

LPP's View on Infrastructure

LPP regard Infrastructure as a core component of a well-constructed long-term asset portfolio. We invest primarily in order to benefit from long-term, stable cash flows and expect much extended holding periods, typically in excess of 10 years and often with a perpetual holding period.

The asset class is not homogenous and each asset must be appraised on its individual merits. A well-constructed portfolio of assets is capable of providing long term, stable cash flows which display low correlation with other asset classes, benefit from direct inflation linkage and provide a high cash yield.

LPP is prepared to invest across a wide range of sectors and phases, such that we are prepared to take greenfield/development risk where these risks are properly rewarded.

We also recognise the challenges when seeking to invest, not least the growing volume of capital seeking similar assets. Any over-supply of capital drives up pricing, as many investors chase the same assets and seek to outbid one another; this, consequently, reduces expected returns. We are therefore patient investors and will deploy capital across an extended horizon.

In order to mitigate downward trends on returns, high costs and possible misalignment of interests, LPP seeks to reduce intermediation and provide solutions that deliver greater control and transparency on portfolio construction.

Note: LPP is an active member of the Cross Pool Collaboration Infrastructure Group (CPCIG). We support its activities and are committed to working with the other pools to seek a solution that will allow efficient and effective access to a range of opportunities within the definition of Infrastructure. We summarise the activity of the CPCIG in the Appendix.

Building on our experience

Our experience in the asset class has followed a path of gradual evolution. When first allocating to the asset class in 2010, the implementation route was generally via infrastructure funds or fund of funds.

Subsequently, we have sought to leverage relationships with investment managers to 'co-invest' in a relatively passive manner, spending only limited time assessing each asset and relying on managers to drive the investment decisions. This provides a similar exposure to the typical fund investment, but with a lower fee and more concentrated portfolio.

Active co-investment is an increasing focus for our activities. By taking a more active approach to sourcing and underwriting investment opportunities, LPP is better able to design a portfolio that we believe is best suited to our investment objectives for the asset class. We are able to engage with a wide variety of co-investment partners and cherry pick the best suited to a specific asset or sector.

LPP has in excess of £500m of directly owned investments. This 'money in the ground' figure is supplemented with a further £230m of undrawn commitments in direct/co-investment investments. These figures continue to trend upwards, as a result of increasing target allocations from our founding shareholders.

This is an asset class where there is an increasing global appetite for investment. Having capital to invest is rarely a differentiator when seeking access to the best opportunities – one must find other competitive edges. LPP's experience through its founding members provides a solid foundation for success and further evolution. LPP will deploy capital via a hybrid model using a combination of funds and direct investments implemented directly and via active co-investment with asset owners and asset managers.

Direct investing and working with others

Through its founding shareholders, LPP has significant experience of working collaboratively with UK and overseas investors, as well as in appraising and underwriting direct infrastructure assets. These initiatives and experience have been brought into LPP with the transfer of the employees involved from the shareholders.

We made our first investments into direct assets in 2011 with the purchase of a UK landfill gas portfolio for electricity generation, which was placed in a new holding vehicle, Red Rose Infrastructure. This deal was structured in co-operation with an infrastructure manager and provides LPP with direct governance rights and a much reduced fee drag as compared with a traditional co-mingled fund structures. Red Rose Infrastructure has since added to its operations with the purchase of methane extraction rights from UK coal mines (including closed mines) and two portfolios of US landfill gas sites.

Since this initial investment, we have made several further investments either as the sole equity provider or in partnership with other asset owners and/or managers. Some further brief examples are listed below:

- **Cape Byron.** Cape Byron Power is a vehicle established with the same infrastructure manager as Red Rose to acquire and hold two biomass power stations in Australia. The power stations burn sugar cane waste and wood. They were bought out of receivership with an operational plan to introduce new management and significantly improve their performance.
- **Semperian.** Semperian is one of the largest owners of PFI/PPP assets in the UK. Through direct ownership of the management company, we are able to exert direct governance influence and avoid fees associated with a typical Fund structure. We hold a Board seat and contribute to the investment strategy of the company.
- **Guild Investments.** This is a holding company established to acquire a 50% stake in EDF's existing Portuguese windfarms. By partnering with an experienced operator, we are able to benefit from the direct management expertise of EDF, with an alignment of interests and no further asset management fees to pay.
- **Madriena.** We bid for and acquired a 12.5% stake in Madriena. This is a largely regulated asset, which runs the gas distribution network in the Madrid region in Spain (5,600 kms of pipes and 856,000 connection points). We are one of a consortium of four international investors owning Madriena directly without any further external asset management fees payable.
- **Clyde.** GLIL (LPP's joint venture Infrastructure partnership established with Greater Manchester Pension Fund – see below for further detail) acquired a £150m direct stake in Clyde wind farm, one of Europe's largest onshore wind farms. As a direct shareholder we pay no fees to third party investment managers and have direct governance rights through Board seats.

In each of the above examples, we have full control over our holding period, allowing us to match the investment to our long-term investment horizons.

We are strong advocates for collaboration within the LGPS where we believe that aligned objectives and common challenges provide a natural catalyst for investing alongside one another. We believe that by avoiding duplication and not competing with other LGPS investors, we can better serve the needs of the sector and our members.

GLIL – our joint venture collaboration

In 2015, working with the Greater Manchester Pension Fund (GMPF), we created a joint venture to facilitate this collaborative investment. In partnership with GMPF, we have created a single governance structure and single investment team, who are able to source, underwrite and manage infrastructure assets for the benefit of both partners.

This joint venture, currently known as GLIL, has had significant success in a short space of time and some key achievements to date include:

- **Demonstrated ability to execute investments:** we committed £210m of a £500m target during the first 12 months of operation. Of this amount, c. £160m represents 'money in the ground'.
- **Established sourcing capabilities** - GLIL has considered in excess of 50 direct opportunities, of which initial reviews were conducted on c. 30, with detailed due diligence on 7.
- **Credible investment partner** – GLIL has been an active co-investor within large and small investment consortia with tier 1 asset owner and asset manager market participants.
- **Flexible/ delegated governance within a broad mandate** – GLIL has a proven model of delegated governance operating within a well-defined mandate, which includes UK focus and a mix of operational and greenfield assets across a wide range of sectors. Full due diligence processes have been undertaken for opportunities that included regulated utilities, unregulated airports, operational renewables, new build renewables and new build transportation assets.

The range of activities described above provides LPP with an established platform from which to leverage and invest into infrastructure across geographies, in partnership with other established investors and with flexibility to implement via both funds and directly. This pedigree will support our member funds' desire to maintain and grow their allocations in the asset class as a long-term component of their portfolio.

Opening GLIL to other LGPS investors

In parallel to continuing to support and contribute to CPCIG initiatives (see the Appendix for further information), we have committed with GMPF to broadening access to GLIL. Having proven the concept with two partners working together, we are now completing the necessary legal and governance work to allow the immediate addition of the wider pooling partners of LPFA and GMPF respectively.

The addition of these funds will bring the founding members of LPP and the Northern Pool together to create a £1bn+ pool of capital dedicated to investment into Infrastructure.

We expect to conclude the work necessary to accommodate the new members in July 2016 and the process of investing the additional capital will begin immediately using the already established pipeline of opportunities.

In addition to bringing these three new members into the existing structure, we are also working with our legal advisors with a view to re-structuring the GLIL vehicle, such that

additional LGPS funds/pools will be able to invest via GLIL. In order to accommodate this further widening of membership and possible participation as a passive partner, it is necessary to convert GLIL into an Alternative Investment Fund (AIF) with a regulated manager (AIFM) to manage the vehicle. We anticipate this will be completed by December 2016.

Having already established LPP with an FCA Regulated Operator, we intend to use this pre-existing Operator as the AIFM. We estimate that the process of creating a new AIF and gaining FCA authorisation of the vehicle will be completed by 31st December 2016. Additional funds will be allowed to join and begin immediate investment from that point forward.

We believe that following this restructuring work GLIL will provide an ideal solution for the national initiative that the CPCIG is currently discussing. To this end, we will seek to ensure the work we undertake in this area is completed in an open and collaborative manner so as to best meet the collective aims within CPCIG. We will continue to participate within the CPCIG constructively, with an open mind with regard to the final outcome.

Appendix

Participation in the Cross Pool Collaboration Infrastructure Group (CPCIG)

LPP is an active member of the CPCIG. We support its activities and are committed to working with the other pools to seek a solution that will allow efficient and effective access to a range of opportunities within the definition of Infrastructure.

The CPCIG has met over 3 days so far. The following reflects our understanding of the discussions/recommendations to date.

The officers representing the pools have agreed they are committed to working together to determine current capacity and capability, share and develop experience and skills in Infrastructure development, and explore options for a more formal *National Initiative on Infrastructure Investing*.

Discussions to date have identified significant shared common ground and some key starting considerations, including:

- Pools and individual funds within pools are at different stages in terms of their current strategic allocations to Infrastructure. Most pool allocations range between 3% and 5%, but individual funds' allocations range between 0% and 10%.
- Current internal resources and capability vary across pools. The majority of pools' exposure is in funds managed by external managers. The exceptions are the joint venture between GMPF and LPFA (i.e. GLIL – described above) and a few co-investments, club deals and investments in bespoke funds made by some funds.
- The range of funds invested in also varies across geographies (UK, Global), managers, and most significantly risk / return budgets (ranging from low risk, cash flow based investment to more development based, value added opportunities).
- Funds also have different environmental expectations in Infrastructure.
- Funds are generally increasing their exposure to Infrastructure and see a National Initiative as providing access to the asset class for those funds that previously saw barriers to investing, provided that the risk / returns are in line with each funds' expectations.
- Pools, whilst committed to the principle of a National Initiative for use when appropriate, may have additional requirements (e.g. risk appetites) for Infrastructure investments, either at a fund or pool level, and would thus want to avoid being forced into specific investments. Different Fund appetites will as a consequence probably require different solutions.
- Pools will not support any initiative that did not exclude political intervention (either local or national) in making investment decisions.

Market research undertaken by CPCIG

The CPCIG has taken evidence from a range of infrastructure fund managers and from other large investors with experience in infrastructure.

Managers

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| • Hermes | UK closed and open ended. |
| • Macquarie | Global closed ended. |
| • JP Morgan | Global open ended. |
| • Partners Group | Direct & Funds global closed ended. |
| • PiP | UK Infrastructure Platform |
| • GMPF/ LPFA Joint Venture – GLIL | UK direct |

Other investors

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|-------------------------|------------------------|
| • Telstra | Australia Pension Fund |
| • PGGM | Dutch Pension Fund |
| • Ontario Pension Board | Canadian Pension Fund |

Although the managers and funds were all different, many of the following themes were repeated in their presentations.

- There is an excess of capital in the market. The challenge is in deploying the capital well, given the competition for deals.
- To be treated seriously by vendors, investors have to prove they will be a competent and credible partner. This requires committed capital and governance structures that allow the investor to actively engage and deploy capital at speed.
- Investing in Infrastructure requires a considerable amount of time and expertise. Significant resources and capabilities are required to manage direct investment.
- Replicating the scale and expense of specialist managers' resources and expertise is not a credible option even over the medium term; knowledge transfer and greater involvement is, however, both possible and desirable, as dedicated capital and resource are built.
- Many investors have gained experience by partnering with a fund manager and gain access to co investments through that manager.
- Advantages of co investment through fund managers include full access to due diligence and legal documents, as well as enhanced governance rights, such as a seat on the board.
- Nonetheless, co-investors should not underestimate the level of time and commitment involved in the process.
- Experience has shown that the path from investing via funds through to the capability of investing direct can take 10-15 years.
- Given the excess of capital, any initiative should seek to collaborate with, and avoid competition with other managers as much as possible, particularly across the LGPS.
- There are concerns about the structures used by some infrastructure managers, which can be relatively short term and poorly aligned with investors' objectives. However, many managers are looking at alternative vehicles, which will offer a better fit, including 'open' funds and 'long term, buy and hold' vehicles.

Generally, the managers were clearly interested in working with a National Initiative, seeing its potential as an important strategic client/partner. A number of ways of structuring this relationship would be possible. Managers are happy to share knowledge and experience with the National Initiative, helping those involved to build up their own

expertise. They understand (and even expect) the National Initiative to become more independent after a period of time.

Interim conclusions

After discussions, the CPCIG felt considerable progress had been made and it was possible to identify some key conclusions and considerations to take forward to the next stage.

- It was felt that Infrastructure investment by the funds should be directed through the pools. The pools would be responsible for determining the arrangements that would suit their members best, including the extent of any participation in the National Initiative. However, all pools will at the very least benefit from sharing knowledge and would explicitly seek not to compete against each other.
- It is immediately evident that collaboration will be greatly facilitated through working as a small number of pools rather than 89 Funds (indeed, collaboration on a particular opportunity was facilitated by one of the meetings!).
- It is also apparent that, when appointing external managers or investing in Infrastructure funds, there will be considerable scope to achieve significant cost savings through collaboration, and this should be an early priority for the National Initiative. The difference between an individual fund investing £20m in an Infrastructure fund, and the pools working together to invest £500m in the fund, could give rise to fee savings of between 30% and 50%.
- Furthermore, as such a key investor, there will be considerable opportunity to improve governance rights, negotiate better/more appropriate structures (e.g. longer term vehicles, greater UK investments) and gain priority access to co-investment opportunities.
- In terms of direct investment in Infrastructure, leading on deals outside the UK is not considered an option, and within the UK would only be feasible in limited circumstances (e.g. smaller or simpler projects), given current and near-term future levels of appropriately skilled resources.
- Furthermore, given the level of interest in Infrastructure, adding to the number of primary market participants and increasing competition would not be advantageous, and instead it is better to work in partnership with others as much as possible.
- Thus, working actively with other investors and investing directly as a co investor, is regarded as the appropriate mechanism for the LGPS to make direct Infrastructure investments. It is consistent with the experience to date of other investors as they built up expertise in Infrastructure. Co-investor would seek to be proactive and be of sufficient capability to ask and challenge – i.e. to be an intelligent shareholder / partner. Investing as a co-investor would enable the achievement of considerable reductions in overall fees as well as greater control over the selection and management of investments. The approach would enable existing resources in the market to be built upon/leveraged.
- Overall a 'hybrid' model is expected to emerge across the pools, with some investment in funds and some direct investment through co-investments and other bespoke structures, with widespread collaboration to reduce costs and increase capacity.
- Externally managed Infrastructure funds will remain important, particularly in areas such as international exposure, specialist funds and development exposure.
- There will be a need for sufficient resources at both a pool level and a national level to support more direct investment effectively; it was recognised that experienced infrastructure professionals are in high demand and expect to be well remunerated.

- It is important that appropriate delegations are in place to ensure decisions can be made quickly when opportunities arise. Individual funds may have specific investment criteria, but typically will be managed by their pool in association with the National Initiative, and any referrals back to funds would be at an early stage and on a strategic basis rather than about detailed terms.
- There are a number of possible approaches and structures for a National Initiative, and several market participants that could be worked with. It is anticipated that the National initiative will need to procure the services of a number rather than just one in order to access all relevant areas of the asset class to satisfy the risk/return requirements of individual Funds and Pools.

Next steps for CPCIG

The CPCIG has agreed to continue meeting through the rest of the year to develop a National Initiative further. Key next steps are likely to consist of the following:

Options Identification	Identify the various options which could in theory provide the capacity and capability the LGPS need.
Options analysis	Determine requirements in terms of legal structures and vehicles, regulatory requirements, governance etc., to support the options, together with analysis of costs, advantages and disadvantages.
Option selection	Identify key criteria to assess options. Determine the preferred options to take forward, including possibly combining options.
Initial Implementation	Design/develop the necessary structures to take the initiative forward and start implementation.
Partnership procurement	Identify/select the partners to work with in the future, which may involve a formal EU procurement or other structured search.
Operation	Start to use the established initiative to make Infrastructure investments.

A challenge for the National Initiative is that it cannot be fully in action until such time as the pools themselves are properly constituted and regulated. This means that its development may lag the development of the pools by some months. However, the intention is to take its development as far as is practicable subject to these limits.

Summary

The CPCIG has examined various options for investing in infrastructure and has developed a practical way forward that recognises market realities but would support an enhanced capacity and capability to invest in infrastructure. The CPCIG considers there to be exciting opportunities to collaborate and increase capability so the LGPS can identify good infrastructure investment opportunities which meet the financial and other needs of the individual funds, while helping to contribute to the UK economy and build a stronger Britain.