EdenTree SRI Expert Briefing

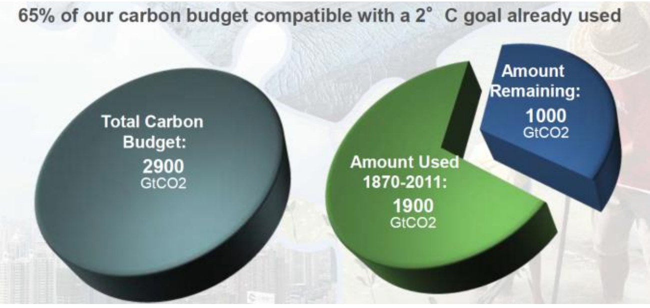
Fossil Fuel Divestment

Introduction

The fossil fuel divestment campaign has captured global attention, with many high-profile institutional investors such as churches and university colleges withdrawing investment from fossil fuels. We are often asked for our views on the campaign and how the Amity Funds are positioned; this SRI Expert Brief seeks to respond to those enquiries.

Q. What lies behind the campaign to divest from fossil fuels?

A. A consensus of scientific opinion agrees that the world is warming and this is largely due to human activity, with global planetary temperatures greater than they have been for 11,000 years. The IPCC (Intergovernmental Panel on Climate Change) has identified a 'carbon budget' above which it would be difficult to avoid the worst effects of climate change. This has been defined as remaining within 2^{o} of pre-industrial temperatures or emitting no more than 1,000 GT of carbon. By 2011, scientists estimate that the world had already burnt 65% of this allowable budget emitting 1,900 GT of carbon since 1870[1].



Q. Are we likely to exceed this 'budget' if no action is taken?

A. Yes. It is estimated that 485bn tonnes of emitable carbon remains in the budget to stay within 1½ ^{o} of warming, and although this seems a lot, at the current rate of exploitation, the budget will be fully extinguished by 2045 if emission rates continue unabated[2].

Q. What are the presumed consequences of exceeding the 2^{o} limit?

A. Scientists predict dramatic climate related consequences if emissions continue unabated. Sea levels could rise by over 1 metre as melting of the polar ice sheets accelerates; even if the world remains within the 2^{o} limit, sea levels will rise by over 500mm putting low lying communities at risk. The intensity and frequency of catastrophic weather events will accelerate; with each degree of warming, wildfires proliferate, displacing communities and destroying ecology. Conversely elsewhere, heavy precipitation caused by warming will see river levels rise to dangerous and unprecedented levels with a consequent risk of mass flooding. Other consequences will see communities increasingly stressed through drought and water shortages.

Q. The IPCC is therefore quite pessimistic about the consequences?

A. Yes. The IPCC reports every six years, and its 2013 assessment was the bleakest yet. In particular it noted that the observed changes were happening more quickly than expected, with climate change already threatening 1 billion people living in low lying coastal communities. Sea levels rose almost twice as fast between 1993 and 2010 as they did in the century between 1901 and 2010. All future emissions scenarios, including the most hopeful, still predict faster sea level rises than those observed since 1971. The IPCC further observed that the impacts of extreme weather were more frequent and more severe than in any previously observed period, particularly in the case of tropical cyclones[3].

Q. What is predicted to happen on a 'business as usual' basis?

A. Business as usual results in the most pessimistic scenario playing out. With the carbon budget extinguished, temperatures rapidly accelerate to beyond 4^{O} the point at which climate change is deemed irreversible. This is the limit set by the UN National Framework Convention on Climate Change as the point where 'human interference' with the climate becomes 'dangerous'. This could happen before 2100.

Q. And this is influencing the fossil fuel divestment campaign?

A. The publishing of a carbon budget has thrown into relief the concept that if the world is to remain within 2^{O} the heaviest emitters of carbon dioxide – coal, oil and gas – will not be able to exploit and burn their fossil fuel inventories. Carbon emissions associated with the known reserves of coal, oil and gas are far in excess of 1 trillion tonnes; roughly 75% must remain in the ground in order to stay within the carbon budget[4]. From this has developed the concept of 'stranded assets', i.e. assets that will incur premature write-down and a collapse in value because they cannot be exploited.

Q. Has the divestment campaign made a difference?

A. It is having a material impact on thinking and in stigmatising coal as the heaviest contributor to global warming. The divestment campaign was launched in 2012 by www.350.org a NGO committed to building a global climate movement (the name 350 comes from how much atmospheric carbon must be reduced to – currently standing at 400ppm [parts per million]). Since its launch, 180 institutions have pledged to withdraw investment from fossil fuels representing $50bn in assets[5]. The campaign has achieved particular traction among faith investors, local authorities and education establishments such as US and European universities. The Quakers, Church of Sweden and Rockefeller Institute are three high-profile divesting bodies, whilst denominations such as the Church of England and the Methodist Church in the UK have announced they will withdraw from some thermal coal assets and from tar sands. The Smith School has estimated that between 2-4% of university endowment assets are invested directly in fossil fuels and approximately 2-5% of pension funds[6]. In the UK, *The Guardian* newspaper has run a 'keep it in the ground' campaign, targeting two very large charities encouraging them to divest: The Wellcome Foundation and the Bill & Melinda Gates Foundation.

Q. Why is there a strong focus on thermal coal and oil sands?

A. All fuel sources except renewables have a climate change impact and intensity in the form of greenhouse gas (GHG) emissions. Different fuels emit different amounts of carbon dioxide in relation to the energy produced when combusted. Thermal coal (anthracite, bituminous or lignite) emits the most carbon per MWh of energy produced (414kg) and compares unfavourably to gas (227kg), LPG (259kg). Oil has a mid-way impact of 314kg per MWh of energy produced. Bio-mass, including wood pellets, chips or straw have a vastly reduced impact, producing average emissions in the range of 7-91kg per MWh of electricity generated. Electricity generation plants such as Drax have retrofitted plant in order to burn bio-mass in order to reduce coal-based emissions[7].

Q. How are the energy companies responding?

A. The major oil companies do engage with the subject of climate change, with published energy scenarios that look at future energy needs. **BP's** 'Energy Outlook 2035' projects strong rising energy consumption and little real fall in the demand for coal over the period to 2035. Under BP's predictions, coal will still account for around 25% of supply by

2035, although it moots gas as being the fastest growing fossil fuel over that period with a commensurate rapid growth in renewables. Overall according to BP, fossil fuels will continue to meet two thirds of the increase in energy demand out to 2035 and up to 80% of supply.

Royal Dutch Shell in its 2050 scenario predicts that renewables could account for a third of primary energy supply by 2050 with fossil fuels still accounting for 60%. Under its 'scramble' scenario in which governments 'scramble' to secure their own energy supplies, a flight into coal pushes atmospheric carbon above 550ppm by 2050. This is clearly not sustainable, and their 'Blueprint' scenario in which collaborative new models of technology emerge suggests that by 2050 the contribution of fossil fuels make to global consumption could be significantly reduced[8].

Both companies recognise that unlimited exploitation of fossil fuels is incompatible with remaining within a 2^{o} warming limit. However, they rely on mitigation, technology and adaptation to reduce overall emissions impacts over the next two to three decades rather than a comprehensive transition to a low carbon energy environment away from fossil fuel exploitation. The Amity Funds exclude all of the major energy companies on a range of 'positive criteria' grounds including environmental risk, human rights, health & safety and climate change.

Q. Surely the definition of fossil fuels is wider than just coal and oil?

A. Yes, although for the purposes of fossil fuel divestment, the definition of fossil fuels appears to be linked in the main to thermal coal (used in electricity generation), oil exploration and production and oil sands. The modern world relies heavily and exclusively on fossil fuels for production, energy and transport. We support investment and innovation that will help transition away from fossil fuels towards low carbon alternatives in order to meet the 2^{o} target. However, realistically, this is not an easy task, and for the foreseeable future fossil fuels will be at the heart of the means of production (e.g. steel manufacture, plastics and lubricants), mobility (aviation, shipping and automobiles) and energy generation in the developed, and especially in the developing world.

Q. What is the Amity Funds' position regarding investing in fossil fuels?

A. The Amity Funds have adopted a policy of not investing in companies that have a material exposure to oil sands or Arctic drilling. Although we do not apply a negative screen against fossil fuels, we have no mining and very little oil in the Funds, as they fail to screen persuasively against our environmental and human rights positive pillars. We can and do invest in companies where the principal fuel source is gas, viewing this to be a 'transition' fuel that has a markedly lower climate change impact than either coal or oil. The Funds, where there is a compelling investment case, do invest in companies developing clean technologies or renewable energy. Overall we believe the Amity Funds are well positioned for clients who would prefer a lower weighting or exposure to fossil fuels.

The EdenTree SRI Team

We have a specialist in-house Socially Responsible Investment (SRI) team who carry out thematic and stock-specific research to identify ethically responsible investment ideas for our range of **Amity Funds**. Headed up by our Senior Investment Analyst Ketan Patel, CFA, and Neville White, Head of SRI Policy & Research, the team is also responsible for creating an on-going dialogue with companies, allowing us to engage on a wide variety of ethical and socially responsible investment concerns. For investors, it's an added layer of assurance that client money is being invested in companies that are operating in a responsible and sustainable way. Our ethical and responsible investment process is overseen by an independent Amity Panel that meets three times a year, and comprises industry and business experts, appointed for their specialist knowledge.

This information is for investment professional only and should not be relied upon by private investors.

EdenTree - Ethical Investment Specialist

Since launching the **Amity UK Fund** in 1988, EdenTree has taken a leadership role in managing ethical investments through our research, engagement and strong fund performance. Consequently, we were delighted to receive the Moneyfacts Award for Best Ethical Investment Provider 2015, the seventh consecutive year of winning this award. We were particularly pleased to win as it is voted for by the Adviser community. In 2013, the **Amity UK Fund** was rated 'Highly Commended' in the Investment Week Climate Change and Ethical Investment Awards. We were also awarded Money Observer Best Ethical-SRI Bond Fund for the **Amity Sterling Bond Fund**; the **Amity UK Fund** won Best Equity Fund in the 2014 Money Observer Ethical/SRI category, and we were nominated for an award in the category of Best Thought Leadership Paper on Sustainable Investing, in the Investment Week Sustainable Investment Awards 2014. Today we offer six SRI funds under our Amity brand, four retail funds and two for charity investors, covering the major markets and investment classes.

Further information

For further information on EdenTree's SRI range of Amity Funds please contact your EdenTree Business Development Manager, visit www.edentreeim.com or call our IFA support team on 0800 011 3821.

Notes:
1 IPCC Fifth Assessment Report 2014 www.ipcc.ch
2 World Resources Institute www.wri.org
3IPCC ibid
4 WRI ibid
5 NGO 350.org www.350.org
6 Smith School of Enterprise and The Environment: Stranded Assets Programme www.smithschool.ox.ac.uk
7 Quoted by Biomass Energy Centre www.biomassenergycentre.org.uk
8 All figures BP (Energy Outlook 2035) www.bp.com or Shell (Shell Energy Scenario) www.shell.com

Glossary:
GT – Giga-tonnes - a unit of measurement used by the IPCC; one billion tonnes or 1 trillion kilograms
NGO – Non-Governmental Organisation
LPG – Liquid Petroleum Gas
MWh – Megawatt Hour – unit of energy equivalent to 1m Watts produced per hour
PPM – amount of atmospheric carbon present defined as parts per million; 350ppm is the upper safety limit for atmospheric carbon dioxide