Information Note

Investment Fund Mechanisms to Support Sustainable Forest Management in the Tropics



A Climate Forestry initiative for the year 2020

This Information Note should be read as an introduction to investing into forestry asset classes. Any decision to invest in Shares should be based on the consideration of an actual Prospectus as a whole by prospective investors. Climate Forestry are responsible for the information contained in this Information Note. We have not authorised anyone to provide different information and we take no responsibility for any other information others may give to you. Climate Forestry are not, making an offer to sell securities and you should not assume that the information contained in this Information Note is explicitly accurate.

Contents

Executive summary	4
Introduction	5
Objective	6
Mission	6
Scope	6
The rationale of utilising Investment Funds	6
Activities of the Forest Investment Fund	7
Framework of the Investment Fund	8
Phase 1: Framing the Fund – Research and analysis	9
Phase 2: Consultations and discussions	9
Phase 3: Creation, listing and initial public offering of the Investment Fund	10
Phase 4: Capital raising and closing of the Fund	12
Phase 5: Asset management, reporting and compliance	12
Phase 6: Harvesting and remuneration	14
Potential growth and yield of natural forests and plantations	14
Example Forest Investment Fund in Borneo	14
Sustainability, legality and certification	16
Fund development costs	16
Timelines and milestones	16
About Climate Forestry	17
Poforonoos	10

Executive summary

Investment funds are a supply of capital belonging to numerous investors and used to collectively purchase securities while each investor retains ownership and control of their own shares. In comparison, forest concessions traditionally secure commercial loans thereby accruing significant debt and financial obligations before returns are substantiated. The use of Investment Funds allows forest concessions to secure capital for operations, i.e., timber harvesting in natural or plantation forest, without entering into debt and with a proportion of the returns owed to the investors. This flexibility provides the financial framework for long-term responsible and sustainable forest activities.

To ensure forest companies do not use the licenses for ill-gotten gains, many jurisdictions place safeguards on forest licenses to ensure they cannot be used as collateral to secure loans from banking institutions, thereby constructing complex corporate arrangements and mechanisms. The use of Investment Funds answers this issue by allocating shares of a realised return on investment and not the asset itself, meaning concessions can use investor money for operations without succeeding ownership of their assets.

As with any investment, the forest industry is associated with risks, i.e., performance, environmental, social, etc. Financial penalties may be allocated for non-performance and non-realised returns can result in investors not interested to re-invest into the concession. Risks to investment can be substantially reduced with professional forest management planning, adequate safeguards, regular monitoring and diligent reporting.

Activities of Forest Investment Funds can be related to the development of timber plantations, the rehabilitation and subsequent responsible harvest of natural production forests, the conservation of environmentally sensitive areas and the development and support of community forests. Forest areas supported by Forest Investment Funds will be managed according to the highest degree of environmental and social standards such as the Forest Stewardship Council and the Programme for the Endorsement of Forest Certification, including local Timber Legality Assurance Systems. In addition, the Fund will engage people living in-and-around the forest to generate employment and capacity building such as training and education. Select areas surrounding forest concessions will be rehabilitated such that wildlife, biodiversity corridors and cultural elements are maintained. Monies should also be used to finance forest research.

Financial costs related to the development of a Forest Investment Fund range between USD 200,000 and USD 400,000, depending on the status of the forest area, the amount of technical support needed, the size of the Fund, its legal structure and the complexity of jurisdictional oversight. It may be possible for these costs to be *reimbursed* to forest concessions or investors in exchange for reduced returns or preferential shares, respectively. Based on the example of a fully integrated forest concession involving a mix of natural and planation forest activities located in Malaysian Borneo, investors can expect to receive 8 to 10 per cent return on investment per year over a 12 to 30-year time period.

Introduction

As outlined in the recent report of the Food and Agriculture Organisation of the United Nations (FAO) Global Resource Assessment (FRA), and more specifically in the Asia-Pacific region through the FAO Asia-Pacific Forest Sector Outlook Study III (APOS III), global trends indicate natural tropical forest are decreasing, with deforestation, severe degradation and land-use change amongst the leading causes (FAO 2019, 2015). Relative to the duration of time needed to regenerate tropical forests and reverse these changes, immediate, decisive and sustained action is required.

Many countries demarcate forests areas into concessions, known as Forest Management Units (FMU), to exclusively mandate the implementation of responsible forest practices whereby activities such as natural forest management, plantation development and conservation activities are exclusively permitted. The identification of FMU boundaries are based on a series of decisions of which timber stocking is a primary element. This is because FMUs are typically financed through traditional timber harvesting activities and those with adequate stocking are able to maintain operations. However, FMUs with low stocking are forced to be 'idle' until timber stocks reach levels eligible for sustainable harvest activities or alternatively, the management invests significantly into the development of timber plantations. Further pressure is extended on FMUs from commercial interests, whereby buyers request timber and forest products be certified against responsible forest certification schemes, such as the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification Schemes (PEFC), thus adding responsibility and cost (FSC 2019, PEFC 2019).

As a result of the increased environmental and socially responsible criteria, many FMUs are forced to reduce timber production, resulting in financial difficulties. This affects downstream timber manufacturing, with many companies closing due to limited activities, which causes a compound effect on general employment and quality of life for employees. Moreover, many FMUs do not have the financial resources to invest adequate sums to develop economically viable timber plantations. Therefore, FMUs accept high-interest commercial loans and in many cases, they do not have the initial income to pay back the interest and/or capital, thus increasing interest rates over time. This cycle of waiting for timber to grow and high interest-loan structures from commercial banks has created tremendous pressure on FMUs and the forest industry. This is also compounded by many governments in the region that mandate performance criteria, i.e., growing or harvesting timber, and FMUs that do not perform are subject to increased scrutiny, and in extreme cases, the surrender of their license to the government. In many cases when licenses are returned, the government tenders the license and the new owners request a 'grace' period, whereby timber is allowed to be harvested to help the new licensee 'begin operations', thus further degrading the natural forest. The cycle continues.

Objective

To create a Forest Investment Fund and development framework designed to mobilise investments into responsible, sustainable and financially attractive forestry operations in humid tropical forests. The framework will focus on the implementation of responsible forest plantation development and the restoration and/or enhancement of degraded natural forest within FMUs. Management actions will apply internationally recognised forestry techniques utilising scientific knowledge and industry best-practices that conform to international standards of compliance through forest certification mechanisms. All work will be undertaken to support initiatives under the United Nations Millennium Development Goals, succeeded by the United Nations Sustainable Development Goals and the 2030 Agenda for Sustainable Development, including relevant International Conventions such as the Climate Change and Biodiversity, and international Agreements such as the Bonn Challenge, i.e., to bring 150 million hectares of the world's deforested and degraded land into restoration by 2020, and 350 million hectares by 2030, and the New York Declaration on Forests to halve deforestation by 2020 and to end it by 2030 (IKI 2019, IUCN 2019, UN 2019a, b).

Mission

To foster responsible, sustainable and perpetual investments into the tropical forest industry from capital markets and market mechanisms by applying industry best-practice, scientific justification and robust monitoring, evaluation and reporting.

Scope

To mobilise investments from the capital markets into forest concessions located in the humid tropics via the development and registration of Investment Funds in known jurisdictions with strong track records of responsible governance.

The rationale of utilising Investment Funds

Investment Funds are a supply of capital belonging to numerous investors and used to collectively purchase securities while each investor retains ownership and control of their own shares. In comparison, forest concessions traditionally secure commercial loans thereby accruing significant debt and financial obligations before returns are substantiated. The use of Investment Funds allows forest concessions to secure capital for operations, i.e., timber harvesting in natural or plantation forest, without entering into debt and with a proportion of the returns owed to the investors. This flexibility provides the financial framework for long-term responsible and sustainable forest activities.

To ensure forest companies do not use the licenses for ill-gotten gains, many jurisdictions place safeguards on forest licenses to ensure they cannot be used as collateral to secure loans from banking institutions, thereby constructing complex corporate arrangements and mechanisms. The use of Investment Funds answers this issue by allocating shares of a realised return

on investment and not the asset itself, meaning forest concessions can use money from investors without succeeding ownership of their assets.

As with any investment, the forest industry is associated with risks, i.e., performance, environmental, social, etc., and financial penalties are allocated for non-performance with non-realised returns resulting in investors not interested to re-invest into the concession. Risks to investment can be substantially reduced with professional forest management planning, adequate safeguards, regular monitoring and diligent reporting.

Activities of the Forest Investment Fund

Timber plantations

Historically, the forest industry evolved by initially harvesting areas in lowlands with easy access, and gradually working their way into areas with steeper and more challenging terrain. These areas are abundant and are located near to existing road infrastructure, which makes transport and development activities accessible and affordable. Investments into timber plantations shall be focused in these severely degraded forest areas within the boundaries of active FMUs. This activity can be a driver of financial returns to the investor.

Degraded natural forest

Many FMUs harvest timber from natural forests with most concessions harvested two, three and sometimes more times over the past 40-years (Gaveau *et al.*, 2018, 2014). Due to this harvest intensity and the limited amount of time to recover, this indicates that timber extracted from degraded forests is becoming smaller in diameter and very likely, lower in quality. To increase efforts to regenerate commercial natural tropical forests, Climate Forestry proposes a portion of the investment be allocated for silviculture and restoration activities whereby climber cutting is performed to allow the forest to regenerate to commercial volumes within timeframes acceptable to the investment community. Restoration planting supports closing the canopy and encourage growth of commercial native forest species and thereafter, responsible harvesting may commence (Arroyo-Rodriguez *et al.*, 2017, David 2014, Appanah and Turnbull 1998, Putz 1985).

Conservation forest

All commercial forest concessions maintain forest areas designated for conservation activities, i.e., riparian areas, steep areas for watershed protection, biodiversity corridors, international boundaries, etc. Some of these areas are designated as High-Conservation Value (HCV), which are home to important species and are essential to local communities. Therefore, it is essential to identify and protect the most important environmental and social features within these areas and avoid their damage or destruction. A portion of the overall investment should be allocated for the maintenance of conservation areas, including the implementation of scientific research (Pearce *et al.*, 1999, Pearce and Moran 1994).

Community forest

The size and growth rate of populations affect demand for food, fibre, fuel and other products and services, and how land and other resources are used. In 2015, the Asia-Pacific region accounted for about 55 per cent of the global population but only 22 per cent of the total land area. Of the world's main regions, it had the lowest per-capita area of arable land and forests. The pressure on land resources is already high and is likely to increase given projected population growth (FAO 2019, UNEP 2015). The inclusion of local communities in commercial operations are key to the successful implementation of forest plantations, forest restoration and management activities, which includes the application of traditional knowledge of localised areas, customary rights and empowerment activities, education and well-being. A portion of the overall Forest Investment Fund should be allocated for the maintenance of community forest activities, including the building of education, health services clinics and community faculties.

Framework of the Investment Fund

In total, six Phases are needed to complete an Investment Fund cycle. Three initial Phases of work are needed to establish and list an Investment Fund and two subsequent Phases are required to raise capital and ensure regulatory compliance, performance monitoring and reporting. One Phase is required for harvest and remuneration, including closing of the Fund. The duration of Phase One, Two and Three is expected to be seven months and the capital raise (up to) a subsequent twelve months. Asset management, reporting and compliance is expected over the lifetime of the Fund. The timeline may be shortened and/or extended due to various reasons such as keen investor base, favourable investment climates, and/or conflict in the scheduling of meetings, the appetite of the emerging market investments, and/or the inability of the work to be carried out on-time, including unforeseen issues that may arise.

Table 1: Phases of work and duration of time needed to register and begin an Investment Fund.

Phase	Description	Completion time
1	Framing the Fund – Site identification, research and analysis	1-month
2	Consultations and discussions	1-month
3	Creation, listing and Initial Public Offering of Fund	6-months
4	Capital raising and closing the Fund	<12 months
5	Asset management, reporting and compliance	On-going
6	Harvesting and remuneration	At end of cycle



Phase 1: Framing the Fund – Research and analysis

Activity 1.1: Area/concession identification

Through its professional network, Climate Forestry will support the identification of FMUs interested to participate in the programme. Once identified, research and analysis will involve two steps: 1) Review of documentation to ensure the viability and practicality of establishing the plantation in the FMU; and 2) Conduct physical examination of the FMU, including site suitability, environmental and social conditions, camp and nursery conditions, staffing and management, including conditions of the forest immediately surrounding the plantation to understand the environmental and social impact of establishing the plantation in the FMU.

Activity 1.2: Review of considerations for establishing the Fund

The financial attributes of the identified FMU will be reviewed by conducting through financial due diligence, including physical, economic, social, regulatory and country risks. Pre-identified jurisdictions for the listing of the Investment Fund will be investigated, including regulatory environments and investor bases to better understand the business and investor environment to maximise the creation of a successful investment Fund for the FMU.

Phase 2: Consultations and discussions

Activity 2.1: Meetings with the Board of Directors of the FMU

Climate Forestry will meet the Board of Directors of the FMU and undertake in-depth discussions and analysis of all aspects of establishing the Forest Investment Fund. Some of the topics to be discussed will be the physical site suitability and the environmental/social considerations, the financial projections, assumptions, returns and risks, the jurisdiction to register the Fund, the administrator and regulator, including entities to be established and how the entire programme will be monitored to ensure compliance to regulatory requirements.

Activity 2.2: Site assessment with the Board of Directors

To support the development and registration of the Investment Fund, members of the Board of Directors will conduct a technical visit to the site and further define aspects of the Forest Investment Fund.

Activity 2.3: Meetings with lawyers, accountants, regulators, etc.

Climate Forestry will support business delegations to the identified jurisdictions to meet with relevant authorities and personnel to support the establishment of the Forest Investment Fund. This will include meetings with lawyers, accountants, fund managers, regulators, and technical business support agencies, including banks and monetary authorities, as required.



Activity 2.4: Concluding meetings

Concluding meetings will be undertaken by the Board of Directors to finalise aspects of the Fund, including deciding on the jurisdiction for the Forest Investment Fund, accountants, fund manager, regulators, lawyers and the creation of legal entities to conduct activities, as necessary.

Phase 3: Creation, listing and initial public offering of the Investment Fund

Activity 3.1: Drafting the Investment Prospectus

Climate Forestry will apply the decisions and information from Phases One and Two to draft the Investment Fund Prospectus. The following activities will be described in the Prospectus:

- Detailed information on the company and track record
- Analysis of the timber market
- Framework of the Investment Fund, i.e., administrator, accountant, regulator, investment vehicle, jurisdiction
- Characteristics of the forest, i.e., species and characteristics, wood properties, growth and yield, management, etc., including details of the physical location
- Projected financial revenues, costs and returns
- Investor risks and performance criteria
- Environmental and social sustainability
- Fund governance and compliance framework

Activity 3.2: Identification and appointment of Investment Broker(s)

One or more regulated corporate brokers may be appointed to raise investment capital into the Fund. The Fund will explore the market in several jurisdictions across Asia, Europe and North America and identify Brokers that can support the raising of Fund capital, including the negotiations and the drafting of legal contracts.

Activity 3.3: Identification and appointment of supporting legal firm

Jurisdictional financial characteristics are attributed to the location in which the Fund is registered, requiring specialised legal knowledge and expertise. The Investment Fund will support the identification and appointment of a dedicated legal team that understands the requirements to support responsible forest management.

Activity 3.4: Identification and appointment of supporting Accountant

A dedicated accounting firm is required to ensure the Investment Fund is administered in accordance with the requirements of the jurisdiction. A specialised accounting team will be identified to provide localised and international accounting support. This would include independent audit reporting on management of the Fund, net asset value (NAV), compliance and reporting to the exchange and the shareholders.



Activity 3.5: Identification and appointment of supporting Administrator

The role of the Fund Administrator is to provide third-party service to protect the interests of investors by independently verifying the assets and valuation of the Investment Fund. The Fund Administrator does all the 'back office' financial paperwork processing, ensuring that clients have up-to-date information on the performance of the Fund and also that it complies with all legal requirements. The Administrator will support the Investment Fund to identify, appoint and structure the legal appointment in-line with jurisdictional legal requirements.

Activity 3.6: Creation of the legal entity to facilitate the Investment Fund

The Investment Fund may be established as a separate legal entity, either a corporate or a partnership. The Fund will support the participating FMU to establish a legal entity in accordance with the laws of the designated jurisdiction such that the Investment Fund will be fit for purpose. This includes considering strategies such as the creation of sub-share classes to represent different areas and/or timber species for varying rotation ages/harvest timelines.

Activity 3.7: Launch of the Investment Fund on a major international exchange

The Investment Fund will be launched as an Exchange-Traded Fund (ETF) on an exchange in a suitable jurisdiction. Given that the forestry returns are generated over long periods of time, this form of listed Fund has a number of advantages. These include access to the capital markets to raise finance into the fund, clear visibility of fund values, and liquidity for shareholders who can buy and sell shares in the Fund over shorter timeframes.

Activity 3.8: Drafting the pre-purchase agreement for the purchase of plantation logs

The Investment Fund has the potential to engage into an advanced purchase agreement for the logs to be grown in the future. This mechanism can increase confidence to investors that the Fund is completely integrated to the operations and vision of the FMU and the principles of sustainable forest management. The managers of the Forest Investment Fund will support the drafting of the purchase agreement between Timber Associations and interested buyers and the Investment Fund to ensure consistency to the laws of the identified jurisdiction. An announcement will be made to advertise the logs and engage with interested buyers.



Phase 4: Capital raising and closing of the Fund

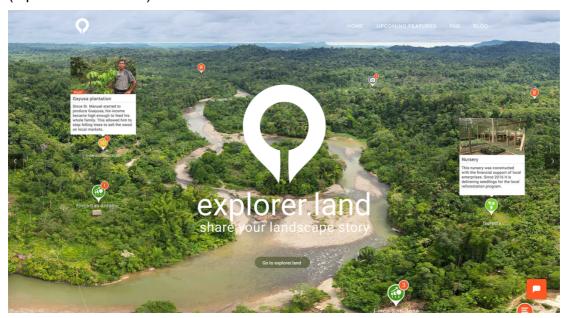
Activity 4.1: Selling the Fund to investors

After the launch of the Investment Fund, the management will work to raise capital. To do so, the Fund will engage global partners and affiliates and travel to multiple destinations in South-East Asia, Europe and North America, where some of the biggest fund managers are located.

Phase 5: Asset management, reporting and compliance

Activity 5.1: Project reporting and evaluation

The management of the Fund will provide on-going monitoring, evaluating and reporting against identified indicators. Referred to as Key Performance Indicators (KPI), the indicators measure performance within, and across various aspects of the Investment Fund (Table 2). In addition to monitoring compliance, the Fund will engage partner agencies such as Open Forests, to support the transparent communication of the project to investors, product buyers, supporters and the general public. The platform titled "Explorer.Land", is an on-line map-based platform that supports the monitoring of activities on the ground by third parties. Videos and surveillance footage are uploaded for verification and assurance. The platform is designed to present forest landscape projects and communicate activities whilst connecting projects with like-minded organisations and stakeholders from around the world (Figure 1) (OpenForests 2019).



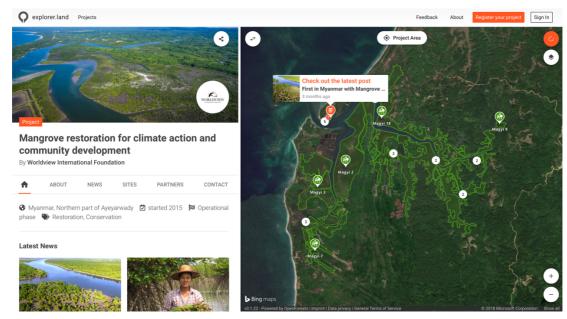


Figure 1: Screenshots of the Explorer.Land on-line monitoring platform. Adapted from OpenForests (2019).

Table 2: Example Key Performance Indicators to monitor the plantation.

Nursery

Number of seedlings produced vs plan

Number of staff per seedlings produced

Mortality rate of seedlings (per cent of dead vs total number of seedlings)

Amount of fertiliser and chemicals used

Land preparation

Number of operational machineries

Fuel consumed (per machine/per hectare)

Number of trees felled/sold/used within or outside operations

Building of worker housing

Planting and maintenance

Area planted (per month/per year)

Number of operational machineries

Fuel consumed (per machine/per hectare)

Mortality rate (per cent of trees dead vs number of seedlings)

Growth rate and yield

Finance

Net Asset Value reporting

Reporting of cash and balance sheet positions

Audited reports on governance and compliance

Most jurisdictions report KPI to the Financial Authorities on a quarterly basis, meaning that The Fund will conduct quarterly monitoring and reporting and compile and submit relevant reports to the Financial Authority of the identified jurisdiction. Reporting to the shareholders of the Investment Fund and the participating FMU would be done on the same frequency. This will involve physical surveillance of activities as well as documentation and financial review for transparent and objective monitoring.



Phase 6: Harvesting and remuneration

Activity 6.1: Project completion and finalisation

Timber is harvested as per the rotation age and sequence identified by the Chief Forester and sold to buyers via the purchase agreement. Shareholders with preferential shares shall be paid-out first and at the premiums as per their shareholding agreement, followed by ordinary shareholders, respectively. Once the timber has been harvested, the Investment Fund will close, and all operations will cease as per requirements by the financial authority and local forestry departments.

Potential growth and yield of natural forests and plantations

The Fund will focus on the long-term regeneration of the natural forest and the planting of short-term native fast-growing species used commercially in local and global timber markets. Ideally, the Fund should invest in FMUs of various scales ranging from 10,000 to 100,000 ha consisting of a mix of natural and plantation forest as well as community and conservation forest. As a soft rule, natural and plantation forests should be equal in size, with plantations a minimum of 5,000 hectares (ha) with an option to scale-up over time. In this way, the Fund can split the capital raise based on areas of 5,000 ha, known in the investment world as a 'tranche'. Once the capital raise is completed for one tranche, physical operations can begin immediately, while the Investment Fund can continue to raise capital for subsequent areas of the FMU. Due to economies of scale principle and dividend discount modelling, each tranche should be 5,000 ha in size (Ying Fah et al., 2008, Penman 1998, Zakaria 1993). It is important to understand that with the focus on the development of long-term responsible forest management activities, the establishment of an investment Fund with short-rotation cycles can repeatedly be established in the same FMU over time, supporting long-term leases and creating an enabling environment for long-term, predictable and sustainable finance. At the same time, the Investment Fund can conduct silviculture activities such as climber-cutting in the natural forest to encourage forest recovery and growth and plan the re-entry into natural forests for sustainable harvesting.

Example Forest Investment Fund in Borneo

The example below outlines an investment into a FMU located in humid tropical conditions on the island of Borneo (Table 3). The area consists of 100,000 ha of severely degraded logged-over forest with a commercial timber license for 100 years. The licensee is eligible to harvest the natural forest and establish plantations in severely degraded areas. In this example, the natural forest does not have the commercial stocking density to meet sustainability requirements and can only be harvested when stocks reach adequate levels, which is expected to recover in year 20 after the application of silviculture treatments. Climate Forestry believe this innovative financial solution can support the global timber industry progress towards sustainable and responsible forest management.



Table 3: Characteristics of an example Investment Fund mechanism for a Forest Management Unit in Malaysian Borneo.

Item	Description
Forest license	Commercial forest license
Forest license duration	100 years
Forest classification	Mixed lowland dipterocarp forest
Forest status	Severely logged-over
Gross concession area	100,000 ha
Natural forest	45,000 ha
Plantation forest	20,000 ha
Conservation	35,000 ha
Natural forest	
Harvest cycle	30 years
Annual allowable cut	1,500 ha yr ⁻¹
Volume per ha	30 – 40 m³ ha ⁻¹
Price per m ³	USD 100 – 155 m ³
Gross revenue per ha per year (after yr 20)	USD 2,800 – 5,900 ha ⁻¹ yr ⁻¹
Gross revenue per year	USD 4.2 – 8.8 million yr-1
Estimated investment into natural forest	USD 58 million over 20 years or
	USD 2.9 million yr ¹
Plantation forest (one cycle)	
Harvest cycle (new establishment)	12 years
Tree types	Native tropical softwood
Final number of trees per ha	200 – 255 trees
Final volume per tree at year of harvest	0.65 – 1.0 m ³ tree ⁻¹
Volume at end of rotation (m ³)	130 – 255 m ³ ha ⁻¹
Price per m ³ at year of harvest	USD 80 – 100 per m ³
Gross revenue per ha after 12 years	USD 33,000 ha ⁻¹
Gross revenue per year from year 13 onwards (harvest 2,000 ha yr ⁻¹)	USD 20 – 50 million yr ⁻¹
Estimated investment into plantation forest	USD 55 million over 12 years or
	USD 4.6 million yr ⁻¹
Estimated Internal Rate of Return (IRR)	10-16% over the project lifetime
Forest Investment Fund	
Fund type	Exchange Traded Fund
Fund jurisdiction	To be determined
Inception project due diligence	USD 40,000
Negotiations and project legality	USD 40,000
Prospectus development and registration	USD 200,000 - 300,000
Capital raising and Fund closing	4 - 5% of capital raise and paid by
	Fund after closure of tranche
Total capital raise	USD 50 million
Annual fund monitoring and reporting	USD 100,000 paid by Fund
Return on Investment (RoI) to investor	8-10% per year

Sustainability, legality and certification

All activities conducted under the Forest Investment Fund will be implemented against industry best-practice, including forest certification Standards. While newly established plantations may not eligible to achieve forest certification under the current rules and modalities of the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC), it does not mean that forest areas cannot be managed to the Principles and Criteria of these Standards. At a minimum, the area will achieve certification to the local Timber Legality Assurance System (TLAS), a system designed to assure operational legality and chain-of-custody of timber supply chains. In addition to employing staff from the FMUs, the Fund will engage people living in-and-around the FMUs to generate employment and capacity building such as training, education, etc. Climate Forestry further proposes the Investment Fund to raise additional finance to conduct forest research and rehabilitate select areas surrounding the FMUs such that wildlife, biodiversity corridors and cultural elements are maintained.

Fund development costs

Financial costs related to the development of a Forest Investment Fund range between USD 200,000 and USD 400,000, depending on the status of the forest area, the amount of technical support needed, the size of the Fund, the legal structure and the complexity of jurisdictional oversight needed. Costs can fluctuate based on the amount of marketing needed to raise the necessary capital, i.e., an FMU based in South-East Asia may not need to raise capital from Europe. It may be possible for these costs to be reimbursed to forest concessions or investors in exchange for reduced returns or preferential shares, respectively. Investors holding these shares are entitled to preferential rights over holders of ordinary shares, such as the first to receive dividend from the Fund and are a fixed dividend, compared to ordinary shares which may have irregular dividends.

Timelines and milestones

the identification of suitable FMU and the establishment and registration of the Fund can take up-to one year to complete with capitalisation and closing a subsequent year to complete (Table 1, Table 3). This timeframe could be shorter pending on the investment appetite from the capital markets and prevailing market conditions, including site access and suitability, environmental and weather conditions, broadly. Once the management is established for an Investment Fund, including the personnel to support its development, it is envisioned the time to complete subsequent Investment Funds can be reduced.



About Climate Forestry

Climate Forestry is a specialist professional forestry company with programmes of work to optimise operational forest management, support forest certification and timber legality assurance, develop and implement sustainable financial strategies and support organisations to meet the requirements of International Conventions and Environmental Agreements. Climate Forestry assists local, national, and international companies and governments enhance their forestry initiatives. Our professional services are implemented using a stepwise methodological approach to meet national and international environmental, social and regulatory standards of compliance. Climate Forestry is lead by Dr Michael Galante, a professional forester with 20 years of professional experience in Malaysia and across South-East Asia.

Climate Forestry Limited (LL13000)

Address: No. U1317, Kensington Gardens, Jalan Jumidar Buyong

Victoria, Labuan, 87000, Malaysia

Telephone: +60 87 599 800

Email: <u>info@climateforestry.com</u>
URL: <u>www.climateforestry.com</u>

References

- Appanah, S. and Turnbull, J.M. 1998. A Review of Dipterocarps: Taxonomy, Ecology, and Silviculture. Centre for International Forestry Research: Jakarta, Indonesia, pp. 1-233.
- Arroyo-Rodríguez, V., Melo, F.P., Martínez-Ramos, M., Bongers, F., Chazdon, R.L., Meave, J.A. et al. 2017. Multiple successional pathways in human-modified tropical landscapes: new insights from forest succession, forest fragmentation and landscape ecology research. Biological Reviews, 92 (1), 326-340.
- David, D.B.D. 2014. The Effects of Forest Management Practices on Forest Regeneration and Arthropod Diversity. PhD, Universität Zürich, Switzerland, pp. 1-175.
- FAO. 2019. Forest Futures: Sustainable pathways for forests, landscapes and people in the Asia-Pacific region. Asia-Pacific Outlook Study 3. Food and Agriculture Organisation of the United Nations. Bangkok, Thailand, p. 1-352. Retrieved from: https://bit.ly/2r0GkR6.
- FAO. 2019. Forest Futures: Sustainable pathways for forests, landscapes and people in the Asia-Pacific region. Asia-Pacific Outlook Study 3. Food and Agriculture Organisation of the United Nations. Bangkok, Thailand, p. 1-352.
- FAO. 2015. Global Forest Resource Assessment 2015: How are the world's forest's changing? Food and Agriculture Organisation of the United Nations. Rome, Italy, p. 1-56. Retrieved from: https://bit.ly/1XBsCgl.
- FSC. 2019. Forest Stewardship Council Certification Standard. Forest Stewardship Council International, Bonn, Germany. Retrieved from: https://bit.lv/2n3HfkT.
- Gaveau, D.L.A., Locatelli, B., Salim, M.A., Yaen, H., Pacheco, P. and Sheil, D. 2018. Rise and fall of forest loss and industrial plantations in Borneo (2000–2017). Conservation Letters, 0 (0), e12622.
- Gaveau, D.L.A., Sloan, S., Molidena, E., Yaen, H., Sheil, D., Abram, N.K. et al. 2014. Four Decades of Forest Persistence, Clearance and Logging on Borneo. PLOS ONE, 9 (7), e101654.
- IKI. International Climate Initiative. The New York Declaration on Forests. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). Berlin, Germany. Retrieved from: https://bit.ly/2PYfiY6.



- IUCN. 2019. The Bonn Challenge. International Union for Conservation of Nature. Washington D.C, United States of America. Retrieved from: https://bit.ly/1C6PJEV.
- Pearce, D., Putz, F. and Vanclay, J.K. 1999. A Sustainable Forest Future. Centre for Social and Economic Research on the Global Environment. London, England, pp. 1-67.
- Pearce, D.W. and Moran, D. 1994. The economic value of biodiversity. Taylor and Francis: Oxford, England, and New York, New York, The United States of America, pp. 1-104.
- PEFC. 2019. Programme for the Endorsement of Forest Certification Standard. Programme for the Endorsement of Forest Certification, Geneva, Switzerland. Retrieved from: https://bit.ly/2JhGXwB.
- Penman, S.H. 1998 A synthesis of equity valuation techniques and the terminal value calculation for the dividend discount model. Review of Accounting Studies, 2 (4), 303-323.
- Putz, F. 1985. Woody vines and forest management in Malaysia. The Commonwealth Forestry Review, 359-365.
- UN. 2019a. The United Nations Millennium Development Goals. New York, United States of America. Retrieved from: https://bit.ly/2VjUol1.
- UN. 2019b. The United Nations Sustainable Development Goals. New York, United States of America. Retrieved from: https://bit.ly/2mNI6GI.
- UNEP. 2015. Indicators for a resource efficient and green Asia and the Pacific: measuring progress of sustainable consumption and production, green economy and resource efficiency policies in the Asia-Pacific region. United Nations Environment Programme, Bangkok, Thailand, pp. 1-154.
- Ying Fah, L., Mohammad, A. and Chung, A. 2008. A Guide to Plantation Forestry in Sabah, Sandakan, Malaysia, pp. 1-167.
- Zakaria, J. 1993 Determination of the economic cut and rotation in Malaysia production forest: An economic approach. Master of Philosophy, The University of Wales, Cardiff, Wales.

