

INSIGHTS & ACTIONS REPORT

Scaling Up Blended Finance for Climate with CDPQ - Insights & Actions report

Roundtable with Australian Superannuation Funds

April 2025

Prof Catherine Brown OAM, Enterprise Professor,
Sustainable Value Creation, Melbourne Business School.
Blended Finance for Climate Initiative

Executive Summary

The Scaling Up Blended Finance for Climate with CDPQ Roundtable is the third in a series of high-level Roundtables hosted by Melbourne Business School to help accelerate finance from all sources into the climate transition in Australia and our region. The Roundtable brought together leaders from superannuation funds and related organisations to learn from CDPQ's deep experience using blended finance approaches and to share insights and inspiration about growing the use of blended finance to help scale up climate

The Roundtable engaged with the superannuation sector as a key source of institutional investment in Australia which could be available for scaling up climate projects if sector requirements around performance, risk, size and longer-term investment horizons are met. Australian participants represented over \$800 billion in funds under management. The superannuation sector is valued at \$4.1 trillion (ASFA). The enormous potential that can be unlocked for collaborative financing of our climate transition is obvious.

Melbourne Business School invited Vito Dellerba, the Managing Director of Sustainable Investment at CDPQ to present to the high-level meeting to share CDPQ's experience of blended finance transactions. CDPQ is a leading Canadian pension fund based in Montreal with funds of C\$452 billion. We were also joined by Jean Etienne Leroux, CDPQ's Managing Director for Australia and New Zealand. CDPQ has a dual legislated requirement to receive moneys on deposit as provided by law and manage them with a view to achieving optimal return on capital within the framework of depositors' investment policies, while at the same time contributing to Québec's economic development. (4.1 of the Act C-2, Act respecting CDPQ, updated November 2024)

Australia requires \$7-\$ 9 trillion of capital by 2060 and \$1.5 trillion by 2030 to fund the climate transition (Net Zero Australia). Australia must continue to reduce greenhouse gas emissions across all sectors of the economy including energy, transport, industrial processes, agriculture and waste management. We need to invest in climate technology solutions and build resilience to climate impact within local communities in the face of increasingly intense natural disasters and heatwaves.

The Roundtable was held in the context of rising global temperatures. 2024 was the warmest year on record, reaching 1.5°C for the first time, with ocean warming also increasing. January 2025 was 1.75°C above the pre-industrial level, according to the Copernicus Climate Change Service (C3S)...it was the 18th month in the last nineteen months for which the global-average surface air temperature was more than 1.5°C above the pre-industrial level. 2024 was the warmest year on record, likely temporarily hitting 1.5°C for the first time, according to WMO's consolidated global analysis of six international datasets.

The latest Intergovernmental Panel on Climate Change 2023, AR6 Synthesis Report (IPCC Report, 2023) highlights the urgent need to keep global warming to at or below 1.5°C to avoid the most serious consequences. We need to make it easier to move finance at scale to where it is needed to accelerate our climate transition.

The IPCC 2023 report highlights that improved availability and access to finance will enable accelerated climate action. Addressing needs and gaps and broadening equitable access to domestic and international finance...can act as a catalyst for accelerating mitigation and shifting development pathways. Climate resilient development is enabled by increased international cooperation including improved access to financial resources, particularly for vulnerable regions, sectors and groups, and inclusive governance and coordinated policies. IPCC Report, 'Near Term Responses in a Changing Climate', p.111

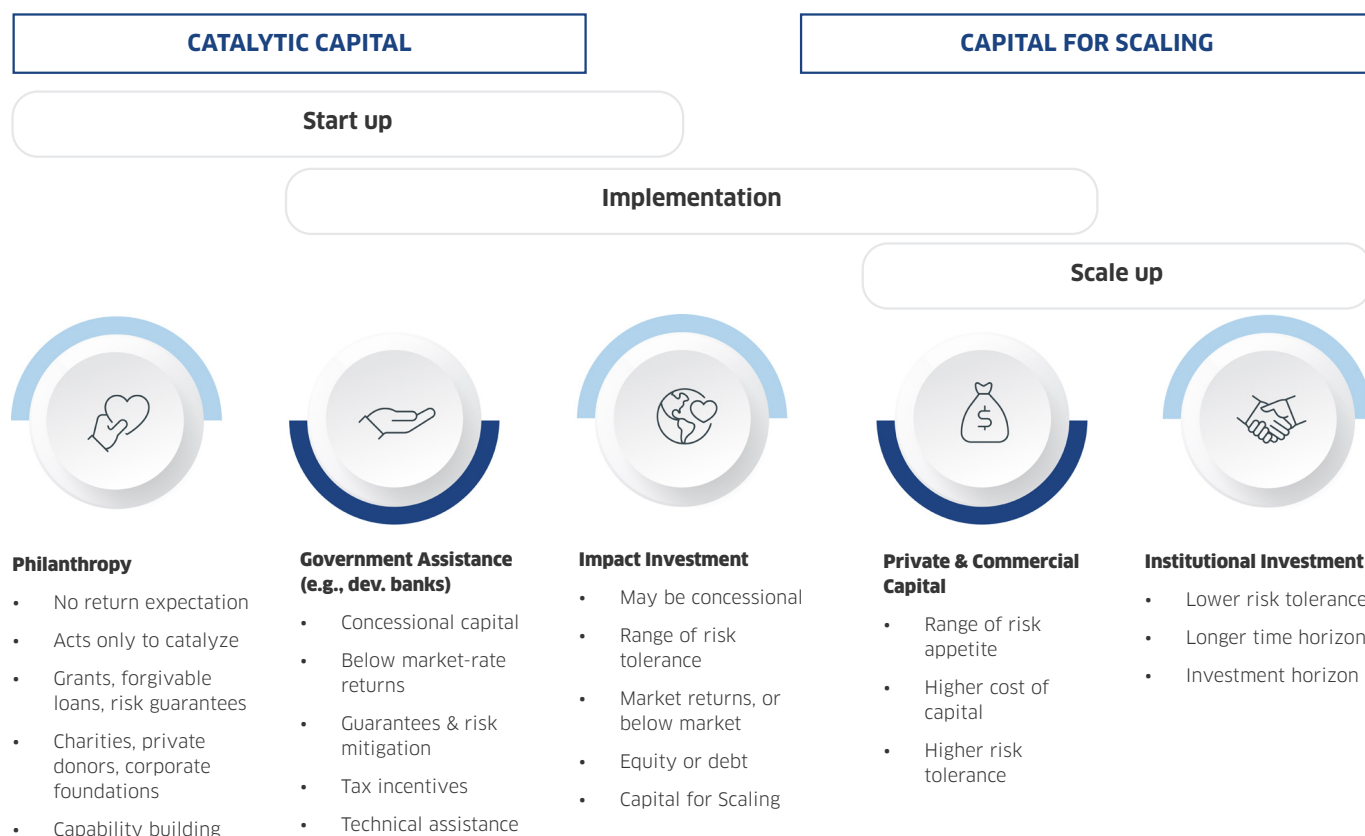
The increasingly unstable climate is leading to more frequent and intense natural disasters which has an adverse impact on the Australian economy. Disaster recovery funding by the Australian government is projected to at least triple over the next 40 years, to \$140 billion in today's dollars if global temperatures rise to 3°C, while labour productivity under a 3°C of warming could decrease by 0.2 percent annually and cost \$135 billion by 2063. (Treasury, Commonwealth of Australia)

In this challenging context, blended finance is an approach which can help marshal local and international finance and funding to support Australia and our region's climate transition. It responds to the acceleration opportunity reported in the IPCC Report. Blended finance involves using catalytic capital from philanthropy, development banks or specialist government investment vehicles (for example, the Clean Energy Finance Corporation) and/or impact investment to build the track record of enterprises or build a capital stack for large scale projects to help leverage in private capital and

institutional investment. The varied sources of finance have different risk appetites, return expectations, flexibility, time horizons and purposes. Ensuring that each source of finance plays its part at appropriate times within a transaction or over the life of an enterprise, can give us another tool to accelerate our climate transition. Institutional investors take a long-term view and invest at very large scale, with return expectations and risks reflecting the aspirations of superannuation fund members.

The following diagram was presented at the Roundtable and explains blended finance as a continuum of funding and finance. While the blended finance approach is used extensively in development finance, it can also apply to a developed country such as Australia. It was suggested that philanthropy should be a much smaller circle but with a lot of catalytic energy!

The continuum of finance SOURCES OF FINANCE



The key Actions identified during the Roundtable include:

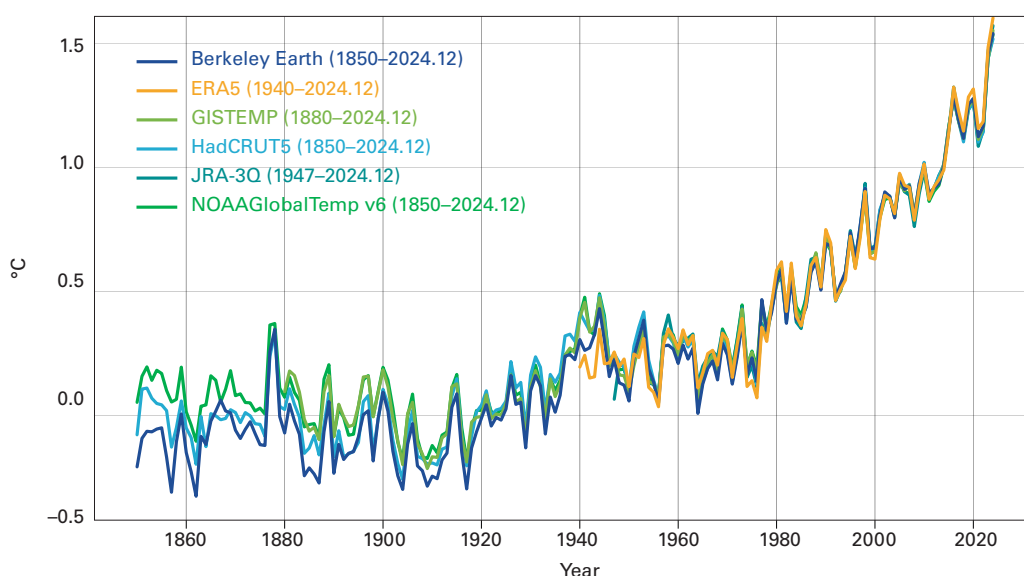
- 1 Create a Blended Finance Consortium Climate Fund which helps accelerate institutional investment into scaled-up opportunities in Australia's climate transition.
The fund must aim for efficiency, operate at scale, and build and share blended finance capability.
- 2 Policy changes to Your Future, Your Super performance benchmarks to support Australia's climate transition.
- 3 Continue to upskill and connect investors across the capital stack to support the Blended Finance ecosystem.

1. Context

The Scaling Up Blended Finance for Climate with CDPQ Roundtable was held on 4 March 2025 at the Melbourne Business School. It brought together leaders from superannuation funds and related organisations to learn from CDPQ's deep experience using blended finance approaches in major climate transition funds and transactions, and to share insights and inspiration about growing the use of blended finance to help scale up climate transition projects in Australia and our region.

The Roundtable was an outcome of the first Blended Finance for Roundtable meeting in this MBS series. The first Roundtable brought together senior leaders from the various sources of finance: institutional investment, private capital and catalytic capital including philanthropy, impact investment and specialist government investment vehicles. During the follow up to that Roundtable, it was recommended that it would help accelerate finance if Australian superannuation funds could learn directly from a Canadian or US pension fund that had a track record in blended finance for climate. Melbourne Business School was able to provide this opportunity. The Roundtables are held using Chatham House rules so that insights and actions are reported but not attributed to a particular participant.

Global mean temperature 1850-2024
Difference from 1850-1900 average



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The global OHC changes within the upper 2000 m ocean layer since 1958 (Fig. 1) show that there has been an unequivocal ocean warming trend in recent decades, regardless of the data sources and processing techniques. About 90% of the excess heat from global warming is stored in the ocean, making ocean heat content a critical indicator of climate change.

Australia is a wealthy country, including the \$4.1 trillion held in superannuation funds (ASFA). We have potential to partner across the different sources of finance from catalytic (specialist government investment vehicles such as CEFC, philanthropy, and/or impact investment) through to scaling via private capital and institutional investment to achieve a smooth transition. We have the finance. The question is how to unlock institutional investment through a strategic use of blended finance approaches to match risk, return and regulatory requirements.

The potential for superannuation and pension funds to be critical funders of the climate transition cannot be overstated. The organisations in the room held funds of more than \$800 billion under management in total. CDPQ itself is a major institutional investor holding funds C\$452 billion. Roundtable participants could see the enormous impact CDPQ had made through blended finance transactions. Helping unlock this in Australia would be a powerful long-term outcome of these discussions. The Roundtable shared learnings and insights and discussed actions that could shift the dial.

2. CDPQ Insights

2.1 Blended Finance Overview

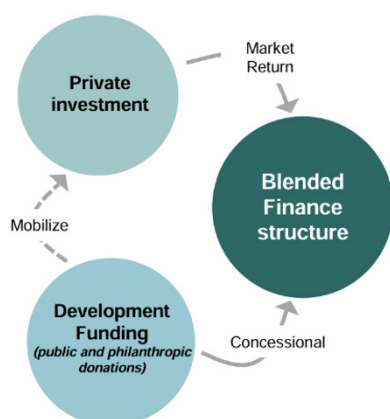
At the Roundtable, we heard from Vito Dellerba, Managing Director Sustainable Investment, CDPQ. In his role, he is dedicated to transforming various sustainability themes into business opportunities. We were also joined on by Jean-Étienne Leroux, Managing Director Australia & New Zealand, CDPQ who was able to provide an international perspective to discussions.

Vito Dellerba, our guest presenter, is an international leader in blended finance for climate. At CDPQ, Vito is a reference for the various asset class teams for establishing and implementing value creation action plans specific to sustainable investing including blended finance. Vito engages in numerous projects such as the Hamburg Sustainability Platform, a public-private stakeholder coalition aimed at scaling sustainable investments into emerging markets and developing economies through the standardization of blended finance structures. He is also a senior fellow of the Climate Resilience Center of the Atlantic Council and sits at the Board of directors of the Resilient Cities Network and the Green Municipal Fund.

He was the architect of the GAIA Fund, which is a blended finance for climate platform initiated by CDPQ and now led by MUFG, alongside FinDev Canada, Canada's bilateral development finance institution, private capital, and international concessional capital including through the Green Climate Fund. GAIA was the winner of the best blended investment NDC (Nationally Determined Contribution) initiative of the year for Africa award at COP 28 (Dubai, 2023). The GAIA Fund case study is included in section 5 of this report.

Blended finance is the use of capital from public or philanthropic sources to catalyse private sector capital into investments whose risk adjusted returns must be realigned through the use of concessional capital. It is a structuring approach that allows organizations with different objectives to invest alongside each other while achieving their own distinct goals.

The blending mechanism



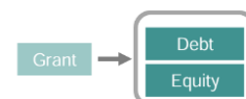
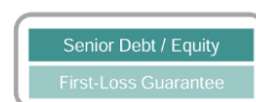
Examples of blended structures

The addition of **public or philanthropic concessional capital** as well as private equity or debt funds offers an attractive risk-return profile for institutional investors.

Used primarily for infrastructure projects, the bond or note issue is **backed by a guarantee or insurance** from public or philanthropic development funds.

Grant-funded technical assistance facilities can be set up to monitor the risks surrounding a project and maximize its potential impacts.

Grants from public or philanthropic donors enable investments to achieve the expected financial and social returns to attract institutional investors.



Source: Convergence (2022). The State of Blended Finance 2021

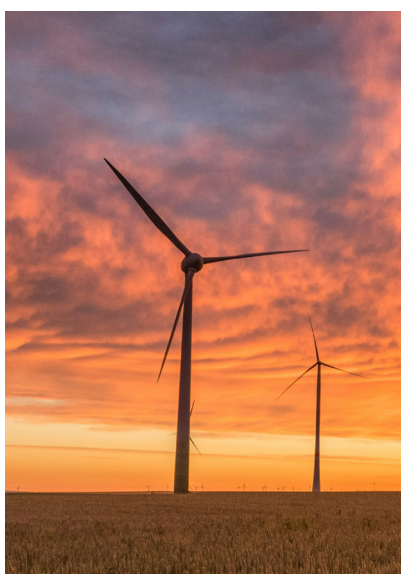
2.2 Enablers

Enablers to accelerate blended finance approaches to support our climate transition include:

- Providing blended finance blueprints to reduce the time to market for blended finance funds
- Empowering and motivating blended finance stakeholders to take action by providing a clear path to success.

Building on these two enablers, the three case studies presented by Vito Dellerba provided participants with practical information about project origination and implementation. The role Vito plays across CDPQ supporting innovative blended finance approaches could be replicated by Australian superannuation funds.

Three excellent case studies demonstrate different capital stacks that used a blended finance approach. Summaries of these are included in section 5 of this report and were prepared by the Investor Leadership Network and the Sustainable Markets Initiative, of which CDPQ is a leading member. In summary, the three case studies presented to the Roundtable were Catalytic Transition Fund (Brookfield), GAIA Fund, and Research Express Metropolitan. A brief introduction of each is below, and the full CDPQ case studies are attached in section 5 of this report.



Case Study 1: **Brookfield Catalytic Transition Fund (Brookfield)**

Catalytic Transition Fund (\$5 billion when closes) with key investors being ALTERRA, Brookfield, CDPQ, GIC, Temasek, Prudential and qualified institutional investors. 8–10-year investment term. Investing in clean energy, business transformation and sustainable solutions. The Catalytic Transition Fund (CTF) is a targeted \$5B fund focused on capital deployment within emerging and developing markets. The fund concentrates its efforts along three key themes: clean energy, business transformation and sustainable solutions. Managed by Brookfield, CTF benefit from up to \$1 billion in catalytic capital from ALTERRA, which helps mobilize investments into the fund's targeted regions across South and Southeast Asia, South and Central America, Eastern Europe, and the Middle East.

Case Study 2: **GAIA Fund**

GAIA works in key areas critical to the climate transition: energy generation and access; low emission transport; health, food and water security; infrastructure and the built environment; and ecosystems and ecosystem services. Around 70% of finance is intended for projects relating to climate resilience risk management and 30% to emissions reduction. The GAIA Fund Platform provides opportunities for participating countries to broaden the range of climate finance tools available to them and significantly expand the availability of both implementation finance (flexible long-term loans in local or hard currency without the mandate of a sovereign guarantee), technical assistance and knowledge sharing in the countries in which the fund operates.

Case Study 3: **Réseau Express Métropolitain**

The Réseau Express Métropolitain (REM) is a new mode of fully automated light rail transit that redefines urban mobility in Greater Montréal. The Réseau Express Métropolitain (REM) is a 67-km, light rail, high-frequency public transit network with 26 stations located in Montreal, Canada connecting key districts, namely the South Shore, downtown Montreal, Montréal-Pierre Elliott Trudeau International Airport (YUL), the North Shore and the West Island. Initiated by the Government of Québec and developed by CDPQ Infra, the REM was financed through an innovative blend of financing tools and risk management strategies.

2.3 Challenges

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Challenge 1. Opaque Market

Concessional capital providers do not publicly disclose financial terms. This lack of transparency of transactions limits its scalability or replicability. Opacity makes risk allocation challenging.

Recommended Actions

1. Pooling of funds (scale guarantees and first-loss tranches)
2. Offering technical assistance and advisory services at scale

Challenge 2. Challenging local environment

An enabling environment that favors cooperation is critical for success. Limited local resources often impede the optimization of a project.

Recommended Actions

1. Strengthening institutional capacity (financiers and technical experts)
2. Identify blended finance investment priorities
3. Establishing public-private partnership frameworks.

Challenge 3. Supply side problem

Importance of policy and institutional mechanisms to attract long-term capital. Strengthening project pipelines should be a key priority to generate quality assets.

Recommended Actions

1. Strong institutional capacity at the government level
2. "Programmatic" approach to pipeline development (policies & investment plans)
3. Project based support to a more systematic and sectoral approach

2.4 Further CDPQ Insights

Collaborating across different finance sectors was central to blended finance approaches. Co-investors need some shared goals (but not all will be the same as some investors will want impact outcomes whereas others will be more focused on financial returns and risk management). The five sources of finance speak different languages and are not necessarily "fluent" in the languages of the other sources, which complicates blended finance transactions. Each sector has its own context, regulatory environment and terminology and building an understanding of these assists collaboration. It is wise to start with less complex structures and to learn from success and failures. Shared learning is critical to building expertise and speed.

It was also noted that many concessional capital providers prefer to deal with the fund allocators not fund managers. Blended finance is a collaborative endeavour, and a base level of trust and shared goals needs to be built over time. There are many almost commercial opportunities in climate that require some concessional or flexible capital to make them attractive to mainstream investors.



3. Australian Insights

Roundtable participants from Australia, representing more than \$800 billion of funds under management, provided local insights about the enablers and barriers to accelerate investment by superannuation funds in the climate transition through using blended finance approaches.

Barrier 1

Mismatch with regulated performance targets

Several participants spoke about the challenges of meeting the Your Future, Your Super performance targets while being:

1. Long term investors; and
2. Seeking to support Australia's transition to a net zero carbon economy.

APRA is required to conduct an annual performance test for superannuation products. This year the test has assessed MySuper products for the fourth year in a row. The assessment under the performance test is intended to hold RSE licensees to account for underperformance through greater transparency and increased consequences. (APRA, website, 2025)

Some of the climate infrastructure, technology and enterprise investment opportunities that can support

Australia's transition to a net zero carbon economy require patient capital with a long-term time investment horizon. The current annual benchmarking measures do not align with the prudent investment decisions that lead to a 30 year or more energy infrastructure investment. They do not support shifting institutional investment into, for example, renewable energy related projects because overall fund performance is measured against a benchmark that has not been screened for alignment with transitioning to Paris Agreement aligned world. However, there are superannuation fund members who explicitly wish to support the energy transition and would benefit from more information about the ways their superannuation can accelerate our transition.

Many participants indicated that this was an issue requiring policy change by the Federal Government. The current policy wording is set out below.

Holding funds to account for underperformance

The Government is ensuring your hard-earned retirement savings are protected from underperforming super funds.

By 1 July 2021, My Super products will be subject to an annual performance test.

If a fund is deemed to be underperforming, it will need to inform its members of its underperformance by 1 October 2021.

When funds inform their members about their underperformance, they will also be required to provide

them with information about the Your Super comparison tool. Underperforming funds will be listed as underperforming on the Your Super comparison tool until their performance improves.

Funds that fail two consecutive annual underperformance tests will not be permitted to accept new members. These funds will not be able to re-open to new members unless their performance improves.

By 1 July 2022, annual performance tests will be extended to other superannuation products.

Your Super, Your Future, Budget 2020-21, Federal Treasury

Barrier 2

Mismatch between size and speed of investment opportunities

Some of the opportunities for investment require speed and are pilot projects, for example in green iron. The size of these deals is too small to attract institutional investors taken one by one. However, opportunities to aggregate and create climate transition fund(s) might overcome this.

An example of energy co-operatives was given as smaller size projects that were struggling to attract less than \$1 million in finance per project. There are also emerging market opportunities with multiple deals on the table, competing for finance support.

Response

Aggregating investment opportunities into funds that are of a size that suit superannuation funds is critical to making these opportunities more attractive and efficient. This could remove inefficiencies across the value chain and help deploy capital with different return and risk criteria.

There is an opportunity for more creative, bold approaches through a Blended Finance Consortium creating a fund, and perhaps a National Blended Finance Strategy. Complexity can be reduced by consolidating into vehicles. This could be through a shared approach to building a scaling up climate fund or funds which is attractive to superannuation funds. The fund scale would need to be at least \$40-\$50 billion. A very small contribution from each superannuation funds, towards a catalytic aggregator fund which could be held by an existing entity such as the Future Fund, National Reconstruction Fund or the Transition Accelerator. It could be a game changer. The Fund could include an allocation to blended finance deal origination, structuring and execution. The Funds could use standardized contracts and find efficiencies.



Barrier 3

Blended finance skills gaps

It was noted that blended finance requires an understanding of the different sources of funding and how they can best be included in a capital stack. It was noted that CDPQ had developed blended finance expertise in house through building the GAIA Fund and that CDPQ had 85% of its investment expertise in house. Blended finance required innovation as it was trying to solve the climate challenge within a finance system which was not designed to solve this problem. Using sources of catalytic funding from philanthropy, impact investment and government, can create opportunities for private and institutional capital. It takes time to build the investor group and match return, risk and impact expectations. Blended finance is solving to enable a market adjusted risk and/or return. It was noted that some Australian superannuation funds are building internal blended finance capability.

Initiatives to make blended finance transactions more transparent and to standardize approaches would assist build the pipeline of investible projects. Due to unfamiliarity, the due diligence required on transactions needs to be priced in and can slow down deal flow and increase costs significantly. The generosity of CDPQ sharing their experience in detail was appreciated.

Several examples of networks seeking to increase technical knowledge and opportunities were mentioned

Response

Finance plus technical assistance

Project development requires development assistance not only financing. Technical assistance and even project execution required support. This is often done on a transaction-by-transaction basis. In the example of the GAIA Fund (Case Study 1), international philanthropy played a role in funding technical assistance in addition to providing grant funding. The Transition Accelerator (Australia), CREO Syndicate and Temasek were noted. Temasek is a Singaporean investment company, which announced that it had set aside \$100 million for concessional climate finance in September 2024. All examples include finance and technical assistance. These accelerator funds are summarised below.

Transition Accelerator (Australia)

Our mission is to accelerate the transition to a sustainable future by expanding the scope for profitable investment in climate solutions.

We work with philanthropists, not-for-profits and investors to provide catalytic capital to fund climate solutions.

We provide patient, risk-tolerant and flexible capital to support projects and solutions that otherwise wouldn't receive commercial capital.

By providing philanthropic grants, concessional debt, first-loss capital and concessional equity underwriting, we can unlock commercial funding for climate projects.

CREO Syndicate

CREO is an NYC-headquartered 501(c)3 public charity with a mission to mobilize and catalyze high-impact capital to drive the necessary transition to a low-carbon, sustainable, and prosperous future for all.

We facilitate investment in climate solutions and sustainability by helping large asset owners and our membership community, consisting of family offices and foundations, to build knowledge and confidence via shared

insights, research, and programming that focuses on the question of 'how' to invest in climate solutions and the decarbonization transition.

In recognizing the critical role of the financial industry in leading the climate transition to meet the goals under the Paris Agreement, we are committed to an ambitious goal: to help deploy US\$100 billion of high-impact capital into climate and sustainability opportunities as well as catalyzing US\$ 900 billion into the marketplace by 2027.

Temasek

The S\$100 million is funded by Temasek's community gifts, which aim to drive intergenerational impact aligned with our community objectives. Since 2003, Temasek has been setting aside a portion of its net positive returns above its risk-adjusted cost of capital for gifts that meet the objectives of connecting people, uplifting communities, protecting planet, and advancing capabilities. These gifts are philanthropic in nature and have the potential to be catalytic in mobilising other forms of capital.

The success of CCCA would be measured by its ability to scale positive outcomes in the area of climate action, including the ability to avoid, mitigate, and adapt to the impact of climate change; promote biodiversity and enable people to live in harmony with nature; and encourage sustainable living choices and behaviours that promote responsible resource use for better human and environmental health. Examples of projects include marginally bankable clean infrastructure projects in Asia.



4. Recommended Actions

The Roundtable discussed some high priority actions. These Actions require a collaborative effort. Australia has many components of a blended finance ecosystem, including some successful examples, however these components are hard for potential investors to find, greater capability in developing and supporting deals is required, and the ecosystem components need to be connected.

ACTION 1

A Blended Finance Climate Aggregator Fund (or other name) which helps accelerate institutional investment into scaled up opportunities in Australia's climate transition.

1.1 Increase access to large scale finance to support blended finance approaches

Impact Goal

An accessible market wide accelerator to enable institutional investors to participate in Australian blended finance climate transition opportunities efficiently and at an appropriate scale.

The solution

A Blended Finance Climate Aggregator Fund that is efficient, leverages and adds value to existing funds, and aggregates opportunities is required. The Fund will add institutional capital alongside the catalytic capital layers within a capital stack or provide investment where catalytic capital has enabled a track record and market to be demonstrated.

To meet the challenges discussed by CDPQ and Australian participants, the new Fund must have the following characteristics.

Aim for efficiency

1. Subject to more due diligence, explore whether the Fund can be hosted by existing investment vehicles within an aligned purpose such as one or more of the National Reconstruction Fund, the Future Fund, the Clean Energy Finance Corporation, or the Transition Accelerator. For an example of purpose:

The Future Fund is an important national asset with a clear purpose – to invest for the benefit of future generations of Australians. The 2024 Investment mandate includes: The priority areas are: supporting the energy transition, the supply of residential housing, and infrastructure.

2. Use standardized documentation wherever possible so that projects are able to fast track through legal and regulatory requirements.

Operate at scale

3. Aggregate investment opportunities into subfunds or other efficient investment vehicles so that opportunities are presented to superannuation funds at the scale they require, at least \$50 and preferable \$100 million.
4. Layer and partner with catalytic sources of finance to create investment opportunities that are attractive to the risk appetite, return expectations and time horizons of superannuation funds. Create opportunities that sit within existing asset classes, so they are easy for investors to understand.

Build and share blended finance capability

5. Superannuation funds contribute an agreed small percentage of funds (perhaps 0.25% of \$4.1 trillion being a \$102.5 million

Build and share blended finance capability

5. Superannuation funds contribute an agreed small percentage of funds (perhaps 0.25% of \$4.1 trillion being a \$102.5 million fund) to create a fast-track finance alongside philanthropy and government, which includes the ability to provide technical assistance for origination, aggregation and implementation.

Next steps

This action requires leadership from the superannuation sector, or a smaller leadership group of superannuation funds, to contribute to establishing the fund, preferably leveraging philanthropy and government to enable seamless support for technical assistance.

The various host organisations need to be considered more deeply, subject to their own strategies and what a host partnership could offer. Detailed work on Fund design and policies would need to be undertaken.

Some initial return and impact targets would be set, and an action learning approach taken so that finetuning can take place as the Blended Finance Climate Aggregator Fund evolves.

1.2 Policy change to Your Future Your Super benchmarks to support the climate transition

Impact goal

Remove a disincentive for superannuation funds to invest in Australian's and our regions climate transition using blended finance approaches

Context

Under the Your Future, Your Super policy, superannuation funds must benchmark portfolios annually against the ASX 300. This means that funds that are supporting the climate transition through decarbonization and strategic investments in climate infrastructure, technology and other enterprises may be measured against an index which is not comparing like with like. The consequences of not achieving benchmarks are very serious, with members potentially being advised that the fund is underperforming when the investments are seeking to reduce carbon emissions and are informed by a longer-term investment horizon. The YFYS benchmarks are not Paris aligned and take a short-term view of returns.

The consequence of this annual reporting, non-aligned with our Paris Agreement commitments, is to stifle investment in longer term, climate mitigation projects. While the public policy goal of greater transparency is supported by the sector, a more granular set of indices should be identified that reflect decarbonisation of portfolios.

Next steps

The superannuation funds and peak bodies interested in supporting Australia's transition to a net zero carbon economy should be encouraged to work with the Federal Government including APRA and Treasury to find a set of benchmarking indices which will provide transparency and accountability to members, while achieving our climate transition goals. MBS will provide this report to policy makers.

1.3 Upskill and connect investors across the capital stack to support the Blended Finance Ecosystem

Impact Goals

Well informed and creative climate transition blended finance professionals and entrepreneurs operate effectively across the investment journey in Australia, knowing how and when to pass the investment baton as a project or enterprise scales up over time, accelerating our transition to a net zero carbon economy.

Action

Melbourne Business School is able to contribute to this Action through convening across the capital stack, including institutional investors, through high level Roundtables, and through executive education as required. We are pleased to continue supporting peak bodies, the Federal Government and other leading organisations in this work.

4. Case Studies

- Catalytic Transition Fund
- GAIA
- Réseau Express Métropolitain

Source: Blended Finance Best Practice Case Studies & Lessons Learned
by CDPQ, Sustainable Markets Initiative & Investor Leadership Network, 2025

A. Introduction to the fund

The Catalytic Transition Fund (CTF) is a targeted \$5B fund focused on capital deployment within emerging and developing markets. The fund will concentrate its efforts along three key themes: clean energy, business transformation and sustainable solutions. Managed by Brookfield, CTF will benefit from up to \$1 billion in catalytic capital from ALTÉRRRA, which will help mobilize investments into the fund's targeted regions across South and Southeast Asia, South and Central America, Eastern Europe, and the Middle East.

Fund mandate	Mobilize and deploy climate finance towards chronically underfunded markets that are critical to achieving Net-Zero
Fund vintage	2024
Fund size	Target \$5B
Fund term	8-10 years
Key investors	ALTÉRRRA, Brookfield, and qualified institutional investors
Key instruments	Commercial capital, catalytic capital, and other risk mitigation mechanisms
Target regions	South and Southeast Asia, South and Central America, Eastern Europe, and the Middle East
Target sectors	Clean energy, business transformation and sustainable solutions
Target Sustainable Development Goals	The fund is anticipated to support various Sustainable Development Goals (SDGs), which may include (but are not restricted to): SDGs 6, 7, 9, 11, 12, 13

1. Source: [Alterra](#)

B. Background

Brookfield has long identified the potential of emerging markets. Through the capabilities amassed during the launch and operationalization of previous transition-focused funds, the asset manager recognized the opportunity to leverage existing know-how in order to direct funds into emerging markets. However, Brookfield lacked the right dedicated pool of capital to undertake and manage the associated risks in these markets.

Concurrently, COP28 saw the introduction of ALTÉRRRA, an innovative \$30B climate investment fund geared to drive substantial investments into pivotal projects on a global level. Established by the UAE, ALTÉRRRA seeks to mobilize \$250B globally by 2030 to create a fairer climate finance system¹. \$5 billion is earmarked for the Global South through ALTÉRRRA Transformation, a distinct branch of ALTÉRRRA.

Both Brookfield and ALTÉRRRA were seeking the right partners that would enable each actor to fulfill their ambitions, leverage their respective strengths, and capitalize on the transition imperative.

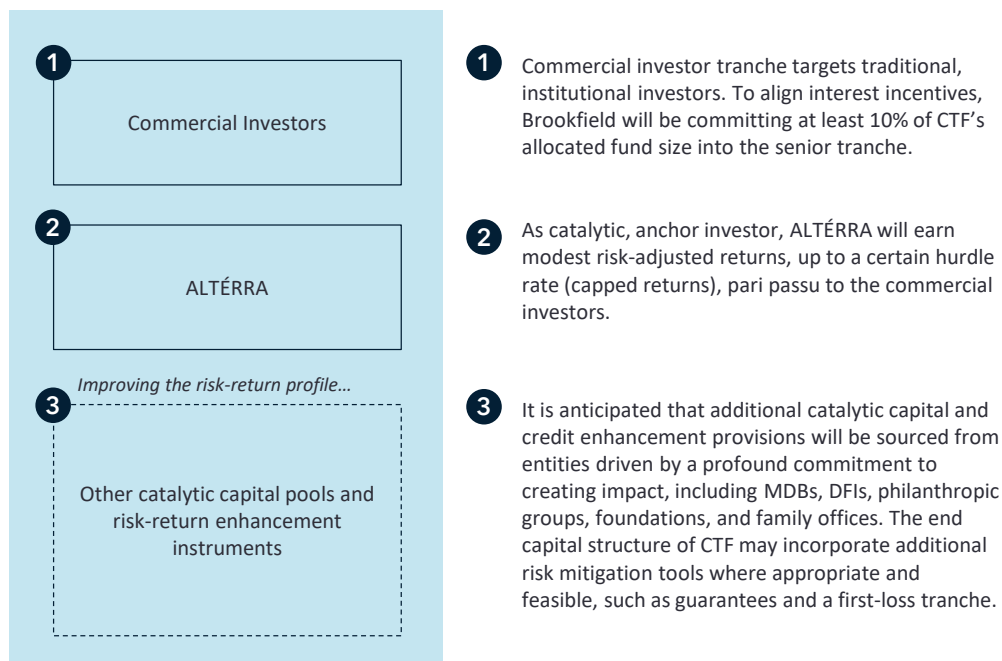
As such, with the support from ALTÉRRRA Transformation, Brookfield launched CTF — a \$5B initiative dedicated to decarbonization efforts within emerging and developing markets. The alliance between Brookfield and ALTÉRRRA marks a significant milestone in blended finance, not only through ALTÉRRRA's significant \$1B catalytic seed investment, but also by virtue of the targeted size of the fund

Why use Blended Finance?

The importance of blended finance comes from the underlying risk-return profile associated to the emerging markets targeted by the fund. CTF's ambition in terms of both size and scale will significantly shape the fundraising and deployment approach within the sector, and its projected impact will serve as a beacon to the potential and importance of key catalyzers such as ALTÉRRRA within the transition economy.

C. Structuring process

Capital Structure (indicative)



For ALTERRA, CTF's capital structure will cap returns at a single-digit percentage. By sheer volume of catalytic capital, ALTERRA's \$1B commitment will play a critical role in the CTF. ALTERRA also enables Brookfield to deploy capital within emerging markets at scale, where historically, these markets have been overlooked for climate transition investments.

Aligning with traditional infrastructure funds, the CTF targets an investment horizon ranging from 8 to 12 years, indicative of a long-term commitment to environmental sustainability and market transformation.

D. Implementation

Governance model

Brookfield's role as the General Partner (GP) enables CTF to a governance structure that is both nimble and robust. The management will delegate region-specific oversight to experienced leads, ensuring investments are rooted in local understanding and sector-specific expertise. The GP maintains full direction of the fund, holding their accountability on committed targets through periodic updates to investors. This leadership model facilitates the balance between flexibility and control necessary for the fund's success. ALTERRA has entrusted the fund performance to Brookfield, given their experience in active management within infrastructure investments at the global level, an expertise gathered through the asset manager's experiences with previous transition-focused infrastructure funds.

Key features of the operating model

Through the dual mandate of financial returns and measurable impact, CTF will utilize Brookfield's existing, proven processes, namely from a due diligence and an impact framework perspective.

- ▶ CTF will leverage Brookfield's established expertise and track record in sustainable infrastructure investment for its due diligence process. With region-specific leaders on the ground, CTF will benefit from Brookfield's proven processes of deal sourcing and deal structuring, which encapsulate the realities of emerging markets.
- ▶ At the heart of CTF's operating model is its impact framework. Aligned with the Operating Principles for Impact Management (OPIM) standards and decarbonization pathways from the Paris Agreement, the impact management framework stands as the cornerstone of the CTF through its holistic, non-exclusionary, and measurable approach to impact. CTF's impact strategy gathers the lessons learned from prior funds, enhancing the credibility and accountability of capital deployment.

Fundraising process

Leading financial institutions at the global-level have demonstrated preliminary interest in investing commercial capital into the fund. Brookfield is also pursuing additional catalytic capital partnerships.

E. Key takeaways

1	Open communication to tailor-design the strategy and inspire meaningful alignment: The preliminary and ongoing discussions the responsAbility team had with investors were key in creating the strategy towards a relevant and purposeful design. Blended finance inherently entails bridging together distinct investment cultures across the public and private sectors. For ACS, responsAbility sought to ensure that the strategy would deliver on the risk and return levels expected by private investors all while meeting the impact, return and mobilisation agenda's of the public funders.
2	Purposeful and well-rounded impact framework: Brookfield's established and market-recognized impact framework is essential to the credibility of the fund. It serves as an enticing factor to investors, especially those who have limited experience within emerging markets, giving them the confidence that they are capturing both the financial benefits and impact targets of CTF.
3	Nimble but purposeful capital attraction process: CTF approached a flexible process in attracting capital from both public and private entities, undertaking dialogue and discussions to explore ways in which constrained capital can be freed to the fund, all while allowing Brookfield to retain operational autonomy at launch. This was important to ensure efficiency for the eventual capital deployment of CTF as it ensured that pools of capital committed to fund were aligned under a common purpose, thus avoiding the complexities of managing varying expectations and individual investor restraints.
4	Education of investors to unlock capital flows: As the world shifts and increasing focus is directed on climate pathways, an education component becomes a fundamental integration into discussions and negotiations with potential investors. In particular, some investors have expressed interest in CTF, but lack the knowledge and understanding in how participation could take shape. It becomes important for Brookfield and the CTF to embark in meaningful conversations to better enable investor participation.
5	Engaging with MDBs, DFIs, IFIs, and country governments to foster a conducive environment for blended finance: Beyond the CTF, Brookfield emphasizes the need for increased endeavours that seek to bolster blended finance at scale. These efforts link to the momentum needed from MDBs and other public actors to reform their agendas, in order to identify concrete ways in which their capital can be used to bolster initiatives such as CTF and target the appropriate pools of capital to enable this process.








F. Conclusion

The Catalytic Transition Fund and its ambitions go beyond the tangible sustainable potential for projects within emerging markets. Guided by a track record of impactful investments, it captures how vision, experience, and a targeted governance foster an enabling environment for sustainable investment and development. Through its alignment to global climate action pillars, the potential to mobilize significant institutional investors, and a proven impact framework, the CTF is poised to become the world's largest transition fund for EMDEs, driven by sheer scale and size. ALTÉRRRA's commitment alongside Brookfield's management demonstrates a new era of mobilization for climate action, exemplifying the importance of stakeholder collaboration in the pursuit of greater global environmental stewardship.

The information contained herein is for educational and informational purposes only and does not constitute, and should not be construed as, an offer to sell, or a solicitation of an offer to buy, any securities or related financial instruments. Investors should consult with their advisors prior to making an investment in any fund or program, including a Brookfield-sponsored fund or program.

A. Introduction to the fund

GAIA is a USD 1.48 bn blended finance platform deploying private debt in up to 25 developing and emerging countries across Africa, Asia and Latin America. The platform aims to address risks associated with climate change through investments in mitigation and adaptation projects. The blended finance fund will be launched towards the end of 2024 and focus solely on the development of greenfield projects within climate-vulnerable emerging regions. GAIA intends to leverage an ecosystem of public and private partners to deploy capital towards selected high-impact opportunities.

Fund mandate	GAIA is an Article 9 fund that seeks to mobilize private capital at scale for high-impact climate projects in up to 25 emerging market (EM) countries, including Small Island Developing States (SIDS) and Least Developed Countries (LDCs), aiming to create a replicable blueprint for other investors to catalyze private sector finance and support EMs' transition to low-carbon, climate-resilient growth.
Fund vintage	2024
Target fund size	USD 1.48 bn
Fund term	30 years, 15-year investment period
Eligible borrowers	Sovereign-sponsored projects, sub/quasi-sovereigns, state owned enterprises
Key participants	MUFG, FinDev Canada (Founding Members / Cornerstone Investors), Climate Fund Managers (Investment Manager), Pollination (Climate Impact Advisor)
Key structural components	Senior Capital, Junior Capital, Reserve Account, Insurance/Guarantee, FX Hedging Facility, TA Facility
Target regions	Starting with 19 countries that have already signed a no-objection letter (NOL); 25% allocation for SIDS and LDCs
Target sectors	GAIA will target climate adaptation (a minimum of 70% of the aggregate fund capital) and mitigation (a maximum of 30% of the aggregate fund capital) projects. Adaptation investments will focus on food and water security, infrastructure and built environment, ecosystem resilience, and enabling information and communication technology. Mitigation investments will target energy generation and access, as well as low-emission transport.
Target Sustainable Development Goals	      

1. Source: [Adaptation Gap Report 2023](#) | UNEP - UN Environment Programme

B. Background

Climate change effects are clear, with increased sea levels, extreme weather, and variable rainfall. Over the past two decades, there has been an alarming rise in climate disasters, leading to floods, droughts, and heatwaves, with severe consequences for low-income economies. There is a pressing need to address these threats within Emerging and Developing Economies (EMDEs), who are disproportionately affected by climate change and most vulnerable to the consequences of the crisis. While the urgency for adaptation finance is more dire than ever, the funding gap to address these challenges within EMDEs continues to widen; estimates currently place the capital shortfall at a harrowing USD 194-366 bn per year¹. Described in a United Nations Environment Programme (UNEP) 2023 report as 'underfinanced and underprepared', EMDEs are and will continue to be profoundly affected by the adverse effects caused by the lack of adaptation resources and capital.

GAIA thus emerged as a response to this growing disparity and aims to secure funding through public and private investments to meet these critical challenges.

GAIA seeks to deliver impact by heavily focusing on climate adaptation opportunities within emerging markets, as defined by the United Nations. By virtue of its targeted size, GAIA enables the attraction of large, commercial investors all while offering a compelling impact proposition to catalytic actors.

Importantly, beyond enabling tangible change across the investments made, GAIA seeks to shed light on the following areas within climate finance:

- 1) Defining the best approach for developing adaptation projects, traditionally perceived as public finance
- 2) Testing the limits of where and how public and private capital can be deployed, and the tools required to enable such mobilization
- 3) Designing a proven and valuable template for blended finance that encourages replicability

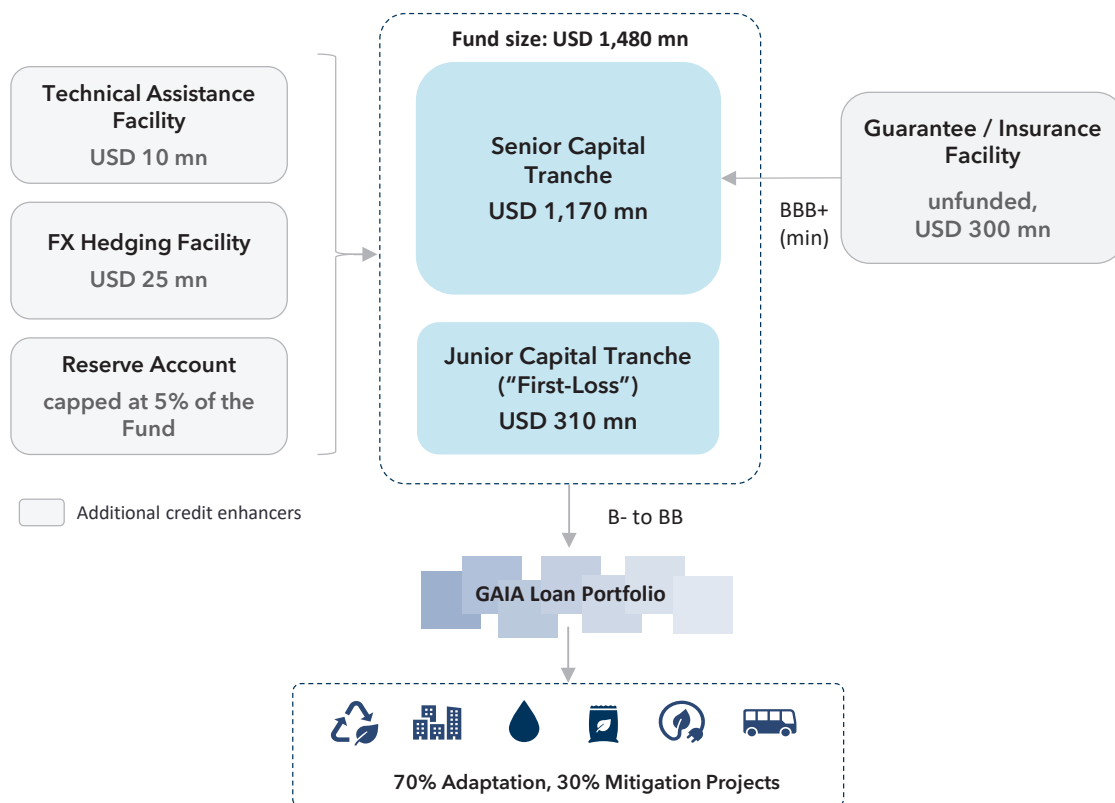
In its entirety, GAIA is meant to be a testing ground, an end-template, that enables the creation of a scalable model and empowers a paradigm shift on the potential of innovative collaboration between private & public sectors in support of climate-resilient pathways.

C. Structuring process

The fund structure has been focused on building protective layers to cater the investment to private stakeholder appetites. Beyond a First-loss Junior Capital Tranche, GAIA's risk mitigators are enhanced by: (A) First-Loss Reserve Account (B) Guarantee/Insurance Facility and (C) Foreign Exchange Hedging Facility.

GAIA Architecture

Through innovative financial structuring, combined with its blended finance architecture, GAIA achieves capital protection at the senior level and enables the mobilization of private capital



GAIA Capital Structure

GAIA vision is to create an attractive investment vehicle with a risk profile aligned with private investors' requirements. This approach includes:

- Blend of different capital sources to match investors to risk-return profiles
- A multitiered fund structure by tiering capital with different risk profiles
- Credit enhancement features and reserve account



Tiered Capital Structure

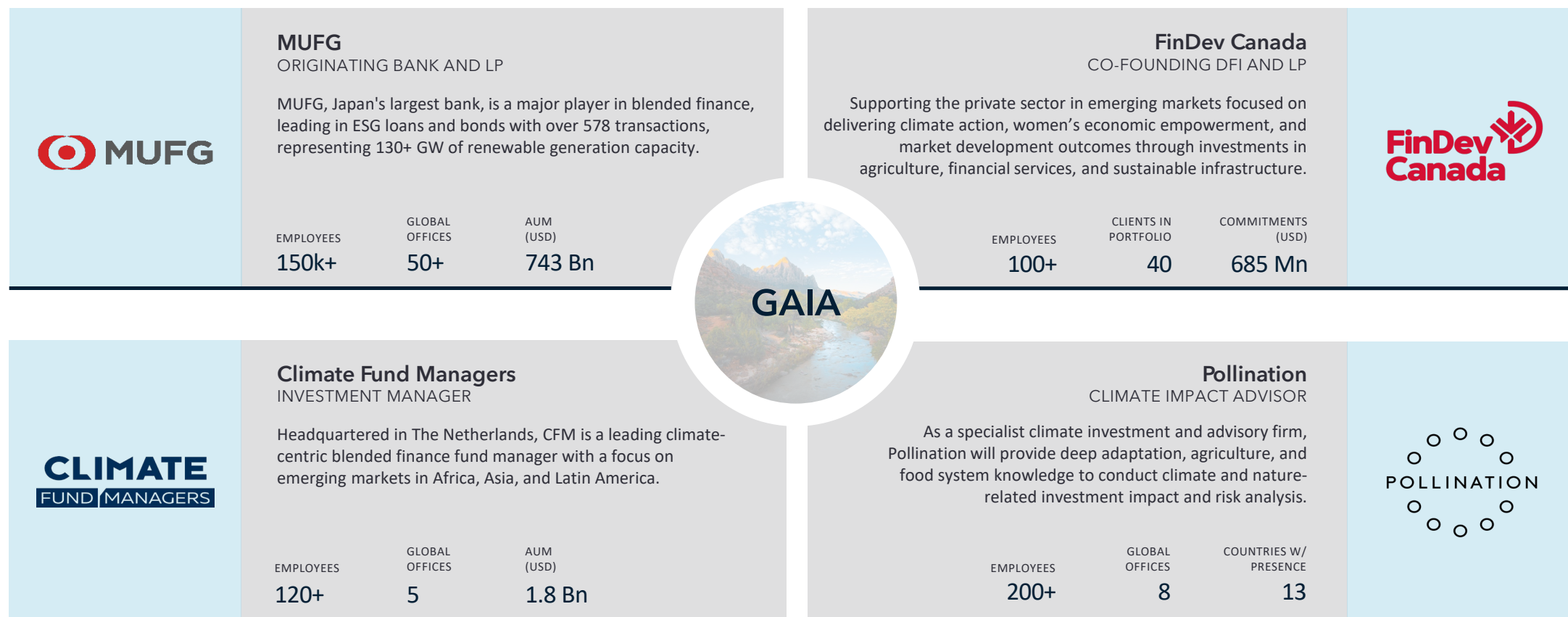
- **Senior Capital Tranche**
Dedicated to and funded by institutional investors that benefit from protection.
- **Junior Capital Tranche**
First-loss facility, funded by impact and concessional fund providers.
- **Guarantee/Insurance Facility**
Second-loss optional unfunded insurance/guarantee tranche. Provided directly to the senior investors and will cover losses up to a cap of USD 300 mn in excess of the total First-loss Junior Capital Tranche committed.

Reserve Account and Facilities

- **Technical Assistance Facility**
Dedicated parallel facility to enhance origination efficiency by structuring viable projects and measuring their SDG impact.
- **FX Hedging Facility**
Subsidises the hedging cost to support lending in local currency.
- **Reserve Account**
Protection-top-up mechanism funded through the excess income produced by the platform, absorbs Senior interest and principal losses before Junior Capital Tranche.

D. Opportunity overview

GAIA's ecosystem of partners collaborates to enhance the Fund's climate and financial objectives through robust pipeline generation, investment selection, and asset management practices



E. Success factors

1	Integrity within senior leadership: To empower blended finance and bolster its transition into more mainstream financing spheres, climate concerns must emerge as priorities from key leadership committees. Initiatives like GAIA typically fall under the ESG teams of organizations, often lacking the traction needed to be deployed at scale. However, for blended finance to truly mature, there needs to be increased conviction amongst investment management committees to direct capital flows towards non-traditional, climate financing. The impetus for GAIA was driven by an intrinsic motivation from the MUFG senior leadership, who recognized the importance and potential of the initiative, allowing the fund to kickstart design and eventual fundraising.
2	Proactive participation from leading concessional figures: The Green Climate Fund's participation as an anchor investor was pivotal to the early enablement of the fund. Not only did the GCF anchor the first round of funding for GAIA and provide the necessary first loss buffer required to attract the private sector, but GCF also brought in the credibility of climate additionality presence needed for further public sector traction. Notable organizations like the GCF play dual roles within blended finance structures such as GAIA – an imperative layer of first loss and a paramount landmark for sustainability potential.
3	Governance structure that empowers investors: GAIA's unique governance committees were pivotal to the fundraising process. Many investors seek a fundamental governance design that integrates stakeholder engagement, enabling oversight of the fund's operations and portfolio development. Giving investors a voice at the table where decisions are made attracts passionate public organizations that pursue true difference while enticing private players that look to fulfill their impact agenda and a defensible return through such exercise. GAIA achieves this by creating both a Climate and ESG Committee and a Credit Committee.
4	Credible climate partners: GAIA's chosen partners brought an important layer of credibility to the fund. Bringing in trusted partners with track records of consistent climate value creation was an important element in ensuring the operating model captured the necessary pieces to enact the promises made by GAIA.
5	Adaptability and flexibility in structural design to cater to investor needs: For many institutional investors, funds like GAIA are their first encounters with blended finance. It was thus pivotal for the GAIA team to adjust the structure of the fund to meet the expectations of the private sector. In this case, by increasing the layer of concessional buffering to de-risk the value proposition for senior investors and creating an investment committee purely comprised of private stakeholders. In the same light, concessional players also come in with bespoke considerations, creating a Climate and ESG Committee purely comprised of public investors creates ownership and dedication amongst these players.

F. Conclusion

GAIA is anticipated to make a significant positive impact on the lives of 19.5 million people in emerging markets' most vulnerable regions. Yet, its ambitions extend beyond as GAIA aims to catalyze a fundamental shift in the way public and private sectors collaborate. It strives to foster a new level of confidence, partnership, and trust that can invigorate the climate finance ecosystem. As a pioneering endeavor, GAIA aspires to set a precedent, serving as a model for how to navigate the complexities of blended finance. It seeks to pave the way for future initiatives by providing a clear blueprint for success, equipping those at the forefront of blended finance with the necessary tools, resources, and stories to empower collaboration amongst the world's financiers.

Outcomes

1. Reduced GHG emissions from climate mitigation projects contributing to low-carbon growth.
2. Increased resilience of physical assets, eco-systems and populations to climate change impact.
3. Increased number of quality jobs contributing to sustainable and inclusive economic growth.
4. Enhanced capacity of project proponents to identify and manage E&S risks in climate projects.
5. Enhanced economic opportunity for women and improved capacity of project proponents to consider the unique needs of women in climate projects.
6. Enhanced capacity of project proponents to access and mobilize climate finance and to address real and perceived risks of climate finance projects.

Expected Impact

- 30.6 mn tCO₂e avoided/reduced
- 700 MW installed renewable energy capacity
- 35,975 GWh renewable energy generated
- 19.5M individuals to be positively affected
- 0.5 mn hectares of natural resources under improved low-emission and/or climate-resilient management practices

A. Introduction to the project

The Réseau Express Métropolitain (REM) is a 67-km, light rail, high-frequency public transit network with 26 stations located in Montreal, Canada connecting key districts, namely the South Shore, downtown Montreal, Montréal-Pierre Elliott Trudeau International Airport (YUL), the North Shore and the West Island. Initiated by the Government of Québec and developed by CDPQ Infra, the REM was financed by a bespoke, blended capital structure through contributions from both public and semi-private players.

Project Goal	Propose and execute on a solution that would connect key districts of the Greater Montreal Area together, integrating the most advanced transportation infrastructure with optimized processes to deliver an impactful public transport system, promote public transit use to Montrealers and surrounding areas, and position the city on a global level for its innovative, urban transit ecosystem.
Project Start	Construction for the REM began in 2018.
Project End	South Shore link was inaugurated in July 2023. The REM targets full completion in 2027 (YUL airport station to be completed by 2027).
Key investors	CDPQ Infra, Government of Québec (government), Canada Infrastructure Bank (CIB), Hydro-Québec, Autorité Régionale de Transport Métropolitain (ARTM)
Key instruments	Equity, preferred equity, senior secured loan, commercial funding agreements and public contributions
Region	Greater Montreal Area (GMA), Québec, Canada
Sector	Transportation; Large-Scale Infrastructure

B. Background

In 2015, the Government of Québec announced a large-scale infrastructure project that would transform the public transit system in Montreal. For years, there had been talks of expanding the transportation ecosystem of the city by creating links to : (1) the Montréal-Pierre-Elliott Trudeau International Airport and (2) the Island of Montreal's South Shore. From its first ideation to its current expended form, leveraging a traditional Public-Private Partnership (PPP) model was challenging given the scale of the project, the targeted rapid delivery timeline, and the numerous interfaces with third parties. To successfully navigate these challenges, the Government of Québec entrusted the delivery of the project to CDPQ Infra, an infra-specialized subsidiary of CDPQ.

Why use Blended Finance?

The potential of the REM was clear; however, there were concerns that the underlying risks, scale, and economics of the project would not align against risk and return levels expected by CDPQ, both as an institutional investor with fiduciary responsibilities and as the most significant contributor to the REM. Hence, it was pivotal to optimize the cost of capital by leveraging a blended capital pool, which included junior, minority equity investment from the government, a senior secured loan with the CIB, a commercial agreement with Hydro-Québec, and contributions from the ARTM, to mobilize CDPQ's position.

Role of CDPQ Infra and CDPQ

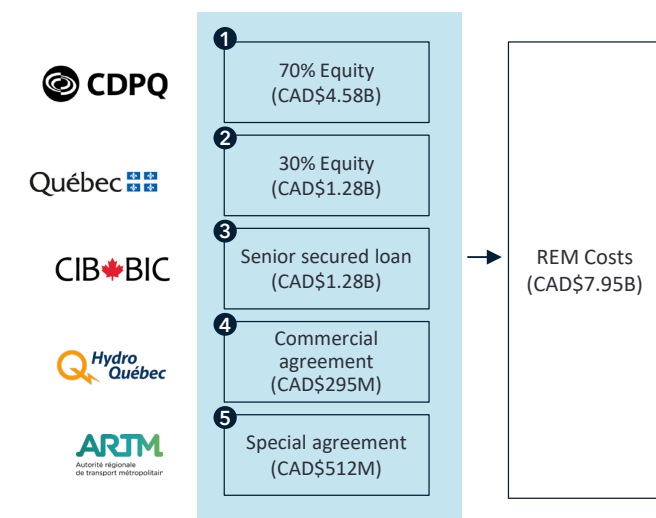
CDPQ Infra held a unique role within the REM. CDPQ Infra is responsible for proposing solutions to mobility needs identified by the government, and after government validation of the proposal, to undertake public consultation and communication, project planning, development, financing, constructing and operating the project. Effectively, by participating in the development of the REM as both principal contractor and an institutional investor, CDPQ Infra bridges the gap between:

- Governments and public authorities;
- Investors and lenders; and
- Engineering and construction firms, by providing a turnkey approach to project development and funding, and by aligning long term interests with public authorities.

CDPQ Infra's unprecedented approach is enabled by CDPQ's dual mandate; since inception, the pension fund has sought to not only deliver optimal risk-adjusted returns to its pension holders, but also contribute to Quebec's long-term growth. These guiding principles were foundational to the development of the REM and its eventual delivery of true, economic value to communities of the GMA.

C. Structuring process

Capital Structure



- 1 Funded by CDPQ Infra, the 70% equity stake comprises of a target annual return on equity of 8-9% over the project's investment horizon.
- 2 Funded by the Government of Québec, the 30% equity stake comprises of a target annual return on equity of 3.7% over the project's investment horizon.
- 3 Funded by the CIB, the senior debt tranche will take the form of a 15-year senior secure loan, at a rate starting 1% and escalating to 3% over the term of the loan.
- 4 Funded by Hydro-Québec, the commercial agreement capital will cover the fixed equipment costs needed to electrify the REM.
- 5 Funded by the ARTM, the special agreement represents payment accounting for the uplift in tax revenues municipalities are expected to generate as a result of the REM's presence.

Process

The capital structure of the REM's project cost underwent multiple iterations to ensure that key stakeholder needs and expectations were well-captured. A methodical approach of identifying, integrating, and testing various risk and return acceptance levels respective to each stakeholder, under different scenarios, was taken. However, there were two key considerations that CDPQ Infra factored in as fundamentals to the financing structure:

- ▶ It remained imperative for CDPQ Infra to generate a priority return and retain preferred, majority, voting shares of the REM. The purpose came on two fronts:
 - For one, CDPQ Infra would be fully bearing the end-to-end development and operational risks involved in the development of the REM. It was thus necessary for the division to capture majority equity, be compensated through market aligned returns, and to have governance rights that reflected this economic position.
 - Second, the team sought to focus on purposeful and effective decision-making. An endeavour of this scale meant that coordination across various suppliers, municipalities, and investors, was essential. The ability to make decisions from a pure technical perspective was deemed crucial, leading to the structuring of full voting rights within the equity owned by CDPQ Infra.
- ▶ In order to support the financing of, and maintain a long-term participation in the project, the Government of Québec participated as a shareholder. However, to reflect the role and responsibilities and risk allocation between the parties in the development of the project, it was agreed that the Government would have minority, non-voting equity. It was also important for the equity investment to have a 'neutralizing' effect on the government's balance sheet¹. As such, the resulting targeted returns for the Government in the REM would be equivalent to the average borrowing costs of the Government of Québec's debt.

The preferred waterfall structure was a fundamental aspect of the deal's framework. This strategy not only compensates CDPQ Infra for their risk-bearing position, but also ensures alignment between CDPQ Infra and the Government of Québec, facilitating the mobilization of capital from each entity. Effectively, the waterfall structure of the REM is as follows:

1. Comparable to the cost of debt

- ▶ CDPQ Infra receives priority returns up to target rate of 8%;
 - ▶ The Government of Québec receives subsequent returns up to target rate of 3.7%;
 - ▶ Remaining upsides are then shared between CDPQ and the Government of Québec according to their equity ownership in the REM.
- Other stakeholders within the structure had a case-by-case participation in the capital stack.
- ▶ At the time of structuration of the REM, the Canada Infrastructure Bank (CIB) had just been founded, and the REM was the first project supported by the CIB. The federal corporation participated in the project by deploying senior secured debt below market terms. The contribution would phase out after 15 years to avoid crowding out the private sector, and CDPQ Infra designed the debt tranche with this consideration in mind. CIB's catalytic position in the structure was driven by their mandate of playing an enabling role in the development of sustainable infrastructure across Canada and was a pivotal piece in rallying the various players together within the project.
 - ▶ Hydro Québec and ARTM support would not come in the direct form of equity and debt participation, but rather through various, singular agreements.
 - In line with their goals of electrification across the province of Québec, Hydro-Québec supported the development of the REM by investing in fixed equipment costs, eventually benefiting from electricity purchase.
 - ARTM's contribution to the REM's construction represents the value capture of new real estate developments generated by the infrastructure within a certain perimeter. It was made possible by the legislative amendment to Bill 66, which is Québec's Infrastructure Acceleration Bill.

There were underlying risk factors, including uncertain ridership numbers that would determine the REM's financial returns and potential labour disputes, to the project. As such, the catalyzing stakeholders were essential as both de-riskers and mobilizers of the capital necessary to completing the fundraising. Although each actor had tailored stakes and conditions, this bespoke approach allowed innovative agreements to take place, bolstered the REM's momentum across various key Québec players, and ultimately commenced the REM's construction.

D. Implementation

Governance Model

CDPQ Infra implemented a simple and straightforward governance model that aligned accountabilities and incentives for the development of the REM. The team was the principal investor and also responsible for the planning, development and execution of the project. By holding main decision oversight of the REM, it enabled an agile and clear structure definition amongst stakeholders and reduced complexity in process management. Such governance approach ensured that the CDPQ Infra team could properly leverage their technical expertise across the end-to-end development of the transit project and adapt flexibly to the different challenges during the delivery.

The interest alignment component across investors was supported by CDPQ’s inherent, semi-public mandate of providing long-term value to Québec pension plan holders. Unlike most private infrastructure developers, the organization is not only tied to the returns generated from the success in the constructions phase, but rather the entire lifecycle of the infrastructure and its end benefits to the Québec economy. This creates incentive to deploy capital towards high potential opportunities, oversee the successful construction, and ensure sustainable delivery of benefits – which is what enabled a true harmonization of interests between the various stakeholders throughout the development of the REM. In fact, through this approach, the REM will be the Government of Québec’s first profit-generating, public transit project. Such outcome speaks volume to the potential and value creation made possible by empowering public-private collaboration.

Below shows the CDPQ Infra model and how it compares to traditional methods of financing and executing on large-scale infrastructure projects; it becomes clear that CDPQ Infra’s unique value proposition comes in the form of bridging the gap between project development expertise and project financing experience to create a highly effective ‘whole greater than the sum of its parts’.

	Public	PPP	CDPQ Infra
Conception	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Planning & financing	<div><div>New public debt</div></div>	<div><div></div></div>	<div><div></div></div>
Consultation & communication	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Development & execution	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Operation	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Controlling shareholder	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Assets on balance sheet	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Ownership of asset	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>

Government Private consortium CDPQ Infra Partners

Source: CDPQ Infra

Operating Model

Pre-execution

The execution of the REM was enabled through two consortia of external contractors:

- (1) First, players involved in the infrastructure, engineering, procurement, and construction of the REM, coined ‘Groupe NouvLR’. Organizations such as SNC-Lavalin (now AtkinsRealis), Pomerleau Inc, and Lemay were actors in this consortium.
- (2) Second, players in the Provision of rolling stock and systems and operation and maintenance (RSSOM) contract, coined ‘Groupe des Partenaires pour la Mobilité des Montréalais (PMM)’. Alstom Transport Canada Inc. and SNC-Lavalin (now AtkinsRealis) were actors in this consortium.

These partners were selected through a formal international tendering process to generate interest from industry leaders across the world and foster competitive bid dynamics, in accordance with global best practices for transparency.

During execution

The development of the transit system ran into some key challenges, notably the COVID-19 pandemic and its accompanying repercussions on the supply chain and procurement and availability of workers, the impact on global supply chains resulting from the war in Ukraine, as well as the discovery of dynamite in the Mont-Royal tunnel, a legacy dating back to the 1920’s.

In light of these obstacles, the CDPQ Infra team was able to quickly remediate and find the necessary solutions through a streamlined decision-making process, enabled by a clear governance model and the holding of majority voting rights within the capital structure. In more traditional, large-scale infra-related financing, where investors have varying levels of voting rights, coming to a formal decision on how to overcome the emerging challenges would have required many discussions amongst key stakeholders, with the resulting implications being long-winded delays, inconclusive discussions, and overbudget complications.

CDPQ Infra’s understanding of challenges ‘on the ground’ allowed agility, adaptability and sense of innovation to be an intrinsic part of the operating model.

E. Success factors

1	<p>Intrinsic project momentum enabled by senior leadership</p> <p>The driving force behind the REM was catalyzed by CDPQ's senior leadership. For a few years, executive management had begun putting increasing importance on more alternative and non-liquid assets, such as infrastructure investing. This came from an embedded understanding that innovative, infra-related initiatives would ignite transformative change to the Quebec population and on a global-level, thus bringing about benefits that would go beyond financial returns. Such top-down endorsement fostered an enabling environment for CDPQ Infra's creation, infused a true sense of purpose to the REM, and allowed the REM to thrive and meet its ambitious goals.</p>
2	<p>Empower through interest alignment</p> <p>CDPQ Infra's role, which lies at the intersection of public and private interests, galvanized a coalescence of varied stakeholders. The collective impact motive did more than rally financial contributions from key players such as the Government, CIB, Hydro-Québec, and ARTM; it also connected municipalities, neighbourhoods, and communities together in the pursuit of the REM's vision. This enabled CDPQ Infra to leverage the necessary capital, resources, and buy-in at onset from project initiation to completion, all while upholding CDPQ's fiduciary duties to their clients.</p>
3	<p>Independent and flexible governance model with clear roles and responsibilities</p> <p>CDPQ Infra's agile and flexible governance model was key to the execution of the REM. Despite the unforeseen challenges that emerged throughout the construction phase, the oversight CDPQ Infra had over the REM ensured that decisions were made promptly by the appropriate resources, preventing additional delays and ensuring timely contingency plans.</p>
4	<p>Regulatory support to accelerate infrastructure projects</p> <p>Governments and public-facing authorities were pivotal to enable this impact initiative. Following CDPQ Infra team's proposal to the Government of Québec, an amendment to Bill 66 on land value recapture was tabled. This regulatory action was instrumental in allowing the participation of ARTM in the financing structure of the REM, thereby providing an additional and essential source of capital for the project.</p>
5	<p>Reliable track record to bring in trusted relationships</p> <p>CDPQ Infra's track record and brand name within the sector and public authorities fuelled the necessary trust in the success of the project. The subsidiary's familiarity with the infrastructure ecosystem created a value-add edge for the team and instilled a confidence-based relationship with the stakeholders of the REM.</p>

F. Conclusion

The REM case study highlights the strategic application of blended finance at the project-level, underscoring the essential conditions to the enablement of such financing approach within developed economies. At the heart of the REM is CDPQ Infra's innovative model; a dual mandate driven by both impact delivery and fiduciary responsibilities, bridging the gaps between stakeholders and empowering the development of highly relevant infrastructure projects. The success of the REM illustrates the model's potential for scale in future iterations, emphasizes the power of public and private collaborations, and demonstrates the importance of leadership integrity for effective capital mobilization. Ultimately, the timing of REM is significant for Montréal as the city seeks to uplift its transit ecosystem and bolster its urban evolution.

Outcomes²

ECONOMIC

1. \$2 billion in wages paid in Québec
2. Over \$4 billion in local content, representing 65% of the project's value
3. Over 1,000 permanent jobs
 - 34,000 direct and indirect jobs created over construction period

ENVIRONMENTAL

1. 2.5M fewer tons of GHGs over 25 years of operation

TRANSPORTATION

1. More than 200 train cars at commissioning³
2. Theoretical capacity: 600 passengers per unit
3. Initial frequency : 3 min 30 seconds

2. Based on 2018 estimates

3. Target once the REM is fully operationalized