We engaged Swiss based South Pole Group, a climate consultancy, to conduct the footprints over the Summer of 2016, using – as far as possible – published data and focusing on Scope I (direct emissions) and Scope II (bought energy) emissions.

EARLY RESULTS HAVE BEEN PROMISING:

AMITY EUROPEAN	23% less carbon intensive than the FTSE European Ex-UK Index
AMITY GLOBAL EQUITY INCOME	22% less carbon intensive than the FTSE World Index
AMITY INTERNATIONAL	7% less carbon intensive than the FTSE World Index
AMITY UK	58% less carbon intensive than the FTSE All Share Index

Source: EdenTree

Each Fund performed well at stock level, suggesting that even within high-impact sectors (such as utilities) good stock picking can result in overall lower carbon intensity within the portfolios.

The exercise revealed significant concentration risk in the Amity European Fund where the 10 largest contributors to the Fund's emissions represented 81.5% of total emissions (compared to 57% for the Amity UK Fund²⁵). The Amity International Fund's footprint, with its long-term investment bias towards Asia was based on just 59% disclosed data compared to 78% for the Amity UK Fund, showing just how much work is needed to encourage Asian companies to disclose their emissions data – there is currently not that much out there!²⁶ Each equity Fund as a result is now labelled a 'climate transparent investment'. With their specific sector and stock carbon risk analysis, the results provide an additional tool for Fund Managers in portfolio construction,

and it has focused our engagement on the most significant contributors to each Fund's emissions; so far we have engaged intensively with 28 companies across the four Funds. More information on the specific results of each footprint can be found on the EdenTree website where a special 'carbon footprint' section has been constructed. This is in compliance with our signing the **Montréal Pledge**, a UN initiative encouraging transparency in reporting of investment portfolio carbon emissions.

It is our intention to carry out a similar exercise for our Fixed Interest Fund, the Amity Sterling Bond Fund, however the methodology is slightly different as corporate and sovereign debt do not so easily correlate to emissions per se. However we are working with South Pole Group to devise a portfolio footprint that can provide meaningful results for our portfolio manager and as a means to further engagement.

Signatory of:
PRII Montréal PLEDGE
Principles for Responsible Investment



25. Amity UK and Amity European Carbon Footprints 2016 www.edentreeim.com

26. Amity International Carbon Footprint 2016 www.edentreeim.com

FOCUS: FRACKING

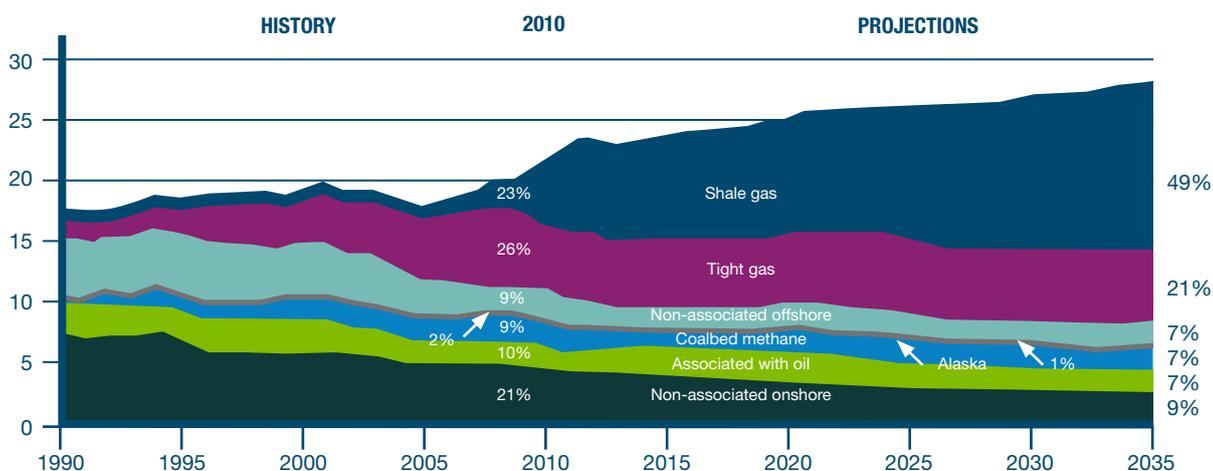
In October 2013, we published our Amity Insight ‘Fracking Shale: The Challenges and Opportunities’,

in which we explored the prospects for this dynamic energy source and the challenges it posed in respect of the environmental and social impacts. In this Focus we provide an update and our views on the sector three years on.

Shale Gas, Tight Gas and Coal Bed Methane are natural gases that are trapped in sedimentary shale formations. These unconventional resources can be released via ‘hydraulic fracturing’ or Fracking, whereby horizontal drilling and the injection at high pressure of water, sand and chemicals acts to release the gas. The shale gas revolution has largely seen the US become self-sufficient in natural gas reserves, and a net exporter for the first time. The US Energy Information Administration (EIA) predicts shale making up nearly half of all US natural gas production by 2035, whereas it represented just 16% in 2009²⁷.

Over \$2 trillion in capex investment is forecast between now and the 2030s²⁸. Given the US has sufficient exploitable reserves for a century, this has been a catalyst for a strong ramping up in production – a 17 fold increase in production in just a decade²⁹. Whilst there is the risk of over-supply (18,000-29,000 miles of new shale pipeline are forecast to be laid by 2035³⁰), the dynamics of US shale remain attractive and include, falling cost of production, supportive geology, improved technology allowing drilling at greater depth, the attractive cost of capital and easy access to land.

U.S. DRY GAS PRODUCTION TRILLION CUBIC FEET PER YEAR



Source: EIA, Annual Energy Outlook 2012 Early Release

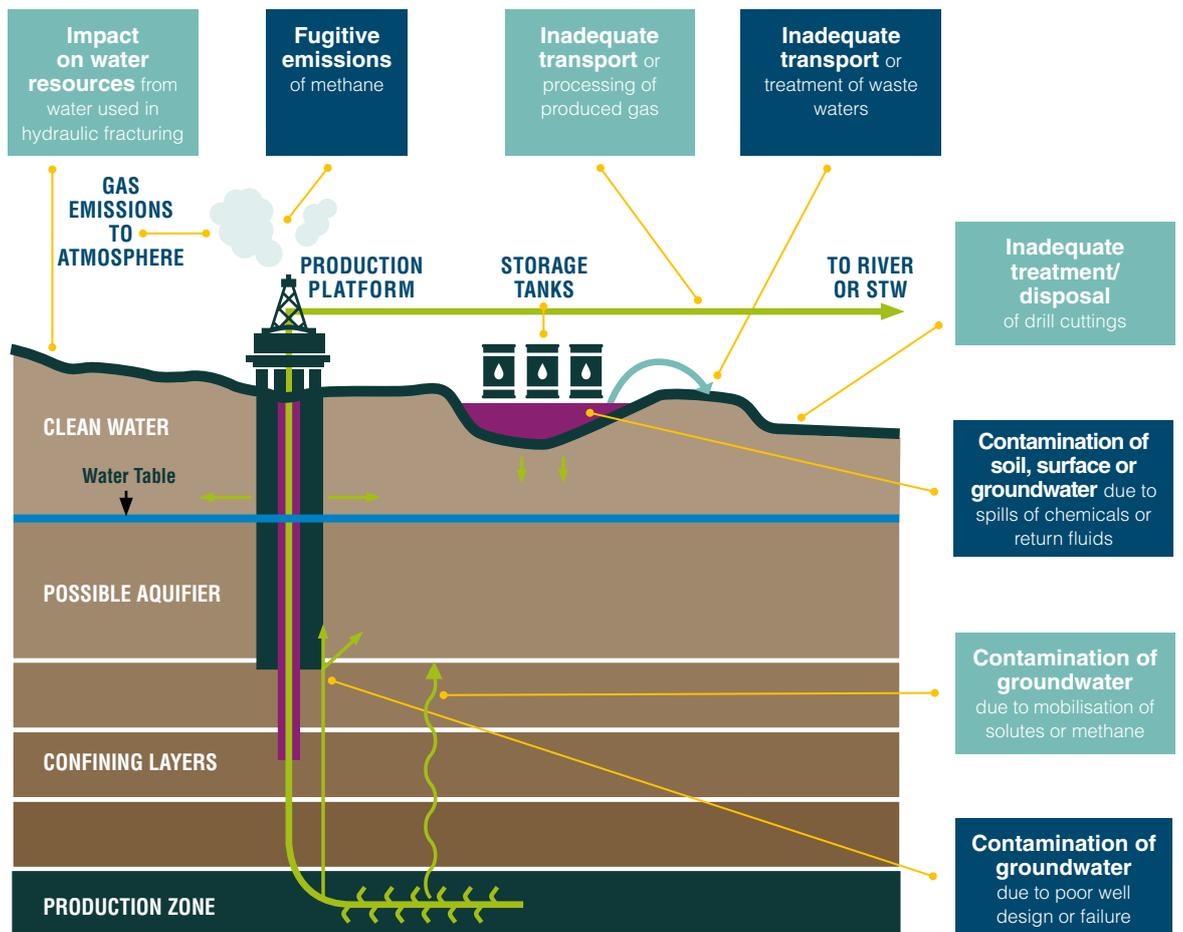
27. US Department of Energy www.energy.gov and EIA
 28. US Energy Information Administration www.eia.gov
 29. *ibid* EIA
 30. *ibid* EIA

In Europe, conversely, the situation is very different. With regulation and approval left to EU member states, many jurisdictions have imposed a moratorium (Germany, Netherlands) or an outright ban (France).

The expectations for UK shale remain overdone in our view. Despite licenses having been awarded, public opposition, the challenge of land access, and dense populations make widescale exploitation a challenge. Whilst the British Geological Survey estimates total shale reserves in the UK to be in excess of 17,000bm³ – only a fraction of that is thought to be commercially exploitable³¹.

Fracking therefore remains a largely US (and potentially Chinese and Russian) phenomenon. The related risks in terms of water use, emissions, induced seismicity, potential spills and effects on biodiversity cannot be ignored. We therefore remain cautious on Fracking in Europe, whilst seeing it as a key contributor to US energy security and export income.

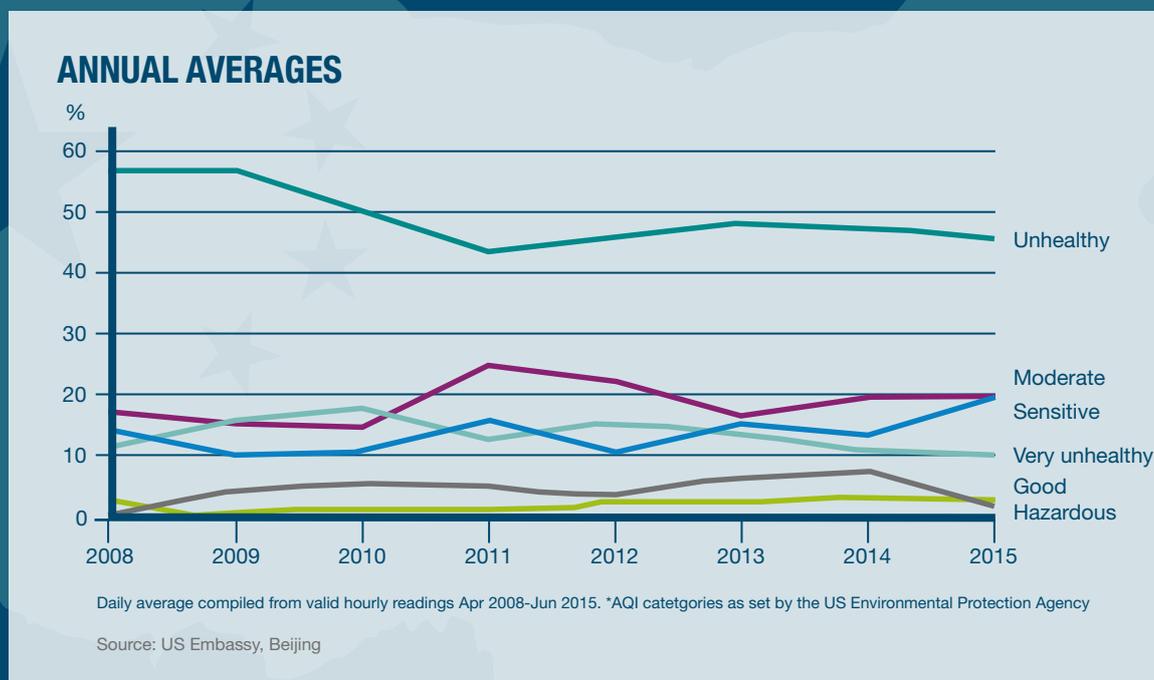
ENVIRONMENTAL RISKS OF SHALE GAS EXTRACTION



31. British Geological Survey www.bgs.ac.uk

FOCUS: CHINA

The Paris climate deal was largely sealed by China and the US – together responsible for 44% of global GHG emissions – agreeing to take part³². China's motivation for doing so was based more on its problem with air pollution than climate science per se. Air pollution is the fourth largest risk to human health with up to 3.5 million deaths per annum³³. The majority of these fatalities arise from the burning of fossil fuels, and in particular, coal. China and India have the highest per capita deaths from air pollution in the world³⁴. Hazardous air quality is therefore driving change; between 2008 and 2015 daily air quality in Beijing was measured as 'unhealthy' to hazardous' 67% of the time'; in only 2% of occasions in that entire period was air quality measured as 'good'³⁵.



China has 900GW of installed coal power and is still building two new plants a week³⁶. A further 200GW is under construction and a further 150GW at planning stage³⁷. Generous subsidies have encouraged over capacity, with perhaps up to 300 plants newly built that it does not need. Over 70% of installed capacity comes from coal, consuming 4.2bn tonnes in 2013 as the largest producer and consumer of coal in the world³⁸. China embodies the 'energy paradox' more starkly than anywhere!

China pledged at Paris that its emissions will peak in 2030 before falling strongly; its CO₂ emissions are currently 33.8% higher per unit of GDP than in 2005, whilst the share of non-fossil fuels used in primary energy generation stands at just 11%, and this mostly comes from hydropower³⁹. China's motivation at Paris, given it is the world's single largest contributor to GHG emissions is to reforest, build alternative infrastructure and reduce its long-term dependency on coal.

32. *ibid* EPA

33. *ibid* IEA Special Report

34. 'What is China doing to tackle its air pollution' BBC 20 January 2016 www.bbc.co.uk

35. IEA 'The potential for equipping China's existing coal fleet with CCS'; Insight Series 2016 www.iea.org

36. *ibid* IEA Insight Series

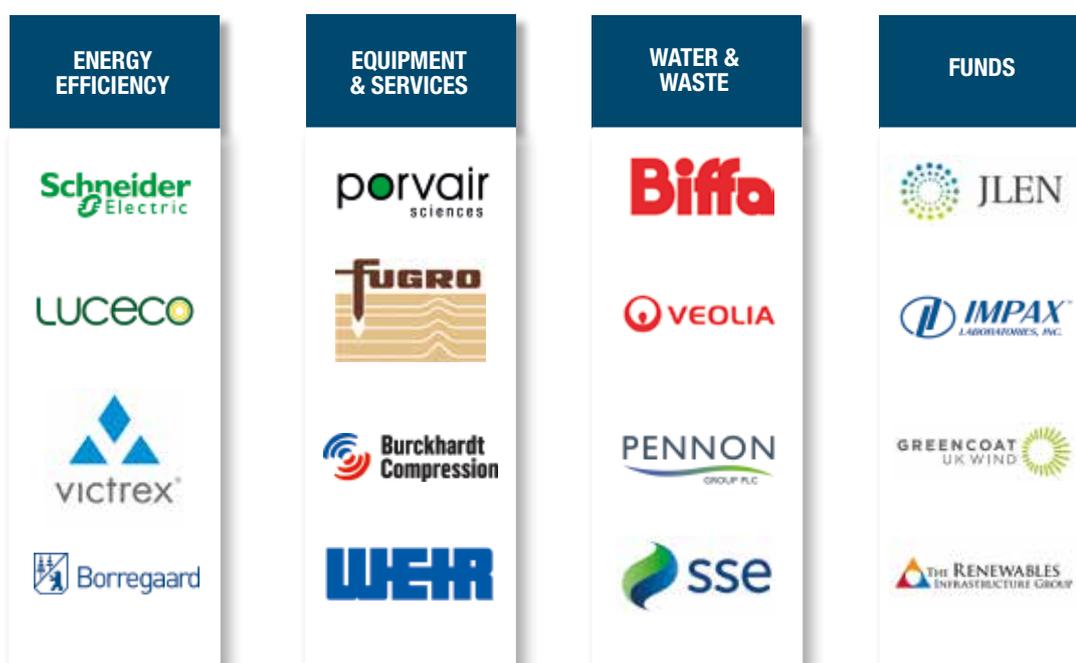
37. IEA China and the role of coal www.iea.org

38. China NDC (Nationally Determined Contribution) submitted www.unfccc.int

39. US Department of Energy www.energy.gov and EIA

INVESTMENT VALUE CHAIN

As 'carbon aware' Funds, managers are able to use the portfolio footprint data to understand the impact of climate change on their Funds. Whilst the outcome is not principally about divestment, the results allow us to tailor engagement and to make judgements on company progress. In screening potential new investments, carbon in the round is taken into account in high-impact sectors. Additionally, in keeping with the Funds commitment to screen each holding positively, we look for companies that are making a positive contribution to climate change in terms of technology or energy efficiency. Part of our Investment Value Chain is shown below:



Source: EdenTree

CONCLUSION

EdenTree seeks to be a leader in understanding climate resilience as it relates to investment. During 2016 we have built considerable momentum in understanding the carbon impact for our clients, positioning the Amity range of Funds as 'carbon aware' and 'climate transparent'. Our aim therefore is to position the Funds as attractive to clients seeking low carbon investments, whilst using the data internally to interrogate carbon resilience and to seek to understand where impact is likely to be felt most acutely.

We intend to maintain our long-standing avoidance of transnational oil and extractives, as well as oil sands and Arctic drilling. Via the Institutional Investors Group on Climate Change (IIGCC), we will make our voice heard in the public policy arena where we collaborate with like-minded investors, and we will continue to provide clients with informed communication via our Montréal Pledge disclosure on the carbon profile of each Fund. We will engage with the highest emitters in the Fund on their process and performance for reducing carbon intensity, and we will consider carbon in the round in high-impact sectors such as generation by ensuring exposure to coal is low and reducing.

VIEW FROM THE TOP

In this Insight, we have reviewed the various scenarios for world energy demand and also outlined our views on fracking, stranded assets and fossil fuel divestment. The relationship between capital and climate change is well and truly at the top of both the economic and political agenda globally. The energy sector has a pivotal role to play in meeting the challenge of a rising demand for energy in a two degree carbon constrained world. The climate change agreement in Paris marks the starting point and not the end of how stakeholders will address the future energy needs of over 9 billion people whilst developing an effective response to climate change. Long-term energy outlooks continue to highlight the deeply entrenched position of fossil fuels. Whilst renewable energy sources are making meaningful strides towards the transition away from oil, gas and coal, the world's carbon budget remains highly stressed and reliant of incentives to effect a swift transition to lower carbon sources.

For investors keen to be at the heart of capital re-allocation decisions in combating climate change, we have highlighted four core areas – energy efficiency, equipment & services, waste & water and specialist funds where we continue to see a deep and broad value chain to invest in, both in the UK and overseas. The Amity range of equity funds in having a carbon footprint commissioned, allows investors to gauge the direction of travel towards delivering on a low carbon future. In addition, it provides us with a valuable insight into identifying companies that are at the forefront of responding to climate change and more importantly those laggard companies which we can engage with directly on the issue.



Ketan Patel CFA
Fund Manager

OUR PEOPLE



Sue Round

Director of Group Investments and Senior Fund Manager

Sue is the UK's longest-serving retail SRI Fund Manager. She launched the Amity UK Fund 28 years ago – pioneering our Profit with Principles investment approach. She is also AA rated by Citywire as of June 2016.



Neville White

Head of SRI Policy and Research

Neville is in charge of our Socially Responsible Investing team. His extensive experience includes being responsible for managing global corporate governance proxy voting for CCLA Investment Management.



Rob Hepworth

Chief Investment Officer and Senior Fund Manager

Rob has previously been voted Investment Week's Fund Manager of the Year and has been recognised as one of Citywire's top 10 Fund Managers of the past decade. This places him in the top 10% of all UK Unit Trust and OEIC Managers.



Esmé van Herwijnen

SRI Analyst

Esmé holds a Master's degree in Sustainable Business from Toulouse Business School and gained experience in ESG research from Sustainalytics and PIRC. She supports our SRI team with company screening, proxy voting and engagement.



Chris Hiorns CFA

Fund Manager

Chris has worked at EdenTree since 1996. He started as a Graduate Trainee and worked as an Investment Analyst before being appointed as the Fund Manager for the Amity European Fund in 2007 and the Amity Sterling Bond Fund in 2008.



Ketan Patel CFA

Fund Manager

Ketan began his career on the equity derivatives trading desk at JP Morgan. He holds an undergraduate degree in History & Geography and postgraduate degrees in Geography and Economics from the University of London and is a CFA Charterholder.



David Osfield CFA

Fund Manager

David joined EdenTree in 2016 as co-manager of the Amity International Fund alongside CIO Rob Hepworth after 14 years at Alliance Trust covering global equities. David has a 1st Class BA(Hons) in Business Finance from Durham University and is a CFA charterholder.



Phil Harris

Fund Manager

With over 25 years' experience in UK small and mid-cap company sectors, Phil joined EdenTree in 2015 to run the UK Equity Growth Fund. He focuses on growth small-caps and previously specialised in corporate activism.

CONTACT

How to contact us

We hope you have found this Amity Insight interesting and useful. If you have any questions, or would like to know more about our responsible investment, in-house research and analysis, please get in touch.

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