

Fossil free B&NES – presentation to Avon Pension Fund - 18th March – David Searby

Ladies and gentlemen, thank you for this opportunity to address the committee

Fossil Free B&NES maintains that there is a strong case for APF to divest from fossil fuels on financial as well as moral grounds.

As the concepts of climate risk, the ‘carbon bubble’ and ‘stranded assets’ become more widely understood and fossil-free funds can be shown to outperform more conventional ones, the perception that fossil fuel investments are a sound choice for pension funds is being broken.

STRANDED ASSETS

- Pioneering work by the Carbon Tracker Initiative in their ‘**Unburnable Carbon**’ report identified that proven fossil fuel reserves (2,795 gigatons of CO₂) exceed the total carbon budget we are able to burn (565 gigatons) by a factor of 5.
<http://carbontracker.live.kiln.digital/Unburnable-Carbon-2-Web-Version.pdf>
- Because these ‘proven’ reserves have been factored into the share price of the fossil fuel companies already, this represents a serious overvaluing of these companies’ share prices.
- These 80% of ‘unburnable’ fossil fuel reserves run a high risk of becoming a ‘stranded’ or worthless asset and a poor investment.
- The size of this ‘Carbon Bubble’ has been estimated at \$27tr.
- At a speech to Lloyds of London in September last year, the governor of the Bank of England issued a stark warning that investors face “potentially huge” losses from climate change legislation that could make vast reserves of oil, coal and gas “literally unburnable”. He said: “The exposure of UK investors, including insurance companies, to these shifts is potentially huge,”
<http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx>
<http://www.theguardian.com/environment/2015/sep/29/carney-warns-of-risks-from-climate-change-tragedy-of-the-horizon>
- While climate legislation that limits fossil fuel extraction is a considerable driver for stranding these assets, there are economic and physical as well as regulatory factors.
- For example the falling price of oil contrasts with the increasing cost of extraction through more extreme environments or extraction techniques and the rise and rise of renewable energy.
- A report by Carbon Tracker in May 2014 showed that, over the next decade, oil companies could invest \$1.1tr in projects that require market oil prices of \$95/bbl or more to earn a decent return.

COAL

- The coal industry is understood to be in terminal decline, with US coal industry losing 76% of its value in the last 5 years. <http://www.theguardian.com/environment/2015/mar/24/us-coal-sector-in-terminal-decline-financial-analysts-say>
- Wall Street banking giant JPMorgan Chase recently announced that it would avoid financing new coal projects in advanced economies due to their contribution to global warming.
<http://www.nation.co.ke/business/corporates/JPMorgan-to-avoid-financing-coal-projects/-/1954162/3107626/-/ukmb1jz/-/index.html>

OIL AND GAS

- The gas industry is also increasingly under criticism, despite often being framed as the 'safest' of the fossil fuels. This [new report from Carbon Tracker](#) shows that gas prices are likely to stay depressed and in particular there is oversupply of LNG into the European market which is likely to depress the spot price over the next few years.
- A recent report by [Chatham House](#) has also highlighted the high levels of uncertainty in oil investments due to the unknown potential impacts of changing demand and legislation to address climate change. The report stated "As long as the uncertainty over policy prevails, oil is in limbo and investment in it remains risky" <https://www.chathamhouse.org/publication/oil-and-gas-mismatches-finance-investment-and-climate-policy>

PERFORMANCE OF FOSSIL FREE FUNDS

- While historically fossil fuel investments have been highly profitable and considered a safe bet, there is now a significant body of evidence that fossil-free funds are performing much better.
- MSCI, who run global indices used by 6000 pension and hedge funds, found that investors who divested from fossil-fuel equities would have earned an average return of 13% a year since 2010, compared to the 11.8%-a-year return earned by "conventional investors."
https://www.msci.com/resources/factsheets/index_fact_sheet/msci-acwi-ex-fossil-fuels-index-gbp-gross.pdf
- Insurance giant Aviva recently announced plans to invest £500m a year for the next five years in low-carbon infrastructure. <http://www.businessgreen.com/bg/news/2419204/aviva-commits-to-gbp25bn-low-carbon-investment-push#>
- [Solar power](#) costs are tumbling so fast the technology is likely to fast outstrip mainstream energy forecasts. That is the conclusion of Oxford University researchers, based on a new forecasting model [published in Research Policy](#).

The UK's biggest energy lobbying group, Energy UK, has recently shifted its position on green energy and will start campaigning for low-carbon alternatives for the first time, in what environmental campaigners are describing as a watershed moment. The group, which represents big six providers, says it now supports phasing out coal-fired stations, after years of defending use of fossil fuels.

So we have is a happy coincidence of what is morally right and fiscally prudent.

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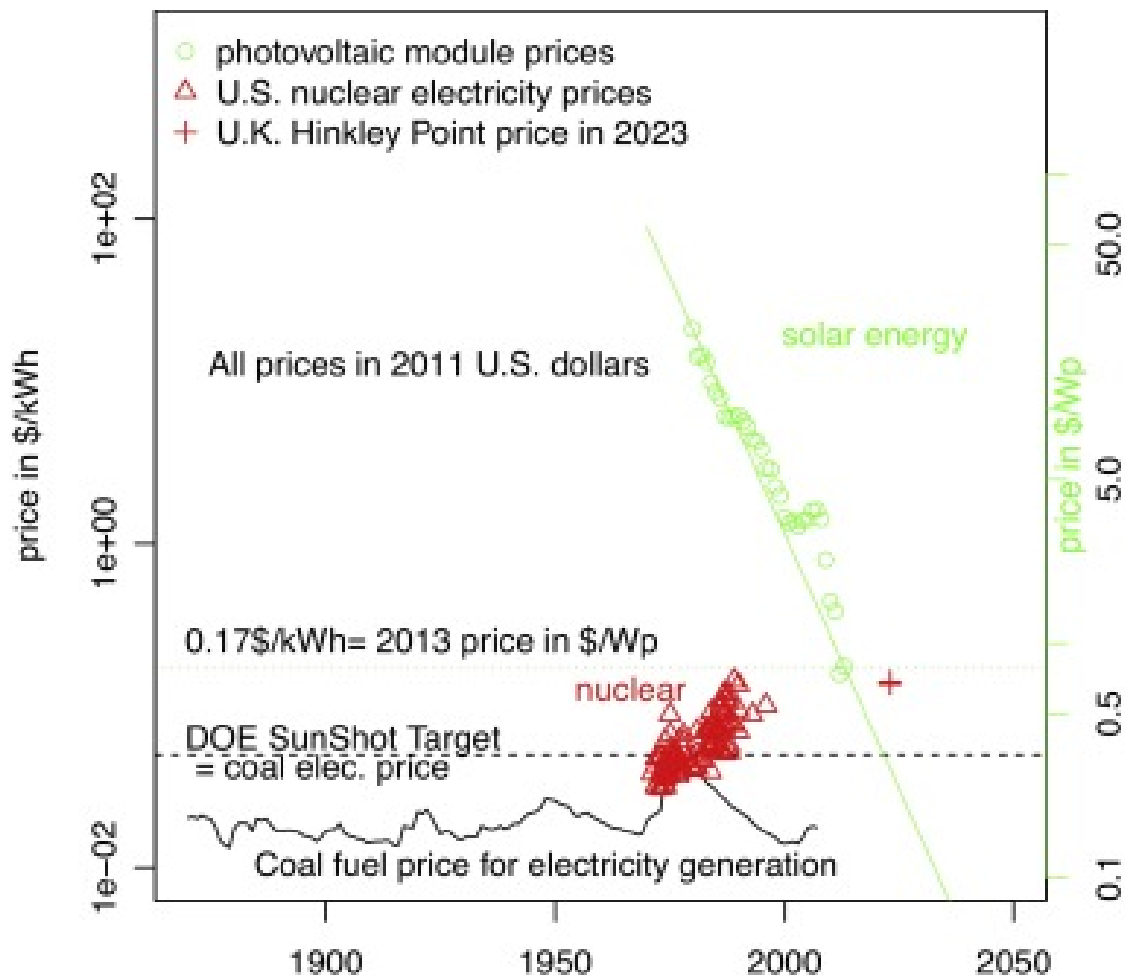


Fig. 1.

A comparison of long-term price trends for coal, nuclear power and solar photovoltaic modules. Prices for coal and nuclear power are costs in the US in dollars per kilowatt hour (scale on the left) whereas solar modules are in dollars per watt-peak, i.e. the cost for the capacity to generate a watt of electricity in full sunlight (scale on the right). For coal we use units of the cost of the coal that would need to be burned in a modern US plant if it were necessary to buy the coal at its inflation-adjusted price at different points in the past. Nuclear prices are Busbar costs for US nuclear plants in the year in which they became operational (from Cooper (2009)). The alignment of the left and right vertical axes is purely suggestive; based on recent estimates of levelized costs, we took $\$0.177/\text{kWh} = \$0.82/\text{Wp}$ in 2013 (2013\$). The number $\$0.177/\text{kWh}$ is a global value produced as a projection for 2013 by the International Energy Agency (Table 4 in International Energy Agency (2014)). We note that it is compatible with estimated values (Table 1 in Baker et al. (2013), Fig. 4 in International Energy Agency (2014)). The red cross is the agreed price for the planned UK Nuclear power plant at Hinkley Point which is scheduled to come online in 2023 ($\pounds 0.0925 \approx \$0.14$). The dashed line corresponds to an earlier target of $\$0.05/\text{kWh}$ set by the U.S. Department of Energy.