Item 5(b)

2nd June 2021

Glasgow City Council

Strathclyde Pension Fund Committee

Report by Richard McIndoe, Director of Strathclyde Pension Fund

Contact: Ian Jamison, Investment Manager, Strathclyde Pension Fund. Ext: 77385

Direct Investment Portfolio (DIP) Investment Proposal – Clean Growth Fund

Purpose of Report:

To set out a proposal for an investment of £20m within the Direct Investment Portfolio.

Recommendations:

The Committee is asked to **APPROVE** an investment of £20m in the Clean Growth Fund by the Direct Investment Portfolio.

Ward No(s): Citywide: ✓

Local member(s) advised: Yes ☐ No ☐ consulted: Yes ☐ No ☐

1 Background

1.1 Portfolio Establishment

In December 2009, the Strathclyde Pension Fund Committee agreed to establish a New Opportunities Portfolio (NOP) with a broad remit to invest in assets for which there was an attractive investment case but to which the current structure did not provide access.

1.2 Review

The NOP strategy was reviewed in 2012 and in 2015. It was re-branded as the Direct Investment Portfolio (DIP) in 2015. The most recent review of the DIP strategy and operating arrangements was concluded in December 2018.

1.3 Implementation Framework

DIP investment proposals are assessed on their own merits within an agreed implementation framework based on SPF's overall risk-return objectives and specific DIP parameters.

The framework agreed at the 2018 review is summarised below.

Direct Investment Portfolio	
Objectives	Primary objective identical to overall SPF investment objective. Secondary objective of adding value through investments with a positive local, economic or ESG (environmental, social, governance) impact.
Strategy & Structure	In line with SPF risk-return framework but focused on the UK and the Equity, Long Term Enhanced Yield and Short Term Enhanced Yield asset categories.
Risk and Return	Portfolio benchmark return of **CPI +3% p.a.** Individual risk and return objectives for each investment.
Capacity	Target allocation of **5%** of total Fund (based on Net Asset Values). Range of **2.5**% to **7.5%** of total Fund.
Investment Size	Target: **£20m** to **£100m** Minimum: **£10m** Maximum: greater of **£200m** or **1%** of Total Fund Value
Decision Making	3 stage process with review and satisfactory due diligence by officers, followed by a presentation to the Sounding Board before a proposal is taken to Committee for approval subject to completion of legal documentation.
Monitoring	Includes individual investment reports, participation in advisory boards, and a quarterly DIP monitoring report which is reviewed by the Fund's Investment Advisory Panel.

The following proposal has been assessed using this framework and is considered appropriate for recommendation by the Sounding Board to the Committee.

2 New Investment Proposal

2.1 Key Terms

Name	Clean Growth Fund
Investment vehicle	English Limited Partnership
Manager	Clean Growth Investment Management (CGIM)
Sector	Venture Capital (clean technology sector)
Investment objective	To provide scale-up capital to accelerate the commercial development of innovative, climate related clean technologies
Term	10 years (plus up to 2x1 year extensions)
Target size	£100m (Hard Cap £150m)
Proposed DIP investment	£20m
Target return	Internal Rate of Return (IRR) of 18.7% (Net) and a multiple of 2.5x capital invested

2.2 Investment Summary

The Clean Growth Fund (CGF) is a new venture capital (VC) fund focused on backing early stage, sustainable technologies in the clean technology (cleantech) sector.

The technology targeted for investment will be capable of either reducing greenhouse gas (GHG) emissions, pollution or other adverse environmental effects, or of promoting positive climate benefits (or efficiencies) in new or existing products. The fund's aim is to provide scale-up capital to accelerate the commercial development of innovative climate-related technologies, while at the same time generating attractive financial returns for investors.

A commitment by the Direct Investment Portfolio of £20m to CGF is proposed.

More information on the investment manager is included in **Schedule 1.**

2.3 Investment Rationale

Innovative and/or disruptive technologies are critical to the rapid achievement of a low carbon economy, or of offering improved efficiency or outcomes than existing products or processes. There is currently a significant lack of scale-up investment funding available, particularly at the early/pre-revenue stage to allow these technologies to achieve commercial scale. While the amount of VC investment in digital technologies has grown rapidly in recent years, this has not been replicated in respect of the cleantech sector.

The demand for innovative solutions in the sector has grown rapidly with the greater public awareness of climate risk, as well as changes to government policies in support of the net zero carbon economy strategy.

The CGF fund will be managed by Clean Growth Investment Management (CGIM or the Manager), a new firm formed by Beverley Gower-Jones who is a high profile and established leader in the commercialisation of innovative, UK clean technology, with close links to the UK Government mainly via the Department of Business, Energy and Industrial Strategy (BEIS).

CGF will target investments in early stage, sustainable UK technology companies with innovative products or services which:-

- can demonstrate technical feasibility, substantial addressable markets and have no reliance on subsidies;
- are scalable with a clear competitive advantage;
- will make a clear/significant contribution either to the reduction of GHGs, pollution or other environmental damage, or to the promotion of positive environmental benefits;
- have management teams with strong execution capabilities; and
- have a clear exit route within the term of the Fund.

The 5 main sectors (and potential sub-sectors) to be targeted are:-

- **Power** - renewable power generation, innovative energy networks, demand response systems, renewable CHP (combined heat and power), energy storage, smart grids;
- **Buildings** - heat pumps, renewable CHP, energy efficiency, service & controls, heat network performance, smart inspection (e.g. drones);
- **Transport** - autonomous vehicles & networks, light-weighting & aerodynamics, air pollution systems, engine efficiency, EVs & drones;
- **Industry** - industrial fuels, efficient machinery, sensing tech, logistics optimisation, efficient thermal transfer, carbon capture & storage;
- **Waste** - industrial design (waste avoidance), washing & sorting tech, materials re-use & recycling, chemicals reclamation, gasification / pyrolysis, anaerobic digestion & waste to fuel.

Within these fields, CGF will be invested across the technology spectrum including hardware, software, process systems and/or materials capable of driving real and rapid change on a global scale.

Initial investments will be in early stage companies which have yet to prove their market, scale up their management team and/or their business capabilities. The applicable technology however will have been proven in a test environment at least and while the fund won't assume technology risk, it will assume market, operational and commercialisation risk. Potential investee companies will require to demonstrate an addressable and scalable marketplace.

CGF will target initial investments between £500k and £3m, and the Manager expects to invest in the most promising portfolio companies over several fundraising rounds. Assuming the fund reaches its targeted size of £100m, CGIM anticipates a portfolio of c.30 initial deals, with c.50% of the total funds held in reserve for follow on funding rounds in the most promising opportunities.

CGF has already achieved a first close in May 2020 with £20m committed from each of: the UK Government's Department of BEIS; and CCLA, one of the UK's largest charity fund managers.

CGIM itself will be committing funding based on the level of total commitments raised. This is considered a satisfactory level of alignment with investors. The CGF fund will be unleveraged.

2.4 Risks

The main risks of the proposed investment in CGF are considered to be:

- Product Risk
- Market Risk
- Management Risk

A summary of risks and key mitigants is included in **Schedule 2**.

2.5 Projected Return

CGIM is targeting an Internal Rate of Return (IRR) of 18.7% (Net) and a 2.5x multiple of invested capital. These are considered satisfactory target returns given the relatively higher VC risk of the fund's investment strategy.

2.6 Exit

CGF will have a 10-year term, which may be extended by up to a maximum of 2 years with investor consent. It is envisaged that DIP's investment in the fund will be repaid from the sale or refinance of the portfolio companies by later stage investment or corporate entities.

2.7 Fees

The Management Fee is structured on a tiered basis such that if the target fund size is achieved (which at this stage appears likely), the blended fee rate will be slightly lower than similar funds. Additionally from Year 6 the fee rate will further reduce on an annual basis. Overall, the anticipated blended management fee structure is considered attractive compared to DIP's experience of the typical fee structures of the VC (or private equity) market.

A Carried Interest (or performance fee) also applies. This is structured such that CGIM requires to perform strongly before it benefits under these provisions.

Overall the fee structure is considered attractive in relation to DIP's experience of similar VC funds.

2.8 Environmental Social and Governance Issues

By its very nature the CGF is strongly aligned to climate and environmental improvements and CGIM is committed to operating as a business on strong sustainability principles. The businesses in which it seeks to invest will be well positioned to make a positive contribution to a sustainable future. CGIM also believes that companies which recognise and manage ESG issues are better positioned to avoid risk and deliver sustainable long-term growth.

CGIM became a signatory to the UN Principles of Responsible Investment in January 2021.

2.9 Investment Size and Cash Requirements

SPF Fund value at 31st March 2021	£26,176m
DIP allocation (target 5% of main fund) NAV	£1,309m
Current DIP NAV	£920m
Headroom v NAV	**£389m**

2.10 Investment Strategy

The proposed investment falls within the venture capital sector and therefore the Fund's Equity allocation.

Allocations following this investment, based on Fund values at 31st March 2021 and total DIP commitments to Equity, would be as follows:

Equity, £ in DIP	£148m
Equity, % in DIP	8.9%
Equity in DIP, as % of Total Fund	0.6%
Equity, % Total Fund (target 52.5%)	61.1%

3 Policy and Resource Implications

Financial: Investment of £20m to be drawn as required. Fee structure is in line with market.

Legal: The investment will be subject to satisfactory completion of due diligence, including review and execution of appropriate legal documentation.

Personnel: None.

Procurement: None.

Council Strategic Plan: Strathclyde Pension Fund aligns with the theme of a well governed city.

Equality and Socio-Economic Impacts:

Does the proposal support the Council's Equality Outcomes 2017-22 — Equalities issues are addressed in the Fund's responsible investment policy.

What are the potential equality impacts as a result of this report? — No specific impact from this proposal.

Please highlight if the policy/proposal will help address socio economic disadvantage. — No specific impact from this proposal.

Sustainability Impacts:	
Environmental:	See section 2.8
Social, including opportunities under Article 20 of the European Public Procurement Directive:	See section 2.8
Economic:	See section 2.8
Privacy and Data Protection impacts:	To be fully provided for in the legal documentation for the proposed investment.

4 Recommendation

The Committee is asked to **APPROVE** an investment of £20m in the Clean Growth Fund by the Direct Investment Portfolio.

Investment Manager - Clean Growth Investment Management

Clean Growth Investment Management (CGIM) is a recently formed fund manager, however its key personnel have strong credentials in the sector, specifically in the investment and commercialisation of new, innovative/sustainable technology.

Beverley Gower-Jones (BGJ), Managing Partner of CGIM, is also CEO (and owner) of Carbon Limiting Technologies Ltd (CLT), a consultancy business she founded in 2006. Since 2012, CLT has been the delivery partner for BEIS's £72m Energy Entrepreneur Fund (EEF), a grant award scheme targeting the most promising innovations in the cleantech sector. BGJ has 30+ years' experience in this sector as both an entrepreneur and investor having co-founded Shell Technology Ventures, developing a £500m technology transfer program there before becoming Performance Director, Ventures Section of QinetiQ (the MoD's former R&D business) where she worked with Dr Jonathan Tudor, before founding CLT.

CLT is comprised of c.25 highly experienced technology specialists in the power, transport, industry, buildings and waste sectors, who have the expertise to appraise both the technical & commercial feasibility of new technologies, as well as providing incubation (i.e. commercialisation) support to successful grant applicants. Since 2006 CLT has provided such incubator services to over 350 businesses including c.140 EEF award recipients. As a result of its profile in the sector, BGJ believes that she and/or CLT get the opportunity to consider 80%+ of all cleantech opportunities within the UK via both the EEF scheme as well as by other avenues. CLT will be the main (but not the only) source of early stage opportunities for CGF.

Dr Jonathan Tudor (JT), Investment Partner of CGIM, has 20+ years' experience creating, building, investing in and managing technology based start-up businesses, both within corporate and VC structures. Most recently JT was Technology and Strategy Director at Centrica where he managed its £100m energy transition fund, prior to which he led BP Ventures and was Venture Director at QinetiQ.

CGIM has an Advisory Board selected for their subject matter expertise, track record in investing in early stage tech businesses, their networks and sphere of influence:-

- **Michael Liebreich**, is the founder of Bloomberg New Energy Finance, a research body for senior decision-makers in clean energy & transportation. He is a board member of Transport for London and a Visiting Professor at Imperial College's Energy Futures Lab;
- **Professor Chris Rapley**, is Professor of Climate Science at Imperial College London, a Distinguished Visiting Scientist at NASA's Jet Propulsion Lab and Chairman of the London Climate Change Partnership. He has also held leadership roles at various climate-related scientific institutions;
- **Vicki Bakhshi**, is Director of the Governance & Sustainable Investment Team at BMO Global Asset Mgt, specialising in climate change and impact investing. She was previously the Prime Minister's Policy Advisor on Climate Change and is on the board of the Institutional Investors Group on Climate Change (IIGCC);
- **George Whitehead** has worked in the VC industry for over 15 years including at Octopus Ventures & was Chairman of the Venture Capital Trust Association;
- **Robert Bahns**, also has 15+ years of VC experience, including as Venture Partner at IP Group, one of the UK's most active early stage technology investment companies and as Director of Technology Ventures at Touchstone.

Investment Specific Risks

Product Risk

While the Fund will only consider opportunities incorporating a working product or service which has demonstrated its technological feasibility in a test (rather than commercial) environment, there is still product and/or engineering risk in respect of the ability to successfully scale the product/service and its ability to operate successfully as anticipated in a commercial scenario.

The specialist sectoral and technical expertise of the CLT consultants represents the risk mitigation. In many (if not most) instances, CLT will have been working with the business concerned for at least a couple of years from the EEF grant appraisal/award stage through the incubator phase, by which time CLT will have developed a relatively deep understanding of the technology and of the key steps required to address, or at least reduce the commercialisation risks as far as possible.

Market Risk

This is the risk that despite the technology being successfully engineered, scaled-up and tested in a commercial environment, the product fails to engage the market, or gains insufficient traction with the anticipated customer base. The market could also determine that the product offers insufficient benefits for the cost or alternatively a better technology emerges rendering the product/service obsolete.

Assessment of the addressable market, the value proposition of the technology, the route to market and the critical management skillsets required, are all key aspects of the commercialisation process undertaken as part of the post-investment incubator support services. This is CLT's key specialism and each portfolio company will benefit from their consultancy services.

Management Risk

The early stage and dynamic nature of the businesses the fund seeks to invest in means that they are unlikely to have fully formed management teams. One of the CGIM's key tasks is therefore to ensure that the investee's management team are supported to enable them to execute the agreed strategy.

Early stage businesses often experience difficulties, complications, setbacks or delays. Such setbacks can be challenging even for experienced management.

It is for this reason that CGIM's key investment criteria include an appraisal of the management team's execution capabilities, although clearly this is still no guarantee of success. As with any VC fund, the Manager will support the management as far as possible, however in some instances there will be no alternative but to effect changes.