WIRRAL COUNCIL

PENSIONS COMMITTEE

21 MARCH 2016

SUBJECT:	**CLIMATE RISK OPTIONS**
WARD/S AFFECTED:	**NONE**
REPORT OF:	**STRATEGIC DIRECTOR TRANSFORMATION & RESOURCES**
KEY DECISION?	**NO**

1. EXECUTIVE SUMMARY

1.1 There are investment actions in line with a decarbonisation approach that may be suitable for the Merseyside Pension Fund to further explore.

1.2 A global context of concerted policy action to limit warming to two degrees Celsius above baseline provides a strong impetus for this; guidance from established partners suggests a strategic framework in which decarbonisation and other investment actions may be planned and evaluated.

2.0 BACKGROUND AND KEY ISSUES

2.1 Pensions Committee considered the investment implications of climate change at its meeting on 16th November 2015, in particular view of the imminent COP21 round of climate talks in Paris and growing calls from civil society groups for divestment from fossil fuels companies. Members noted that Merseyside Pension Fund addresses these implications through its responsible investment strategy and that further investigation of alternative approaches to addressing climate risk was merited. In particular, Members requested that a subsequent report be brought, exploring options in this regard.

2.2 In December 2015, the United Nations' COP21 round of climate change talks concluded with the historic Paris Agreement. The first ever universal climate agreement, signed by the G20 nations and leading developing countries, it commits signatories to take steps to keep warming to below 2 degrees Celsius above pre-industrial levels, with best efforts directed to keep it to 1.5 degrees. Countries agreed to submit updated and stringent carbon reduction plans every five years and to establish a framework to measure and monitor the reduction, in order to reach carbon neutrality (or emissions 'balance') in the second half of the century. Developed nations agreed a climate finance goal of USD 100 billion per year to support transition to a low carbon economy in developing nations (this is expected to serve as a funding level floor, rising in time and likely to create opportunities and be supportive of mitigation and adaptation measures).

While there remains scepticism in some quarters as to the enforceability of what has been presented as a legally-binding agreement, COP21 has delivered the clear policy signal that investors have been seeking, with high ambition locked in to a clear direction of travel. As attention shifts to the deliverability of individual nation's reduction plans, governments and non-state actors (including asset owners and corporates) will be expected to work ever more collaboratively and it is likely that carbon pricing will become an ever more prevalent policy tool (particularly as the five-year review and update mechanism gives a major incentive for regulation in this regard to be ever tighter).

While the Paris Agreement has not yet delivered a mechanism for a meaningful global price on carbon, there is clear impetus in that direction. An upward-moving cost of carbon would have the most direct implications for the Fund's investment strategy, both in terms of the risk to existing assets with high carbon exposure and the opportunities in new energy markets created by transition to a low carbon economy. Following Paris, the challenge to position long-term strategy accordingly remains considerable, but investors are contending with less (and more manageable) uncertainty.

2.3 Merseyside Pension Fund's present strategy has a high degree of climate awareness - as set out in its Responsible Investment policy, whereby climate as a leading ESG factor is being integrated through-out the Fund's investment process (as set out in the Fund's Statement of Investment Principles and Investment Philosophies documents). It is identified as a theme guiding decision-making within the Alternatives and Property allocations (comprising 28% of the strategic benchmark). Engagement in various forms is the Fund's primary RI activity – with companies, with policymakers and with the wider investor community (especially the Fund's own investment managers) – all of which is driven by a fundamental belief in the importance of ownership to long-term fiduciary investors. Ownership shapes the present approach to climate change mitigation and adaptation actions: to develop these approaches further, the Fund should commit to better understanding its ownership of climate risk and the alignment of its strategy to a '2 degree' scenario.

Divestment from 'fossil fuels' companies does not adequately address the need to reduce GHG emissions as it does not remove capital from companies with a high carbon exposure, but rather it denudes the value of ownership by transferring it to others who care less about the problem. Decarbonisation maintains the importance of ownership while still aiming to send a strong and unequivocal signal of the primacy of carbon-efficiency by a process of re-allocation of capital at scale away from carbon-intensive companies, projects and technologies and re-investment into the low carbon economy.

2.4 A decarbonisation strategy would involve committing to further action on measuring and disclosing carbon exposure, reducing that exposure and reallocating to the low carbon economy. Portfolio carbon foot-printing techniques (using data disclosed by companies under the U.N.-aligned

Greenhouse Gas Protocol's Corporate Standard for reporting GHG emissions) are used by some institutional investors (notably the first wave of signatories to the Portfolio Decarbonisation Coalition, such as the Environment Agency Pension Fund) as the basis for reporting their 'financed emissions', understanding their carbon exposure and targeting its reduction. The commonly used investment portfolio footprint metrics include total GHG emissions weighted by ownership (indicating a measure of ownership responsibility) and carbon intensity (measured as emissions per unit of company revenues). They are particularly useful for establishing the presence of carbon risk exposure in a portfolio (in absolute terms and relative to benchmarks, peer groups etc) and as the starting point for contemplating exposure reduction (particularly useful when used in combination with more dynamic analyses). However, persistent methodological issues hamper standardization, limiting their utility as precision tools with which to manage investment decisions. The GHG Protocol and others are working as the Portfolio Carbon Initiative to produce a standardised reporting framework for adoption by institutional investors that will better facilitate comparative analysis of climate performance metrics.

Increased use of carbon footprinting though-out the finance industry should also drive improvements in standardisation (this is already being driven by regulation in some jurisdictions; in 2015, France introduced rules compelling carbon disclosure by institutional investors). Alternative metrics are being developed that could be used alongside carbon footprints, but would provide a less static, more forward-looking view. The larger aim should be to better map and track movement along a decarbonisation pathway.

2.5 Pensions Committee has previously noted the high concentration of carbon exposure within the strategic benchmark allocation to listed equities; that one quarter of this allocation is managed in a passive investment strategy tracking standard market cap-weighted indices covering the UK and North America; and that a feasible near-term goal may be to move a portion of this to a low carbon index-tracking strategy. This could have the twofold benefit of mitigating against over-concentration in two of the major benchmark indices around particular stocks and sectors; alongside realising a decarbonising goal. Depending upon the level of decarbonisation targeted and the index methodology selected, it is thought that a relatively low degree of re-weighting could achieve a significant decarbonising effect.

Low carbon indices operate by targeted exclusions (e.g. by eliminating those companies that explore, own and directly extract carbon reserves that may be considered 'un-burnable' and so at risk of stranding) or by applying a tilting mechanism (whereby companies in the index with a high carbon footprint are underweighted while those with a low carbon footprint are overweighted). Re-weighting processes are then applied to the rest of the index to control for unintended tilts and minimise the tracking error with the main index. The tilting approach will usually produce lower tracking error and a lower overall carbon reduction effect, although further refinements can enhance the overall efficacy (such as maintaining overall sector exposure by overweighting companies that are taking a lead in reducing their carbon emissions while tilting away from others with high carbon intensity in the same sector). The selective exclusion approach might be viewed as more risk efficient, as relatively few stock exclusions can produce a large carbon exposure reduction (due to high concentration of carbon intensity in a few stocks and sectors) and also, the approach is agnostic toward low carbon (and not taking an active view on whether low carbon allocation will add or detract from returns is consistent with a passive strategy).

Further exploration of this option suggests that appropriate low carbon index solutions could be developed with existing partners and made investable within the Fund's present passive mandate. The terms of the mandate require the appointed manager to be capable of supporting the Fund's implementation of tactical and strategic allocation decisions, in addition to the main index replication goal. The present manager (State Street Global Advisers) already has an expanding available range of low carbon index strategies (both in terms of asset in-flows and coverage of the major indices) and a high-level commitment to climate-aware investment processes.

Such an approach would not be without risks (to strategic objectives addressed by the passive mandate) and costs (both explicit and implicit). It is not possible at this stage to fully quantify either, but both are thought to be manageably held and brought within acceptable tolerances. The practical considerations are as follows:

- Selection of appropriate low carbon indices to be based on reference to underlying mainstream index series (broadly covering UK and North American equities), to achieve the required benchmark coverage and clearly measurable baseline for carbon reduction;
- Low carbon indices would be selected on the basis of deliverability of a verifiable carbon reduction benefit (to be determined, but referring to either or all of total carbon emissions represented, degree of carbon intensity or exposure to fossil fuels reserves at risk of 'stranding'), but within an acceptable margin of tracking error to the main index;
- The acceptable margin would need to be set higher than present tolerance ranges (+/- 5bps) and initially allow for maximum head-room of up to 100 basis points tracking error (actual TE expected to be lower and on downward trajectory);
- The quantum of tracking error could be influenced by the re-weighting methods selected (e.g. target exclusions or tilting), but also from out-performance relative to the main index.
- Initially, to be implemented through a managed account (which reduces the liquidity benefit of the present pooled vehicle arrangement), although pooling options could become available in time with scaling up of institutional in-flows to the strategy. There would be a significant increase in explicit transaction costs (both at transition and ongoing) due to the higher volume of index-change trading necessary to achieve the required re-weighting (but also because access to the crossing networks used by the pooled vehicles to trade 'off market' would be severely restricted).
- There would be a higher management fee, owing in part to the extra costs out-lined and the bespoke nature of the strategy. This would be relative to the very low cost of the Fund's present passive mandate and appropriate to

a large institutional mandate (with a view to this becoming a scale-able investment solution of interest to other institutional investors).

2.6 It is not considered appropriate at this point to extend carbon reduction objectives into the Fund's active mandates. This would be likely to introduce levels of constraint incompatible with the objectives of these mandates. Nevertheless, the Fund should seek to better understand the climate risk exposure in these portfolios and monitor its consideration by investment managers. This is consistent with our present RI obligations as signatories to the Principles for Responsible Investment to integrate consideration of ESG factors throughout investment decision-making chains. The managers could be required to include climate risk in their reporting, using a range of carbon footprint metrics.

2.7 In 2015, the Fund's primary engagement partner on climate change, the Institutional Investors Group on Climate Change produced an updated guide to asset owners on climate-related investment solutions. The IIGCC Guide provides a useful framework that links top down priorities with bottom up implementation actions; it suggests a basis upon which Members may wish to see the Fund's policy on climate change develop further. It highlights four areas for asset owners to consider:

Strategic review > Strategic asset allocation > Mitigation actions > Adaptation actions

	Suggested actions	**MPF current RI policy**	**Potential actions**
Strategic review	*Define investment beliefs related to climate.*	Climate change will materially impact long-term investment returns (stated in SIP).	Define beliefs in relation to policy trajectory and carbon price.
	Consider investment constraints.	LGPS Investment Regulations determine scope of RI policy.	Investment Strategy Statement includes RI policy based on updated Regulations and clarified interpretation of fiduciary duty.
	RI policy update to include actionable & measurable climate goals.	No explicit goals set in relation to climate.	Determine if strategic target relating to climate is practical or desirable. Prioritise exposure

			to risk or opportunity?
Strategic asset allocation	*Review fundamental SAA assumptions (e.g. risk premia, macro drivers, asset mix).*	Effective asset allocation over multiple time horizons is fundamental to achieving investment objective. Equity and illiquidity risk premia, volatility tolerance and interest rate sensitivity are key assumptions determining the SAA.	Determine if long run volatility and return assumptions allow for risk of lower returns and higher volatility on high carbon assets.
	Measure & reduce/increase exposure to risks & opportunities.	Exposure to climate risk (including mitigation scenarios and physical impact of climate change) not measured at the strategic benchmark level. Exposure to climate opportunities not measured at strategic benchmark level.	Evaluate carbon exposure of existing strategic asset allocation. Determine if exposure to risk and opportunity can be reduced/increased within existing SAA limits.
	Set SAA-level	No strategic exposure targets set & no formal	Identify potential to evolve exposure targets

	exposure targets.	mechanism to review.	in line with SAA benchmark review process. Key drivers & ‘trigger points’ identified.
Mitigation investment actions: ***(all activity related to reducing GHG emissions and increasing the exposure to the low carbon economy)***	*Engage with investment managers.* *Engage with companies.* *Reduce exposure to fossil fuel reserves* *Reduce exposure to GHG emissions* *Increase exposure to the low carbon economy*	Manager selection biased in favour of RI capability. RI part of ongoing monitoring. Comprehensive & robust engagement policy. Ongoing monitoring of carbon asset risk. Ongoing monitoring of climate risk. Thematic driver of allocation and evaluation of opportunities in illiquid assets allocation.	Require managers to provide useful carbon exposure reporting. Review engagement priorities, monitor progress and outcomes. Scale up resource with partners. Decarbonisation plan to measure and reduce carbon exposure and increase LCE exposure. Make use of new generation of climate performance metrics to measure progress along decarbonisation pathway. Consider setting ‘soft’ targets for thematic allocations within illiquid strategies e.g. renewable energy, cleantech,

			'green buildings' etc.
Adaptation investment actions: ***(activity improving the resilience of investment assets to the physical impacts of climate change)***	*Reduce climate vulnerability of existing assets* *Build exposure to adaptation opportunities*	Developing awareness of risk embedded in wider value chains. Climate resilience part of stewardship requirements in respect of 'real assets' (property, infrastructure etc). Thematic driver of allocation in illiquid strategies.	Identify focus list of managers with whom to engage on climate vulnerability. Examine as part of investment case for allocation to frontier markets. Seek partnership opportunities with development banks & other international finance institutions.

3.0 RELEVANT RISKS

3.1 Climate change is a systemic risk with major implications for the long-term investment strategy of Merseyside Pension Fund; as such, it necessitates a proactive and precautionary approach.

3.2 An ill-considered and hastily implemented decarbonisation plan may jeopardise other investment strategy objectives.

4.0 OTHER OPTIONS CONSIDERED

4.1 No other options have been considered.

5.0 CONSULTATION

5.1 There has been no consultation undertaken or proposed for this report. There are no implications for partner organisations arising from this report.

6.0 OUTSTANDING PREVIOUSLY APPROVED ACTIONS

6.1 There are none.

7.0 IMPLICATIONS FOR VOLUNTARY, COMMUNITY AND FAITH GROUPS

7.1 There are none arising from this report.

8.0 RESOURCE IMPLICATIONS: FINANCIAL; IT; STAFFING; AND ASSETS

8.1 The initiatives set out will have a financial cost should they be implemented. Certain operating costs (such as access to specialist data and analysis) may be met from within existing budgets and others managed through efficient procurement (the Fund is working with LGPS partners to establish an ESG Services Framework later in 2016 that will include a wide range of specialist service providers that could support the development of a decarbonisation plan).

8.2 The larger costs are more difficult to quantify, but are not beyond the Fund's competence to effectively control. The precautionary principle should also apply, in that such costs may be balanced against the potentially larger cost of inaction.

9.0 LEGAL IMPLICATIONS

9.1 There are none arising from this report.

10.0 EQUALITIES IMPLICATIONS

10.1 Has the potential impact of your proposal(s) been reviewed with regard to equality?

(b) No because there is no relevance to equality.

11.0 CARBON REDUCTION AND ENVIRONMENTAL IMPLICATIONS

11.1 There are no carbon usage implications in reference to Wirral Council's own carbon reduction plans.

12.0 PLANNING AND COMMUNITY SAFETY IMPLICATIONS

12.1 There are none arising from this report.

13.0 RECOMMENDATION/S

13.1 That an initial decarbonisation plan for Merseyside Pension Fund be progressed, to encompass carbon-footprinting of listed equities and reduction of exposure in the passive equities portfolio.

13.2 That a strategic review be initiated, along the lines set out in the IIGCC Investment Solutions: Asset Owner Guide, with an updated policy statement on climate change to be included in the forthcoming Investment Strategy Statement.

14.0 REASON/S FOR RECOMMENDATION/S

14.1 Progress on decarbonisation is in line with the renewed commitment of Pensions Committee to a Responsible Investment strategy, the ongoing development of which can be furthered in line with wider investment objectives.

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APPENDICES

BACKGROUND PAPERS/REFERENCE MATERIAL

IIGCC, *Climate Change Investment Solutions: A Guide for Asset Owners* (2015)

SUBJECT HISTORY (last 3 years)

Council Meeting	Date
Pensions Committee **Pensions Committee**	**16/11/2015** **28/09/2015**