

Dyfed Pension Fund Divestment and Re-investment in Local Renewable Energy

12th November 2019



1. Carmarthenshire County Council Motion carried 9/10/19:
“Divest value currently invested by Dyfed Pension Fund in fossil fuel companies (£141mⁱ) and reinvest directly in local renewable energy within 2 years.”
2. At the same full Council meeting, Greg Parker asked a pre-booked related question about divestment to Elwyn Williams, the Chair of the Dyfed Pension Fund Committee. Elwyn was not present, and subsequently sent a reply in writing which seems to go against the motion to reinvest in *local renewable energy within 2 years*. This may have been prepared before the motion was carried, and may not be relevant anymore. But, in case there are still reservations by the Committee, the points raised are covered in this endnoteⁱⁱ.
3. Invest directly in solar panels and battery backup on Council / Government land and buildingsⁱⁱⁱ. Sell off shares invested by the Fund and invest in projects as and when they are planned. If it is difficult to extract these individual shares from a pooled investment, the amount can be taken from the general pool value, leaving the adjustments to be made as and when possible.
4. Installed cost of 1kW peak solar panels and 1kWh battery backup approx. £1,000^{iv}. The battery backup will help reduce load on the grid and balance it, allowing more renewable energy to be accommodated without requiring major new investment in grid infrastructure. Additionally, as more fossil fuels are replaced by electricity e.g. electric vehicles there will be more local demand, requiring more local generation, again balancing the grid.
5. A large part of the generated electricity will be used on site by the Council property users who will continue to pay a discounted rate for the electricity used. This minimises risk to the Dyfed Pension Fund as you have guaranteed consumers and guaranteed payers.
6. Excess generation will be sold direct to local consumers on the same sub-grid using the Energy Local model^v. This allows you to have an income of say 15p/kWh by selling direct to the consumer, rather than 5p/kWh by selling through a Power Purchase Agreement to the grid. This allows a discounted price for consumers and keeps profit high for the generator.
7. If there are grid limitations at some sites that prevent export of large amounts of power, the system can be automatically limited, and the power stored in batteries for 100% onsite use.
8. Income generated can cover the cost of lost income from the original investment. The £141m is estimated to generate £0.9m income per year^{vi}.

9. Each year, reinvest the profit into more solar panels and batteries.
10. By 2029 you generate enough energy to make the entire Dyfed region's current *electricity* consumption renewable^{vii}.
11. Electricity consumption will rise as fossil fuels are phased out, until all energy use is electrical including heating, transport and aviation^{viii}. By 2051 you generate enough energy to make the entire Dyfed region's *total* energy consumption, including electricity, heating, transport and aviation renewably.
12. All of this is with no additional investment. Hopefully, initial success will encourage more funds to be moved from the stock market to renewable energy, achieving the targets far sooner.
13. Carmarthenshire Energy has been asked by CCC's Chief Executive to act as CCC's "Climate Emergency Team". Helping to manage the investment and running of the project could form part of its role.

ⁱ £141m figure provided by Cllr Rob James.

ⁱⁱ Elwyn Williams' reply in bold italics. Comments in plain text:

"it is not possible within this structure for individual beneficiaries to choose to "opt out" of any particular investments."

There are an overwhelming number of pension funds who have voted to opt out of fossil fuel investments. It does not seem likely this is *not possible*. Rather it is just *not easy* for fund managers, so they just don't do it. Suggest change to fund managers who are willing to be flexible. It was pointed out at the Council meeting by a previous Dyfed Pension Fund Committee member, that this has already been done in the past to an underperforming fund manager, and funds moved within 6 months.

While this transition is taking place, from an environmental point of view, we would see no problem with keeping the fund with the same portfolio, but just withdraw the £141m from the general fund, and invest it in local renewable energy. It would have the same benefit to reducing carbon emissions. Then in slow time, the fund could adjust investments into different companies.

Additionally, with so many organisations pulling out from fossil fuel companies, they may continue to look attractive in the short term, as they are forced to increased dividends, but the value of the shares may soon become worthless and very difficult to sell. So, a rapid move may reduce losses significantly.

"The Fund was one of the prime movers/supporters of the strategic resilience shareholders resolutions put to BP and Shell's recent AGMs".

All the resolutions say is that more information is to be provided in annual returns to say what is being done about emissions management and low carbon research:

<https://shareaction.org/wp-content/uploads/2016/03/Expectations-2015resolutions.pdf>

i.e. they do not require any action to be taken. In-fact one of the responses at the AGM made clear that BP have no intention of doing anything:

"We don't think it is productive to go for targets" – it's not always that easy, e.g. gas is harder to get out of the ground so may produce more emissions. Targets are "not always productive" but the company is "keen to get the right developments."

We are not ready to set targets on emissions. If we are serious about a low carbon economy we need to steer from the demand side. Carbon pricing is critical to stimulate demand."

i.e. we're not going to do anything out about. It's up to governments to increase taxes so that consumers move away from fossil fuels. While consumers are willing to purchase, we will sell as much as we can – it's our core business.

“It should be noted that the Dyfed Pension fund does have an increasing level of investment in renewable and low carbon energy”

This may be true, but as pointed out at the debate in full Council by Aled Vaughan Owen, the actual figures show that investment in fossil fuel companies has also increased year on year.

“The Dyfed Pension Fund has a comprehensive Investment Strategy Statement: www.dyfedpensionfund.org.uk/media/1647/investment-strategy-statement-19-19.pdf”

This states:

“Environmental, Social and Governance are important factors for the sustainability of investment returns over the long term”

All of these factors are now against fossil fuel investment, so to comply with this strategy it is important to divest now, as directed by the Council.

“Value for money from investments is important”

Investing in local renewable energy will provide much higher return on investment than existing fossil fuel investments, as demonstrated by figures included in the business plan with this document.

“Environmental, Social and Governance risks – The Fund’s investment strategy contains its own approach on Responsible Investment. Non-compliance would expose the Fund to financial and reputational risk.”

Continuing to invest in fossil fuel companies would put the fund at severe financial and reputational risk.

“We will apply long-term thinking to deliver long-term sustainable returns.”

Fossil fuels are not long-term nor sustainable.

“the Dyfed Pension Fund believes active engagement with investee companies is the preferred option to bring about change whilst managing overall investment risk issues.”

This has been the policy for years and it has had no effect – e.g. the zero effect of the strategic resilience shareholders resolutions already discussed above. “Business as usual” in an Emergency can no longer be accepted, indeed the Future Generations Act makes this illegal. The Fund needs to change this policy and take action, as it has been mandated to by Carmarthenshire County Council.

Checking to see if fossil fuel companies are making a serious investment in renewable energy, or just paying lip-service:

Latest BP annual report: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-annual-report-and-form-20f-2018.pdf>

Income: \$303,738 million, Profit: \$16,723 million, Total Equity: \$101,548 million. Amount invested in solar power \$66million (0.02% of income i.e. just paying lip-service) (\$200million in all low carbon investment).

If we say all the £141m Dyfed Pension Fund is invested in BP, this is approx. 0.13% of the total equity of BP. So the amount invested in solar power by the Dyfed Pension fund is \$90k. This is a paltry amount and does not justify keeping the £141m invested.

ⁱⁱⁱ The land area required for the initial 141MWp solar panels is a square 280m x 280m (20 acres). Ideally panels will be placed on existing buildings so that no land is used. However, this is more complex and time consuming to arrange than ground mounting panels on open land. It is suggested, to give the scheme an initial kick start, existing council open land is used. While it is not great to take prime farming land out of production, CCC owns 26 farms and there may be suitable land there, if no other areas can be identified. It is still possible to use land under solar panels for sheep grazing, so the land can still be productive for farming to a degree. When the income is reinvested each year into new panels, there will be more time to identify buildings which can have roofs fitted with panels, and car parks are a prime example of land that can have solar panel canopies, gradually ensuring all CCC building stock and land is producing power. Some ideal sites would be Carmarthen’s John Street and St Peter’s Street car parks – which could accommodate a canopy with 1.5MW panels, and the car park around County Hall with 170kW of panels.

^{iv} Hafod Renewable Energy (<https://www.hafodrenewables.co.uk/>). 13.4kWh Tesla Powerwall 2 £6,000 = £440 per kWh.

<https://www.alibaba.com/showroom/best-price-per-watt-solar-panels.html> from US\$0.13 per watt = \$130 per kWp. Plus inverter <https://www.alibaba.com/showroom/solar-inverter.html> \$80 per kWp.
Total around £604 leaving £396 to allow option for higher quality components and installation per kWp.

v <http://www.energylocal.co.uk/>

vi Total Local Government Pensions Funds in Wales (2018 figures):

Total Investment	Annual Investment Income	Annual Fund Management Fee	Annual Net Income
£16.8bn	£191m	£87m	£104m

<https://www.gov.uk/government/statistics/local-government-pension-scheme-funds-for-england-and-wales-2017-to-2018>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/748799/Tables_1-6_-_Wales.xlsx

£141m of Dyfed's funds are invested in fossil fuel companies.

If we allocate income proportionally, the fossil fuel companies generate $(141/16,800 * 104) = £0.9m$ income per year.

vii See spreadsheet <https://www.carmarthenshireenergy.org/YSG/PublicFiles/media/CCCCalcs.xlsx> giving expected income over the years based on 3 different levels of profitability. Emergency measures should be taken to ensure costs are kept low so that the Climate Emergency targets can be met as soon as possible e.g. (i) no charging of business rates and income tax (or if it is charged, then that amount is re-invested directly back by the government into more panels), (ii) government self-insurance, (iii) administration/management staff kept to a minimum and salaries initially paid by other grant funding, (iv) onerous and expensive planning conditions should be relaxed.

Consumption estimations: Figures broken down by county are not easily available, so use the figures for Wales as a whole a proportion them based on the population of the counties.

Total population of Wales 3,138,631, Carmarthenshire 187,568, Ceredigion 72,992, Pembrokeshire 125,055.

<https://statswales.gov.wales/Catalogue/Population-and-Migration/Population/Estimates/Local-Authority/populationestimates-by-localauthority-year>

Proportion of energy required to be generated renewably for CCC Pension area: $385,615/3,138,631 = 12.28\%$.

Total electricity consumption of Wales: 14.9 TWh ("SUB-NATIONAL ELECTRICITY AND GAS CONSUMPTION STATISTICS December 2018"

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/767027/Sub-national-electricity-and-gas-consumption-summaries-report-2017.pdf) less 11 TWh already produced

renewably in Wales ("UK Energy Statistics, 2018 & Q4 2018"

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791297/Press_Note_March_2019.pdf) = 3.9 TWh balance to generate.

Amount for CCC Pension area: 0.48TWh.

IWA "A plan for Wales' renewable energy future: Essential actions to re-energise Wales by 2035"

https://www.iwa.wales/wp-content/uploads/2019/03/IWA_Energy_WP6_Digital-2.pdf: 14.6 TWh electricity consumption for Wales. 84% of total remaining energy product is non-renewable -> Total 91.2 TWh. Less 11 TWh already produced renewably in Wales ("UK Energy Statistics, 2018 & Q4 2018"

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791297/Press_Note_March_2019.pdf) = 80.2 TWh balance to generate.

Amount for CCC Pension area: 9.85TWh.

viii To speed this up, CCC should lobby government to remove subsidies for fossil fuels and increase taxes on fossil fuels.