MIRO
FORESTRY COMPANY

2017
ANNUAL REPORT

Nursery, Ghana.

MIRO
FORESTRY COMPANY

MIRO FORESTRY IS PLEASED TO PRESENT ITS 2017 ANNUAL REPORT, OUR PRINCIPAL COMMUNICATION TO STAKEHOLDERS

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Corymbia Citriodora.

ORGANISATIONAL OVERVIEW

Miro Forestry is a commercial forestry and timber products group operating in West Africa. The Group, now with semi-mature plantations, is starting to develop and scale-up its sales of sustainable solid wood products into the local, regional and worldwide export markets. Miro Forestry is primarily growing fast-rotation eucalyptus and acacia for the production of sawn timber, plywood and transmission poles, as well as producing and selling charcoal and biomass as by-products.

MIRO FORESTRY COMPANY

NATURAL CAPITAL

FOREST

PLANTED HECTARES

Increased by **42%** to **10,081 hectares**

BIOLOGICAL ASSETS

increased by **74%** to **US$21m**

LEASEHOLD LAND

32,003 hectares up **1%** (includes conservation areas)

MANUFACTURED CAPITAL

TIMBER PRODUCTS

SAWN TIMBER

1,324m³ produced

COMMERCIAL THINNING

4,416m³ of Biomass and 72 tons of Charcoal produced.

2 NEW TIMBER PRODUCTS

to be produced and tested in 2018

FINANCIAL CAPITAL

14% AVERAGE ANNUAL INCREASE

in **Share Price** over last three years to 2018

Company Value of **US$50 MILLION** a 65% premium over money invested

Note: All comparisons are to prior year-end 2016 figures, all other figures are as at year-end 2017.

ORGANISATIONAL OVERVIEW
CONTINUED

INTELLECTUAL CAPITAL

PLANTATIONS 100% FSC™ CERTIFIED[1]

FSC™ CHAIN OF CUSTODY[2] for sustainable charcoal production in Ghana.

RESEARCH AND DEVELOPMENT
High R&D focus and member of Camcore international tree breeding R&D collective

HUMAN CAPITAL

OVER 1,000
individuals trained during year

Approximately 1,400 people employed including 18% women

ACCESS TO MEDICAL CARE
for all employees

1. *Miro Forestry's Ghana plantation in the Asante region with license number FSC-C136035 and Sierra Leone plantation in the Tonkolili district with license number FSC-C135138.*
2. *Miro Forestry's charcoal operation in the Asante region of Ghana with license number FSC-C136035.*

ENVIRONMENTAL CAPITAL

256,000 TONNES
of atmospheric CO_2 sequestered in 2017

4,562 HECTARES
under active conservation management

SOCIAL CAPITAL

OVER 20 SOCIAL PROJECTS
in access to water, education and income generation estimated to benefit more than 12,000

OVER US$70,000
spent on community development

2018 TARGETS

MIRO
FORESTRY COMPANY

3,000 hectares
of new plantation targeted to be established in the year

Total of >12,500
hectares of plantation established by the Group by year-end

>US$1.0million
revenue from developing production and sales of solid timber products

Ghana

>7,000 hectares
of sustainable plantations at year-end

Veneer
production line installed (first phase in the production of plywood)[1]

800 tonnes
of sustainable charcoal to be produced

Sierra Leone

3,780m³
of Sawn Timber Produced

>5,500 hectares
of sustainable plantations at year-end

Pole Treatment
facility installed

800 tonnes
of sustainable charcoal to be produced

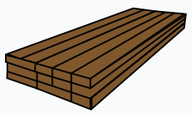
1) Initially the veneer will be sold into the existing Kumasi based plywood industry. For more information on timber product production and sales from Ghana and Sierra Leone, see page 36 'Timber Products and Sales'.

2018 TARGETS
CONTINUED

The following shows Miro's timber processing and industrial operations development timelines.

Sawn Timber

2016

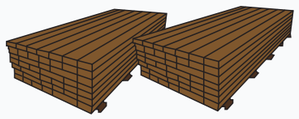


c.200m³ produced during 2016 using small mobile mill

2017

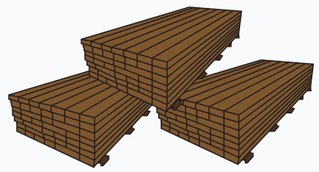
1,324m³ production using expanded semi-mobile mill

2018



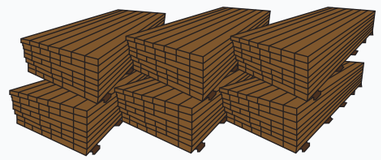
3,780m³ production planned

2019-2023



10,000m³ production / annum planned

2024 →



160,000m³ saw timber / annum production planned

Assuming predicted added margin is realised from production of plywood panels, scale-up of sawn timber production will be limited, with the timber diverted to increased production of plywood panels, for which the market is extremely large vs. Miro's possible maximum production.

Charcoal/Biomass

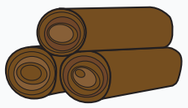
2016

4 tonnes produced using mobile pilot kiln

2017

72 tonnes produced using pilot containerised kiln

AND

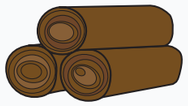


4,416m³ (c. 3,000 tonnes) biomass logs produced

2018

1,500 - 2,000 tonnes production planned using semi-mobile retort kilns

AND

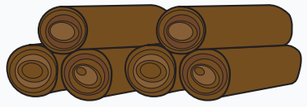


c. 12,000m³ (8,000 tonnes) biomass logs production planned

2019-2023

5,000 - 10,000 tonnes / annum sustainable charcoal production

OR



c. 20,000 - 40,000m³ / annum biomass logs

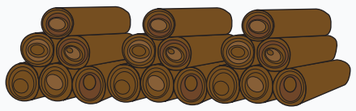
OR

a mix of charcoal and biomass

2024 →

40,000 tonnes sustainable charcoal production

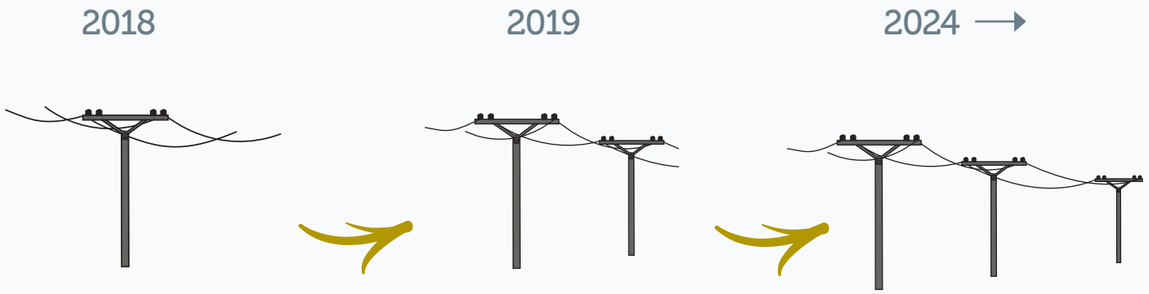
OR



200,000m³ / annum biomass logs

2018 TARGETS
CONTINUED

Treated Poles/Posts



Fence post trials (treated by third parties). Initial transmission pole samples sent for testing by Ghana Standards Authority and Forestry Research Institute of Ghana

c. 3,000m^3 treated poles production planned (c. 1,000m^3)

c. 200,000 treated poles production per annum (c. 70,000m^3)

Plywood

Pilot plywood veneer project to commence in 2018

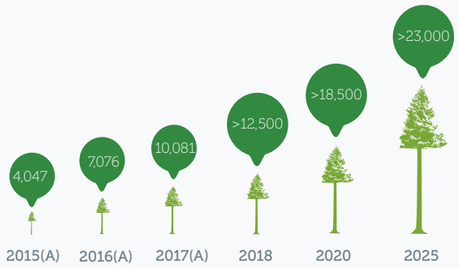
c. 200,000m^3 plywood production

Sawmil, Sierra Leone.

GROUP THREE YEAR SUMMARY AND PROJECTIONS

Key Data[1][2]

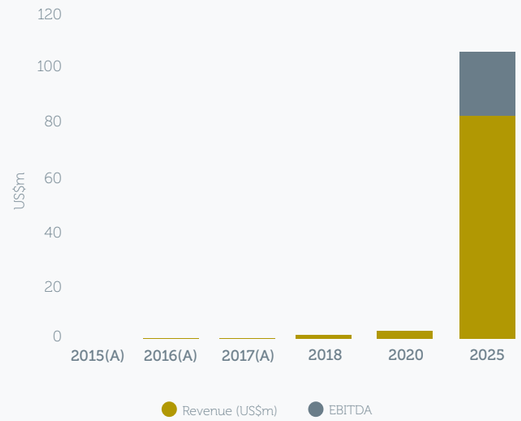
Standing Timber (Hectares)



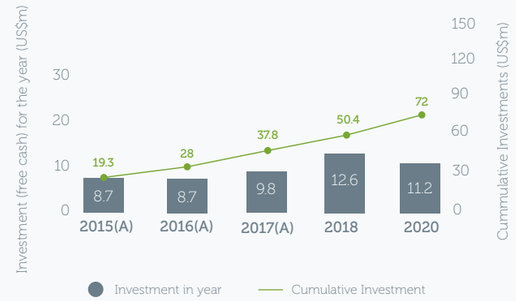
Biological Asset Value (US$m)

2015(A)	2016(A)	2017(A)	2018	2020	2025
-	12	21	38	71	219

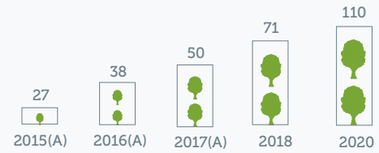
Revenue and EBITDA (US$m)



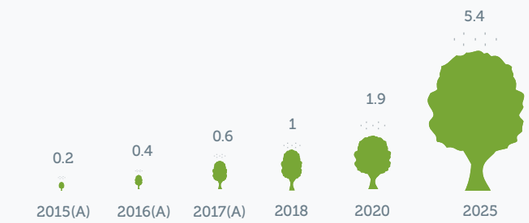
Investments (US$m)



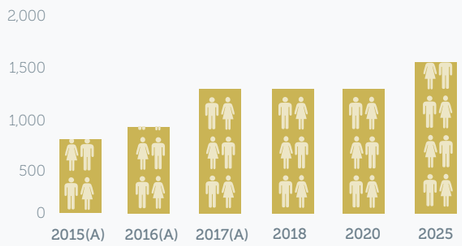
Group Valuation (US$m)



Cumulative Carbon Sequestered (net tonnes in millions)



People Employed



1) Current estimate figures. Acronym (A) (eg 2015 (A)) denotes numbers are actuals realised.
2) Harvesting of commercial thinnings started in 2017, and given tree growth rates above expectiations, clearfell harvesting is expected to commence earlier than existing forecasts. Miro is reviewing projections, based on latest plantation enumerations over 2018 and thus revised harvest timing and wood-flows will be presented in the 2018 (next years) annual report.

CHAIRMAN'S STATEMENT

Due to our consistent and stable growth, Miro Forestry is now a strong brand in sub-Saharan African plantation forestry. As our plantations are maturing we are highly focused on developing our timber product operations, growing revenue, and proving our sales margins over the next two years, before significantly scaling for overall profitability.

Richard Laing, Chairman

Statement

Over 2017 we established 3,205 new hectares, taking the standing plantations we have established to over 10,000 hectares across the Group. As a result, whilst we are still relatively small on a global forestry basis, we are now one of the largest plantation forestry companies in West Africa, and sub-Saharan Africa more widely.

In addition, during the last year, we continued the early-stage development of our value-add processing operations, increasing sawn timber and charcoal production output capacity, and developing our management systems and teams in these areas. Of particular importance, we have started to successfully build our sales personnel and processes.

We have achieved the above, including our targets for financing, at 2.1% under our annual budget of US$10.2 million.

I am delighted that in 2017 we were awarded Forest Stewardship Council (FSC) certification of our plantations in Ghana and Sierra Leone, and of our Ghana charcoal production operations. FSC certification is one of the highest independent standard authority for the economic, environmental and social certification of forestry and timber products businesses. Such certification provides greater access to international timber markets, many of which require such certification, and to finance that likewise requires the comfort yielded from such certification.

Board Focus

The Board remains focused on strategy and execution; ensuring the Group has well-qualified, competent, and motivated people; appropriate funding; and promoting high standards of corporate governance. Whilst the Board's main emphasis is on the commercial success of your company, a sine qua non for any sustainable business, we also monitor carefully the positive developmental impact of Miro. This is discussed further on pages 58 and following in this report. There have been no changes to the Board over the last year (details of the Board are shown on page 16).

Looking Ahead

We now have some semi-mature plantations and so will increasingly focus on the development of our value-add processing operations, whilst continuing to expand our planted areas. This year we are installing a veneer peeling line in Ghana, the front-end equipment for the production of plywood. We will sell the veneers we produce into the existing plywood market in Ghana. This will be a major step for the Company in the development of our timber product operations and sales. We plan and forecast for plywood production to be the primary product we produce and our

core focus, from as soon as 2020. This focus on plywood is driven by the high and increasing supply to demand gap in plywood in West Africa, now mainly supported by imports from outside the region, and consistently seeing price increases well above inflation. Given the similarity of our operating environment to parts of South-East Asia we are focused on replicating proven, simple and robust technology from this region for the production of veneer and subsequently for plywood.

In addition, over this year we will expand our charcoal production operations, also with proven and robust technologies and hence scale up our local sales and exports of charcoal, primarily into the UK where we have already made our first shipment.

Funding

Over the last year, due diligence has been conducted on our entire operations and structure by several institutional investor groups. Although this process has at times been somewhat slow and laborious, progress has been made. We expect, therefore, to be nearing a point where we will be ready to present financing proposals to our existing shareholders. As part of this financing it has been our aim to reduce the cost of debt (accounting for approximately 20% of our capital) from the existing rate of 14% per annum. We hope to report a substantial reduction in this rate.

We have a strong and highly supportive shareholder base, and I would like to take this opportunity to thank all our shareholders for their continued support, especially the three largest shareholders, Finnfund, CDC and Aqua Ventures who have ensured that the business can continue to progress whilst we await the next round of funding.

People

The continuing success of Miro is entirely due to the consistent delivery of business targets despite our challenging operating environment. The progress we have made this year is entirely as a result of the staff's hard work. I therefore thank all our team for their considerable efforts and passion to deliver these results.

Richard Laing, Chairman

CORPORATE GOVERNANCE

Board of Directors

Richard Laing, Chairman
(Chairman of the Audit and Remuneration Committees)
Richard was previously CEO of CDC Group plc, formerly the Commonwealth Development Corporation, from 2004 to 2011, having joined the organisation in 2000 as Finance Director. Prior to CDC, Richard spent 15 years at De La Rue plc where he held a number of positions both in the UK and overseas, latterly as Group Finance Director. He currently is a non-executive director in a range of companies and NGOs.

Andrew Collins, Chief Executive Officer, Co-Founder
(Member of the Environmental, Social & Governance Committee)
Andrew has extensive experience in structuring and completing emerging market investments and has been responsible for driving the expansion of Miro Forestry since inception in 2009. Prior to Miro Forestry, Andrew spent three years developing and financing biomass energy projects in Europe, prior to which he was a corporate finance investment banker. Andrew holds a Masters in Engineering from the University of Bristol and a Masters in Finance from the Cranfield School of Management.

Charlie Bosworth, Strategy Director, Co-Founder
Charlie is a forestry business specialist and has a background in emerging market business development and management. Charlie has been responsible for managing the development of Miro Forestry since inception. Charlie previously worked for Sunshine Technology as part of the venture set-up team developing the company's forestry and biofuel operations and systems capacities in Yunnan, China. Charlie holds an MA in Politics from Cambridge University.

Keith Alexander, Director
(Chairman of the Environmental, Social & Governance Committee and Member of the Audit Committee)
Keith has been involved with businesses operating in Africa for over 25 years and most recently he was a director at Actis LLP where he was a member of the management team of the Actis Africa Agribusiness Fund. Prior to Actis, Keith was employed by CDC Group plc where he focused on agribusiness investments in emerging markets.

Ilkka Norjamäki, Director
(Member of the Environmental, Social & Governance Committee)
Ilkka has more than 15 years experience in forestry and forest industry sectors in emerging markets and particularly Africa. In his previous position, he was the Head of Forestry Consulting at Indufor, one of the leading global forestry consulting companies. Currently he is Investment Manager at the Finnish Fund for Economic Cooperation Ltd.

Andrew Tillery, Director
(Member of the Remuneration Committee)
Andrew has over 24 years operational management and private equity experience in Africa and other emerging markets and is currently a non-executive director on three African agribusiness boards. Andrew has 15 years experience running emerging market tree plantation businesses and holds a Masters in Forestry, and an MBA from the University of Chicago.

Jacob Logothetis, Director
Jacob is Managing Director of Aqua Ventures International FZE, a family office specializing in alternative investments. Jacob oversees a pipeline of private equity and structured fund investments in sectors including natural resources.

Governance

The highest governing body of the Miro Group is the Board of Directors of Miro Forestry Developments Limited (MFD) (the Group parent company), which meets not less than quarterly. Of the seven person board, three hold shares in the company, three have been nominated by investors, and one is independent. All directors except for the CEO and the Business Strategy and Development Director are non-executive. All subsidiary company boards are chaired by the Group CEO.

There are three sub-committees of the main Board of MFD: The Audit Committee (consisting of two directors, meeting annually), the Remuneration Committee (two directors, meeting once or twice annually) and the Environmental, Social and Governance Committee (ESG Committee) (three directors plus two expert members, meeting not less than quarterly). The chairman of each committee provides feedback to the Board at following Board meetings.

The Group Environmental, Health, Safety and Social Development (EHSS) Director reports to the ESG Committee on Group stakeholder relations, and the environmental, social and economic impacts of the Group. Any critical or urgent matters are immediately reported to the ESG Committee or the Board as appropriate.

Below the Board, the strategy of the Group is implemented by the Group CEO, Business Strategy and Development Director, CFO and the General Managers (with the support of the senior management team) of Ghana and Sierra Leone. Regular input is provided by the Chairman of the Board and non-executive Directors.

In 2017 the Group achieved Forest Stewardship Council (FSC) certification (one of the highest forestry standards).

The ESG Committee are primarily responsible for monitoring compliance to FSC standards as well as complying to the International Finance Corporation's Performance Standards (IFC-PS), and completing the Group's Environmental and Social Action Plan (ESAP).

Miro has a code of conduct which all employees sign adherence to, and to which they are held accountable. In addition, the Group follows a range of policies and procedures, published on the companys website. These are: the Group anti-corruption and whistleblowing policy, the land development policy, the occupational health and safety and labour policy, the environmental and sustainability policy, the community engagement and external stakeholder policy, and the public relations, communications and media policy.

This annual report covers all companies in the Miro Group (see page 12).

MISSION

To develop and operate globally high-quality and cost competitive commercial forestry plantations producing plywood, sawn timber, poles and wood biomass sustainably to FSC standards whilst providing environmental, social and economic benefit to local communities.

VISION

Be Africa's leading forestry company based on shareholder value add, sustainability standards, environmental and social development benefits; with a passionate and determined team and supportive stakeholders.

VALUES

Be the Best:
We're determined to be the best vertically integrated, forestry and timber products business, in Africa.

Positive Impact:
We aim to make a positive impact though our operations, relationships and voluntary contributions. We aim to have a happy and engaging work environment where individuals take leadership and initiative to deliver the positive impacts of the Company.

Continuous Improvement:
We're committed to continuously improving the way we operate from a commercial, environmental and social development perspective. We are determined to be the best in our field, by each individual taking ownership of business needs and striving to efficiently achieve long-term business objectives.

Integrity:
We're committed to conducting our operations with integrity and with respect for the many people, organisations and environments our business touches.

CEO'S STATEMENT

Our primary economic ambition, on which the entire company is focused , is to maximise our average profit margin per cubic meter of timber we produce. To achieve this, we aim to have the best people, whose attitude is to take on responsibility and be the best at what we do.

Andrew Collins, Chief Executive

We now have over 10,000 hectares of plantation that we have established, making Miro Forestry one of the largest plantation forestry groups in sub-Saharan Africa, outside of South Africa. These plantations, which we continue to expand, are now semi-mature, and have therefore started to provide commercial timber in increasing volumes.

Strategy

We are into an exciting phase of development for the company. We are piloting our timber processing operations, refining our strategy accordingly, and producing and selling initial volumes of our target timber products.

In 2017 we produced our first commercial volumes of sawn timber and charcoal, generally achieved our target prices thereby gaining comfort over our long-term profit margin forecasts. Looking forward to late 2018 and early 2019, we will be piloting our final target products, producing veneer for plywood production and pressure treating timber primarily to produce utility transmission and fencing poles. We therefore forecast to increase revenue this year to more than US$1.0 million and, more importantly at this stage, gain comfort that we will be able to produce and sell these industrial timber products at our desired margins.

We have located our plantations with good access to ports to give us full optionality to be able to competitively sell our products into the world market, in addition to local and regional markets via road haulage. The market for our products is therefore very large compared with the volume of timber product we will produce at full scale, and our cost base is globally competitive.

Securing regular supply to customers of suitable volumes of product does however take time and effort to develop, and hence over 2017 we have started developing our sales personnel and customer relationship management approaches. A high-quality sales function is particularly crucial in our business environment where markets are fragmented and where the logistics and processes related to sales can be complex to manage.

Sales are also particularly important at our stage of development where market feedback on products is crucial to developing our strategy. For example, the difference in cubic meter price between green rough sawn timber and planed tongue and grove timber for panels is more than three times, substantially more than the added cost of production although volumes are more limited. Thus, whilst we are focused on selling the majority of our timber as plywood (and potentially all our timber once we reach necessary scale, given the attractiveness of prices and highly positive price and demand trends, particularly in West Africa) it is nevertheless important that we build the right balance between value-adding our timber and focus on producing a few carefully selected industrial timber products most efficiently.

To guide our product and sales approach, and our company strategy at large, our primary economic target is to maximise our average profit margin (including all overheads and depreciation) per cubic meter of timber we produce. It is this singular focus, even at this early stage in our revenue development, that helps us to target efficiencies in our forestry, timber processing and sales strategies.

People

We have developed a strong team across our operations, something that is particularly challenging, and particularly important, given our geographic areas of operation and remote working environments. We operate with a flat and open structure, providing responsibility down the organisation, hence also providing recognition and motivation to individuals and their teams. This has helped to build high morale with an enthusiastic and motivated work environment, which we will continue to enhance.

Building Miro Forestry in a comparatively new geography for plantation forestry requires us to constantly gather the facts on the environment around us and our operation, products and markets and to, without bias, assess and learn from these facts. At a senior management level, we have a good culture of such observation and analysis upon which our strategy is built. This, together with our collective attitude to take on responsibilities down to each individual and team, and to take disciplined action, whilst maintaining our ethic of entrepreneurship, is our focus to build and enhance, such that everyone adds value.

Financing

We are one of, and probably the most, high quality institutional plantation forestry group in West Africa and in the top few in sub-Saharan Africa as a whole. As a result, we have no shortage of investment interest from the growing pool of capital seeking sustainable returns from emerging markets whilst also providing environmental and social benefit. However, we still have up to five years to reach cash-flow positive given the scale and growth of our operations and development of value-add processing infrastructure. Thus, until we have proven our ability to generate our target profit margin off reasonable revenue and are within one or two years of cash-flow positive, many pools of capital will remain closed to us. As a result, a current fundraising we are now working to close is probably the most important the company will ever face.

A few select investor groups conducted due diligence on Miro over the course of 2017 and the early part of this year. We shortly expect debt and equity term sheet offers from these groups which will then be presented to shareholders for consideration. More details of this and other continuing financing and operational strategies will be presented directly to shareholders in due course.

Conclusion

We are now at a stage of development where we have proved that we can develop good quality plantations efficiently and at scale, with good research and development leading to increasingly productive plantations. We have also proved that we can produce and sell our first target products locally and internationally, albeit in limited volumes, meeting our target run-rate profit margin. Whilst maintaining and continually improving these aspects, we are therefore now focused on developing our final products and growing sales.

We expect and look forward to a very positive couple of years ahead of us, and to reporting progress at regular intervals.

Andrew Collins, Chief Executive

Nursery, Ghana.

PLANTATIONS OVERVIEW

Miro has established over 10,000 hectares of plantation from greenfield in West Africa, in Ghana ("Boumfoum Plantation") and Sierra Leone ("Yoni Plantation"). The following outlines the details of these two plantations, both of which are FSC certified.

Country	Eucalyptus	Teak	Acacia	Gmelina/ Pine Other	Total Planted Area	Approx. no trees Established	Area of managed conservation land
	3,143ha	2,256ha	515ha	52ha	5,966ha	>6.5million	3,656ha
	2,372ha	20ha	1,348ha	375ha	4,115ha	>4.5million	563ha
TOTAL	**5,515ha**	**2,276ha**	**1,863ha**	**427ha**	**10,081ha**	**>11million**	**4,562ha**
Change over prior year	**45%**	**26%**	**52%**	**80%**	**42%**	**16%**	**5%**

In addition to the Boumfoum and Yoni plantations, Miro also operates a mature pine plantation in Sierra Leone ("Bradford Plantation") originally planted by the Government in 1985-90. This plantation is small in size from which approximately 6,000m^3 of round log timber will be harvested through to the end of 2018, primarily for the production of sawn-timber for the local market. Upon completion of the harvesting of this site, Miro will be replanting and managing the regrowth of this area for future harvesting.

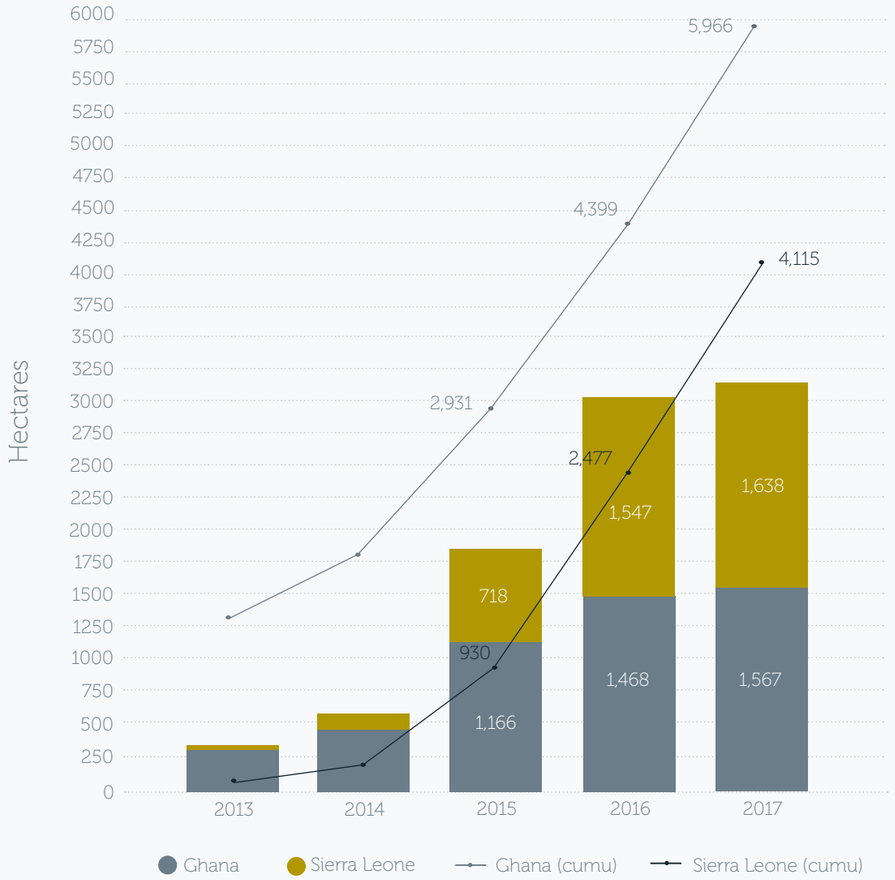
Nursery, Sierra Leone.

PLANTATIONS OVERVIEW CONT.

Boumfoum,Yonibana and Bradford Plantations

Eucalyptus gxu, Sierra Leone.

Boumfoum and Yonibana Plantations



Nursery, Sierra Leone.

Boumfoum, Yonibana and Bradford Plantations

Ghana - Boumfoum

- 9,691 hectares land leased and under Public Private Partnership Agreement
- 1,300-1,700mm of rainfall annually
- 22-28°C temperature
- 6 degrees North latitude - high sunlight
- Rainy season March-August, October-December

Sierra Leone - Yonibana & Bradford

- 22,311 hectares land leased
- 2,500-3,000mm of rainfall annually
- 22-28°C temperature
- 8 degrees North latitude - high sunlight
- Rainy season April-December

Map showing Boumfoum Plantation in Ghana

Map showing Yonibana and Bradford Plantation in Sierra Leone

R&D Greenhouse, Ghana.

RESEARCH AND DEVELOPMENT

Miro places a strong emphasis on research and development in two broad areas: silvicultural/nursery research, and tree-breeding.

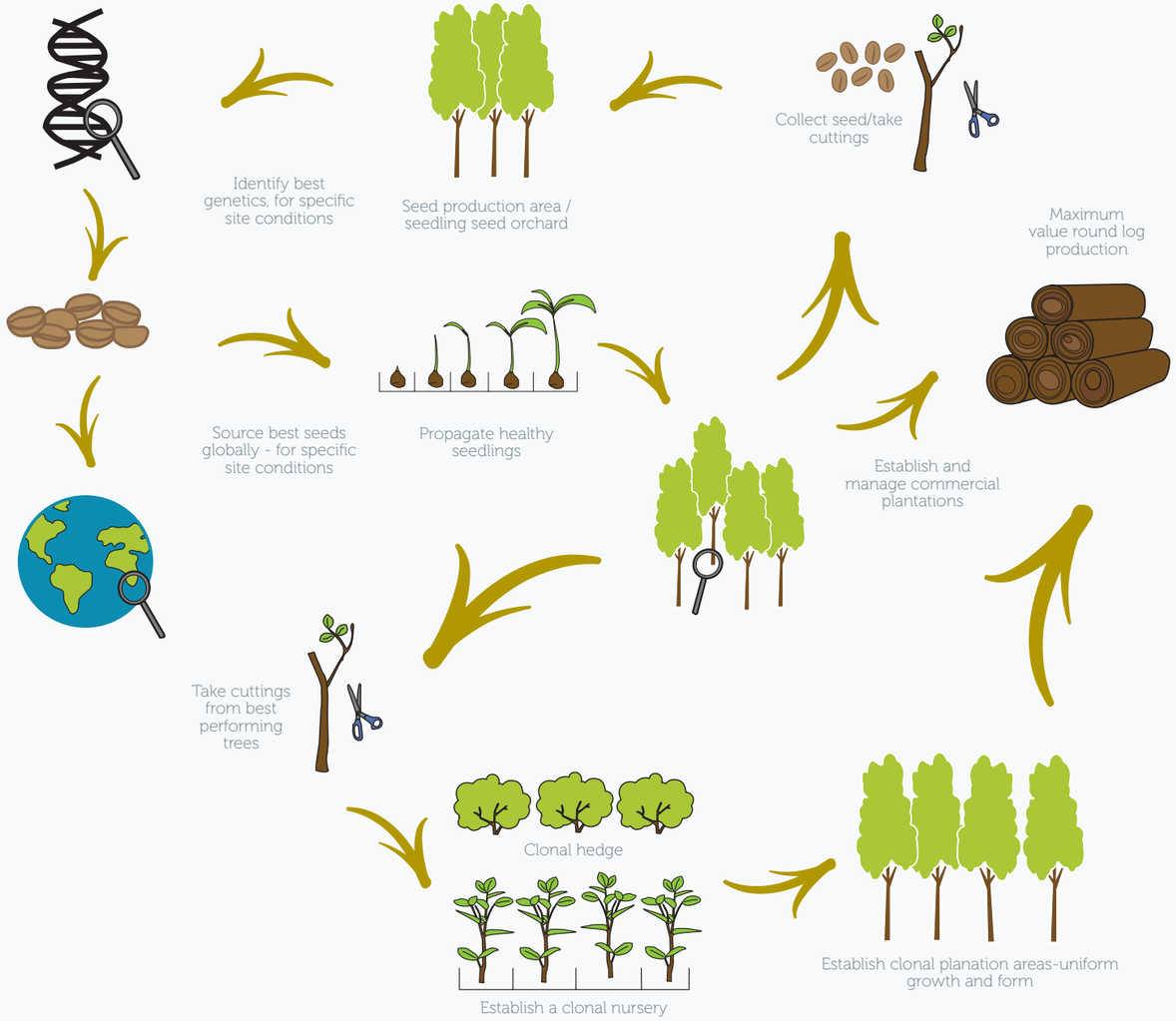
Nursery, Sierra Leone.

Silviculture and nursery research aims to improve the forestry and nursery techniques and working methods that the Company employs, to ensure that we achieve the best potential of the current genetic material we are planting. For example, during 2017 we carried out nursery fertiliser research trials to improve the root-shoot ratio of our seedings in the nursery.

RESEARCH AND DEVELOPMENT
CONTINUED

Tree-breeding aims to improve the quality of the genetic material that is used to establish the Company's plantations – we aim to improve growth rates, to improve wood quality, and to breed trees that are more tolerant and resistant of pest and disease issues.

A key target for Miro is to develop commercial clones from our tree-breeding programme – we expect this to deliver volume growth gains of c. 50% over the first three rotations, with the most significant gains occurring at the early stages of the programme.



Seed source trials

Once a species has been identified as a candidate for commercial plantings, we aim to procure and trial a wide selection of the most improved seed material available of that species, focusing our efforts on seed from provenances that have a climate similar to that of our plantations. We procure bulk seed initially, to identify the most promising provenances, and often also purchase seed by family to prepare for the possibility of producing our own clonal hybrids in the near future. In 2018, we are bringing in seed for trials from Brazil, Vietnam, Australia, Phillippines, Costa Rica, and India.

Clonal programme

We also run a clonal research programme - selecting candidate plus trees from within our plantations and establishing their performance through trials, with the aim of identifying superior performers that can be clonally reproduced in commercial plantations. We select trees on strict formal mass selection criteria. During the 2017 planting season, we established 100 hectares of clonal eucalypts in each country. We plan to plant 200-250 ha per country in 2018, and aim to increase this to 80% of our total annual planting by 2020. We also plan to introduce clonal gmelina in trials in 2018, with the aim of establishing our first clonal hectares in 2019 once growth rates and tree quality are proven.

Camcore

Miro have been full members of Camcore since the start of 2017. Camcore is a tree-breeding organisation funded by its members. Miro strongly believes in collaborative approaches to research – the strength of Camcore lies in the extent to which the members share genetic material and research findings. There are 38 member companies in total including Weyerhauser, Smurfit Kappa, APRIL, Mondi, Sappi, Sinarmas, Merensky and York Timbers. From Camcore, we have brought in large family collections of Eucalyptus, E. urophylla, E. grandis, E. pellita, and will be participating in the Eucalypt Hybrid Programme that will aim to develop new clones that will be available to the Group.

Taxa/species trials

While the Company has already identified a strong selection of genera and species suitable for commercial afforestation in and on our climate and sites, we continue to implement basic taxa trials that assess the suitability of less well-known species that may also show promise.

Other research collaborations

Miro is also working with other organisations to develop bilateral research projects where we trial restricted genetic material to test its commercial application – we established hybrid eucalyptus trials with material provided by Merensky (South Africa) during 2017, and Gmelina arborea clones from ASIREA (Costa Rica) will be put into trials during 2018.

"Miro Forestry has established more than 10,000 hectares of plantation from greenfield in West Africa."

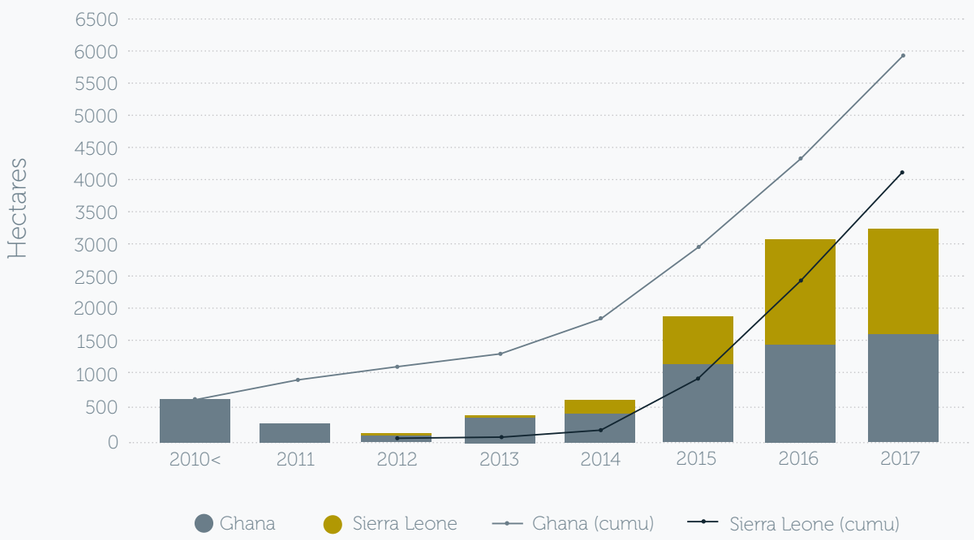
"Miro Forestry aims to improve growth rates, to improve wood quality, and to breed trees that are more tolerant and resistant of pest and disease issues.

Nursery, Sierra Leone.

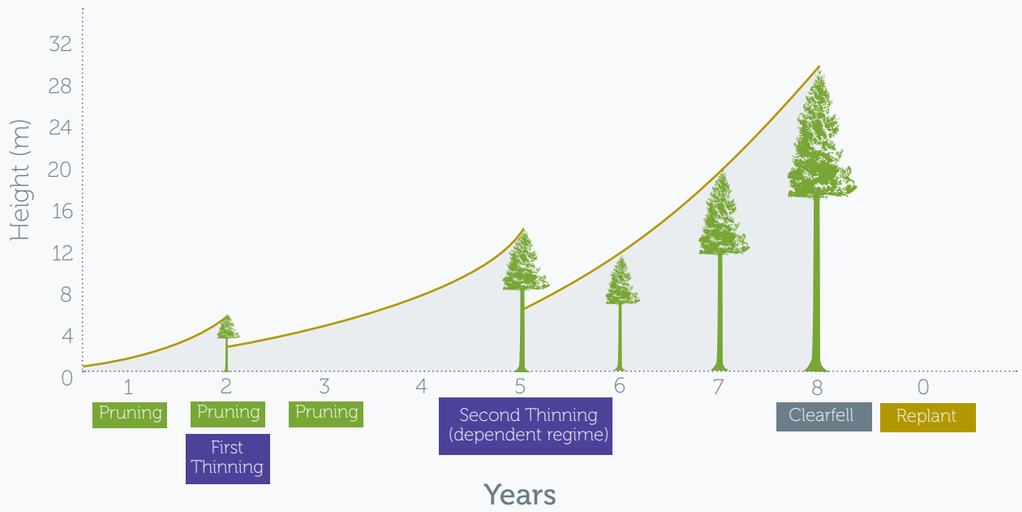
WOOD FLOWS

Teak Thinning, Ghana.

Existing Plantations Age Class Distibutions



Management regime of a typical Miro plantation



Eucalyptus Plantations

- 8-10 years to mature
- Produce sawn timber, electricity transmission poles and plywood
- Pruning, thinning, harvesting and sawmilling produce residue that can be sold for biomass or converted to charcoal

Acacia Plantations

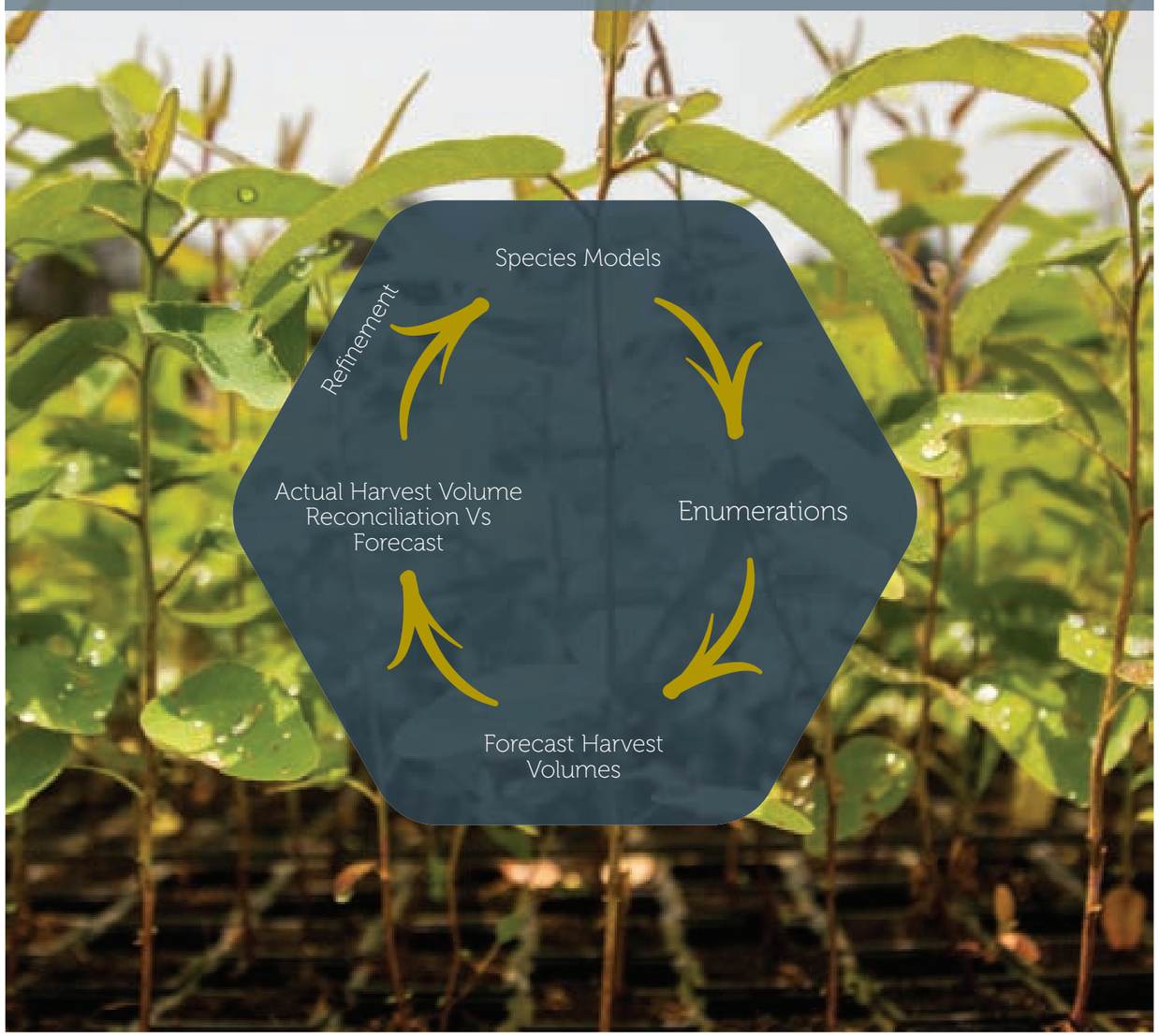
- 8-10 years to mature
- Produce saw timber, plywood and biomass residues

Teak Plantations

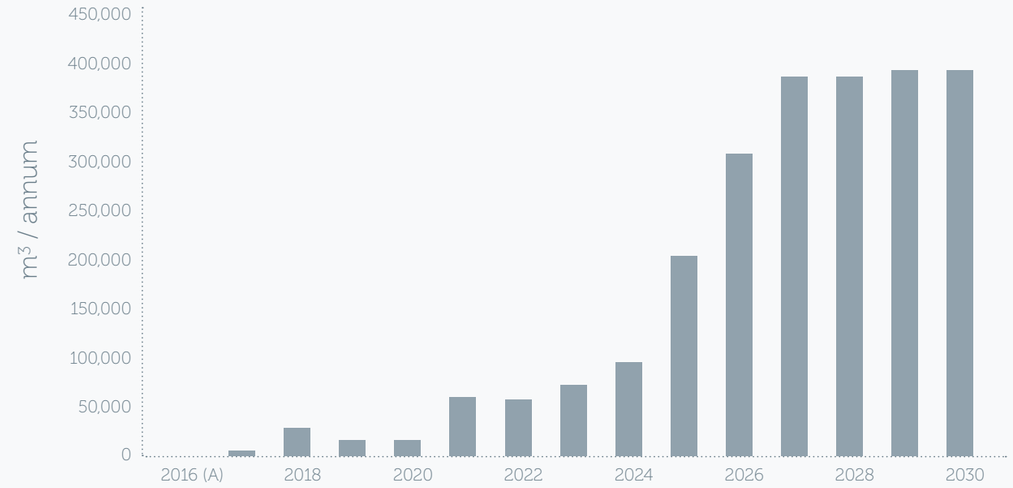
- 20 years to mature
- Produce saw timber and biomass residues

WOOD FLOWS
CONTINUED

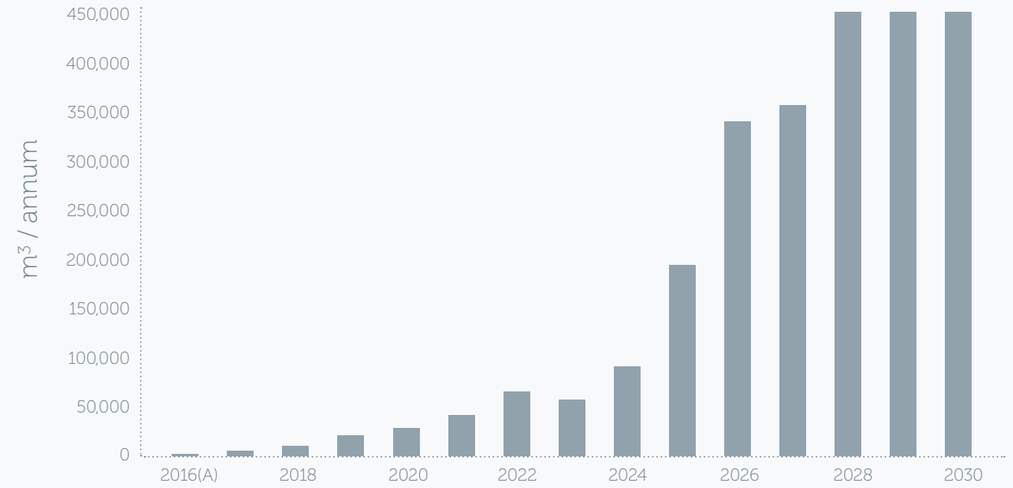
Our wood flow forecasts use species growth models that Miro has developed through a joint project with our plantation management software provider, Microforest. We have developed bespoke growth models for our main commercial species that forecast harvest volumes. Actual harvest volumes will be closely reconciled against these forecasts to further refine our models over time. During 2018, we are carrying out further work to more closely study log taper and form to improve log forecast accuracy.



Ghana
Total Wood Flow Volume (m^3 by year)



Sierra Leone
Total Wood Flow Volume (m^3 by year)



TIMBER PRODUCTS AND SALES
CURRENT PRODUCTION

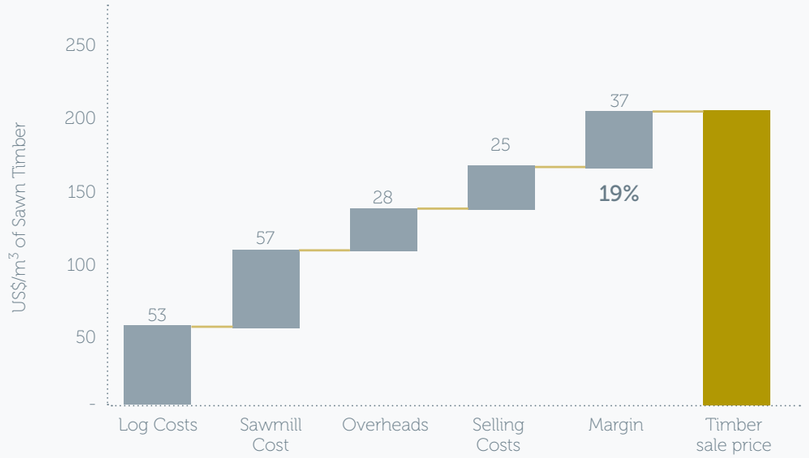
Miro is currently producing limited volumes of sawn timber and charcoal but these volumes will scale up as increased wood becomes mature. The following describes the current scale, economics and strategy for these two processing operations:

Sawmill, Sierra Leone.

Sawn Timber

Miro operates a mature government pine plantation at Bradford, Sierra Leone. Miro is harvesting and producing sawn timber from this plantation and will upon completion replant the area. The following provides an overview of these operations:

Bradford Sawmill Forecast Economics

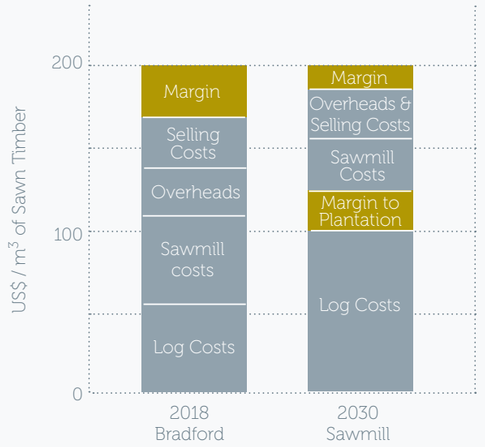


In 2017, Miro produced 1,324m^3 of sawn timber and is currently producing at an average monthly rate of 315m^3 (equal to approximately 525m^3 of round log timber input to the sawmill) largely to order. As shown by these graphs Miro is forecasting to make a margin of 19% in the production of this sawn timber. We expect this to increase notably as we are now delivering a consistent output, (unlike at start-up when our production took time to build. We now also have experienced sales personnel and therefore expect to achieve higher sales prices, and less wastage since we are predominantly now cutting to order. As a result, we forecast our running gross margin to continue to increase and the overall profitability of the project to reach targeted levels this year.

Looking forward over 2018 and beyond, we will continue to produce sawn timber from Bradford but we will also start in 2019 with small scale production of timber from our own plantations, planted by the Company.

The forecast economics show that as we increase output, sawmill and overhead costs become a less significant proportion and are absorbed in our existing structure, whereas Bradford is a seperatly located operation. This allows a greater proportion of the costs to be attributed to the log costs – a higher wood-paying capacity providing a high return to the plantation and company overall.

Sawmill Forecast Economics



SAWMILL

Saw Control

Woodmizer Sawmill

Board Edger

Woodmizer Sawmill

TIMBER PRODUCTS AND SALES
CURRENT PRODUCTION - CONTINUED

Charcoal Production:

In the production of solid timber products it is typical that around 50% of the timber grown is lost as waste wood in the form of uncommercial thinnings (i.e. small or poor form trees), branches, offcuts and sawdust.

It is important to minimise this waste and to recover as much as possible. As a result, Miro has started to develop significant scale charcoal production operations which can be used to convert all uncommercial thinnings and wood pieces (with a diameter typically of 3cm to 10cm) into charcoal.

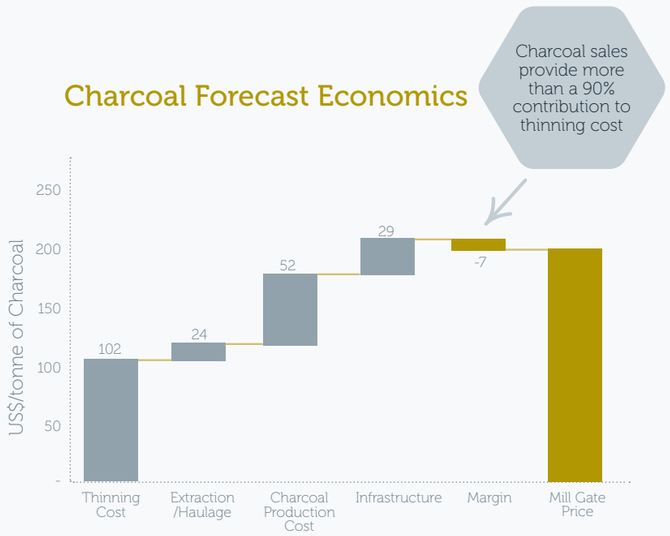
We then sell a significant proportion into the export market where a good price premium is available over local prices for charcoal from FSC certified sources (such as our FSC certified chain of custody charcoal kiln in Ghana), and also for quality product and reliability of supply.

Whilst charcoal production is not a core product for Miro, it does allow us to part recover the cost of thinning and extraction of the biomass timber (operations that have to be undertaken from a forestry management perspective to generate a high value final harvest). It is nevertheless a business from which we believe we can generate future net profit as we continue to improve our charcoal production infrastructure and knowhow, learning what we can from existing large producers in Africa.

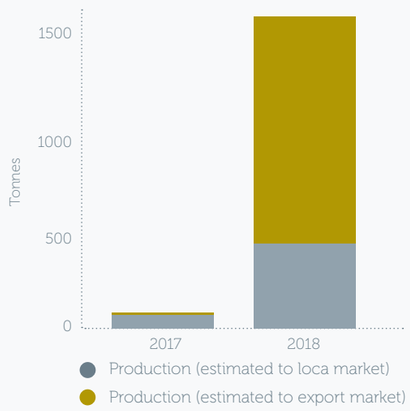
The chart below shows that we expect to reach a run-rate towards the end of 2018 whereby we are recovering approximately 100% of our cost of first thinning (of uncommercial, small diameter, log sizes).

If we achieve this as expected it will reduce our overall cost, whilst also generating further jobs, minimising our waste, and while producing a sustainable carbon neutral fuel. This therefore reduces the pressure for such charcoal to be produced unsustainably from the natural forests (from where much charcoal originates, even when destined for the UK market).

Charcoal Forecast Economics



Group Charcoal Production



FSC Charcoal

Container Charcoal Kiln, Ghana.

We will continue to develop our charcoal operations in both countries, aiming to achieve the Group production targets described above and to increase the cost recovery on the thinning operation and potentially even make a net profit. To support this, earlier this year we secured a grant for £260,000 for the continued development of charcoal operations in Ghana from Partnerships for Forests (www.partnershipsforforests.com). This will be used to support us expand production using a commerical three pot kiln system as shown below.

Commercial charcoal production kiln (three pot system).

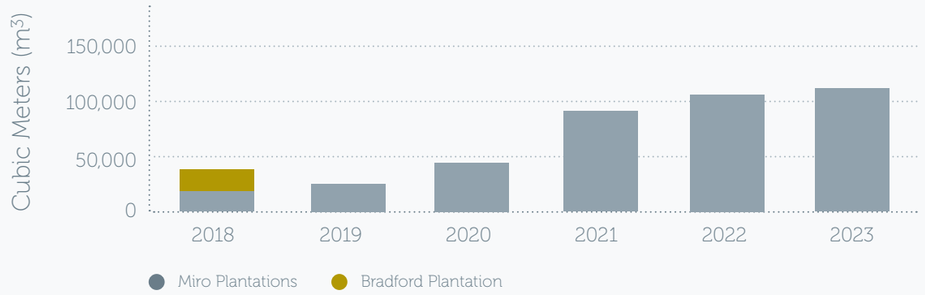
TIMBER PRODUCT DEVELOPMENT STRATEGY

2018 TARGET DEVELOPMENTS

Going forward, Miro's availability of wood from our plantations steadily increases as outlined in the chart below:

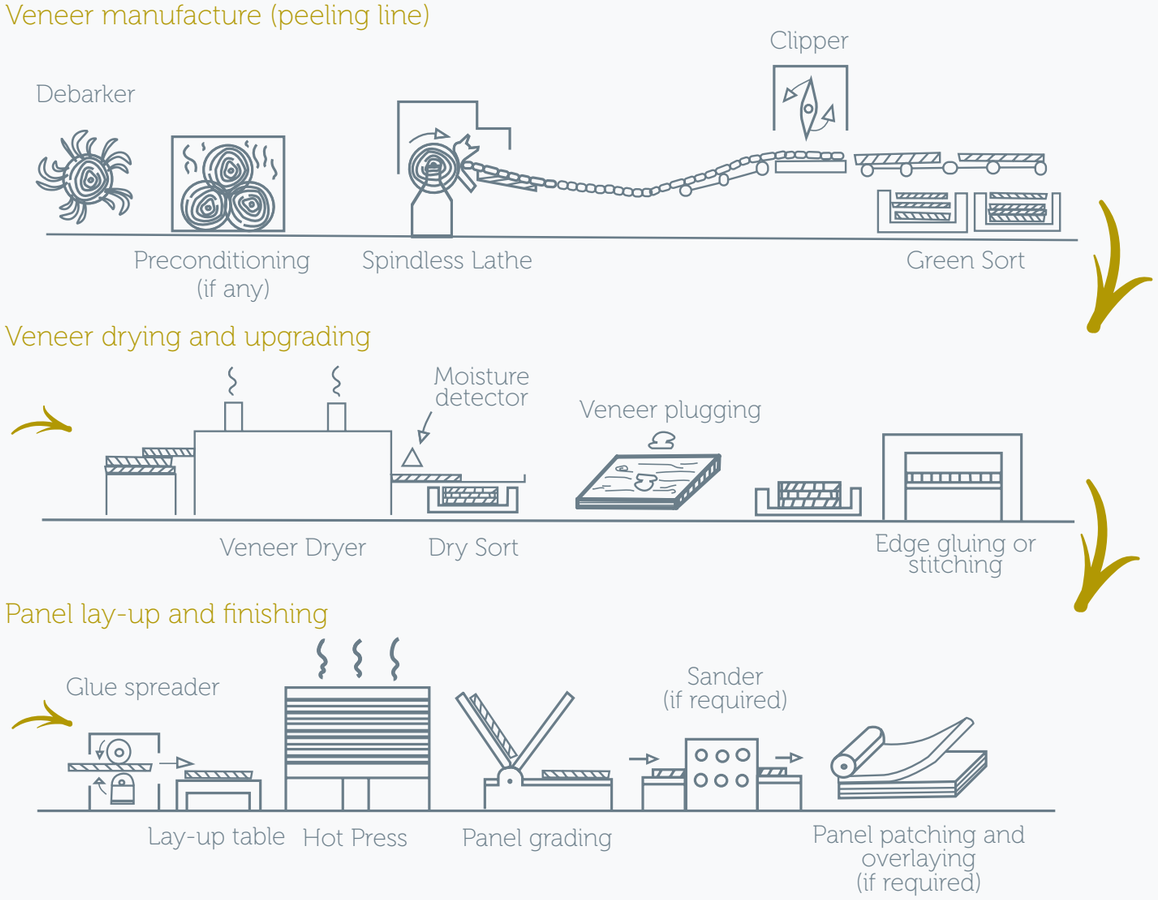
Eucalyptus Citriodora

Total Cubic Meters (m^3) of logs



Plywood Production:

The three stages of plywood panel manufacture are described in the diagram below:



This year we are developing, facilities and capability for the production of veneer (the first step towards the production of plywood) and thereafter in 2018-2019 facilities for the treatment of wooden transmission posts and poles. We are doing this on a small scale, as we always have with new operations, so that we learn and develop our capability at limited cost before scaling up. In this way we also develop our capabilities in these areas ahead of significant wood-flows from our plantations giving us time to tune our strategy and then scale up whilst also aiming to bring revenues and hence our time to EBITDA positive and cash-flow forward (to around 2023).

As discussed in last year's annual report, the market demand and price of plywood, made from peeled veneers, and treated utility transmission poles are very attractive, both offering significant margin improvement over the production of sawn timber, when selling into sub-Saharan Africa.

This increased margin available is as a result of the higher barrier to entry to produce these products, particularly due to equipment cost, scale requirement and knowhow. We forecast therefore, subject to successful small scale development, that the production of plywood and treated poles will be our key focus and highest margin earners in the future.

The following describes the planned development of these product lines over 2018-2019, targeted sales routes and our longer term strategy for these products:

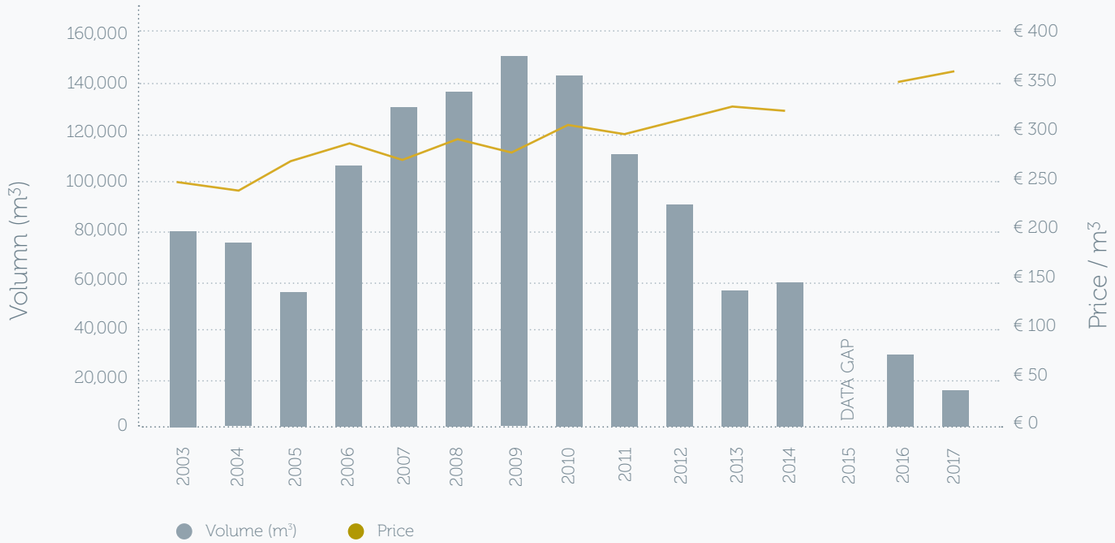
TIMBER PRODUCT DEVELOPMENT STRATEGY - CONTINUED

The first stage in this process is the production of veneer. This year in Ghana Miro will install a small diameter spindleless peeling line (as described in the top line of the diagram on page 43 and sell this veneer into Ghana's plywood production centre in Kumasi, close to the company's plantations.

Due to the heavy deforestation in Ghana and West Africa as a whole over the last few decades, the plywood industry in Kumasi is in a severe state of decline with a dwindling supply of raw material. As a result, Miro expects to be able to sell its veneer into the Kumasi market for a good price in the region of US$120/m^3. The plywood producers buying Miro's veneer would then use their existing equipment and sales network to produce and sell finished plywood.

We expect that the quality of our veneer will at first be low, only suitable for core veneers (veneer layers inside the plywood rather than as used on the face or back), but over time we expect to improve with learning and equipment quality.

Ghana Plywood Exports to all Countries



Ghana has historically been a country with a significant plywood industry, exporting to Europe, America, the Middle East and Nigeria.

However, there has been a major decline in export volumes since a peak in 2009-2010 due to drastic contraction in the availability of round-log supply to ply mills. Prices over this time have risen rapidly, rising at a CAGR of 2.9% over a 15 year period in EUR terms (inflation over this period was on average 1.64%/annum).

Plywood has traditionally been made with large diameter timbers, where the core left after peeling off the veneer (analogous to the cardboard tube inside a toilet role) has been itself large in diameter (up to a foot) to allow for clamping onto the timber of a rotating spindle either side.

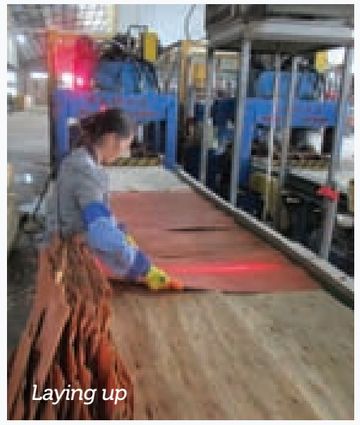
However, given the very significant rise in demand for panels (of which plywood is a key product alongside Orientated Strand Board (OSB), Particle Board and Medium Density Fibre Board (MDF)) particularly from Asia, smaller diameter logs have increasingly been needed to meet demand. As a result, spindleless peeling technology and production (particularly from Eucalyptus) has developed in Asia whereby a small diameter log, often down to 8cm in diameter, is fed between three counterrotating rollers which clamp and spin the log to which a blade is applied to peel-off veneer of the desired thinkness.

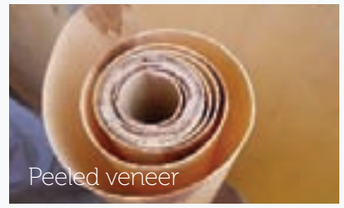
Such machines result in only a small core the size of a typical broom handle (and in fact many are sold as such). Such technology is not currently present in West Africa as all production of plywood to date has been from large diameter trees harvested in the natural forests, not smaller diameter plantation grown species (one reason why Miro cannot simply sell logs into the existing local plywood industry). It is such simple, robust, proven and cost effective technology that Miro will be using for its veneer production to be installed in mid-2018, as outlined in the pictures below.

Spindleless Peeling

Hot Press

Log core remaining after peeling


Laying up

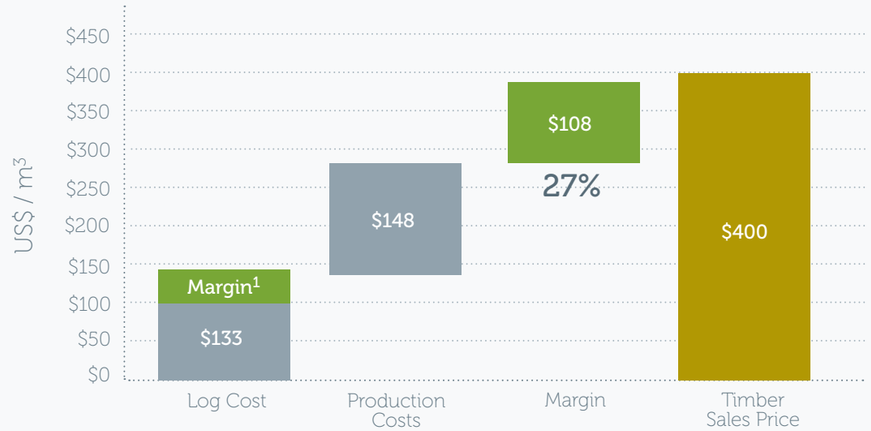

Peeled veneer

Finsihed Plywood

TIMBER PRODUCT DEVELOPMENT STRATEGY - CONTINUED

Miro target the following costs and margin from the production of plywood.

Plymilling Economics



Treated Posts and Poles:

Miro intends to develop a pole treatment facility in Sierra Leone in 2018-2019, which will treat utility transmission pole material available from Miro's Bradford Plantation, as well as fence post material from Miro's Yoni plantation. We intend initially developing such facility in Sierra Leone, over Ghana, since in Ghana there are a range of third party treatment facilities where we can get timber needing treatment competitively treated. The design of the treatment facility will be as shown below:

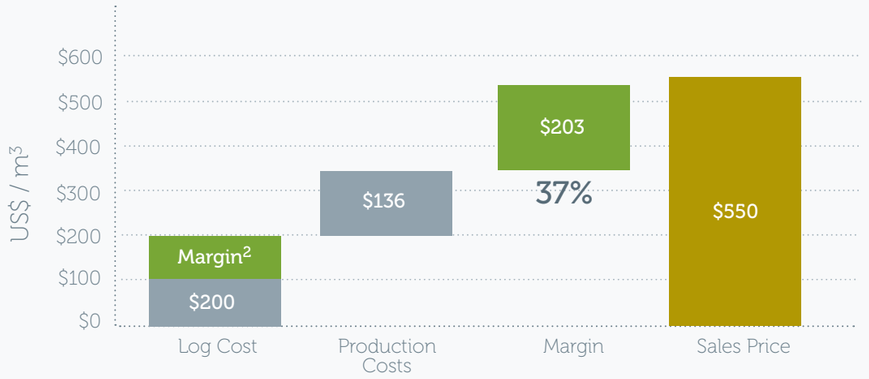
Timber Treatment Autoclaves

Timber Treatment Autoclaves

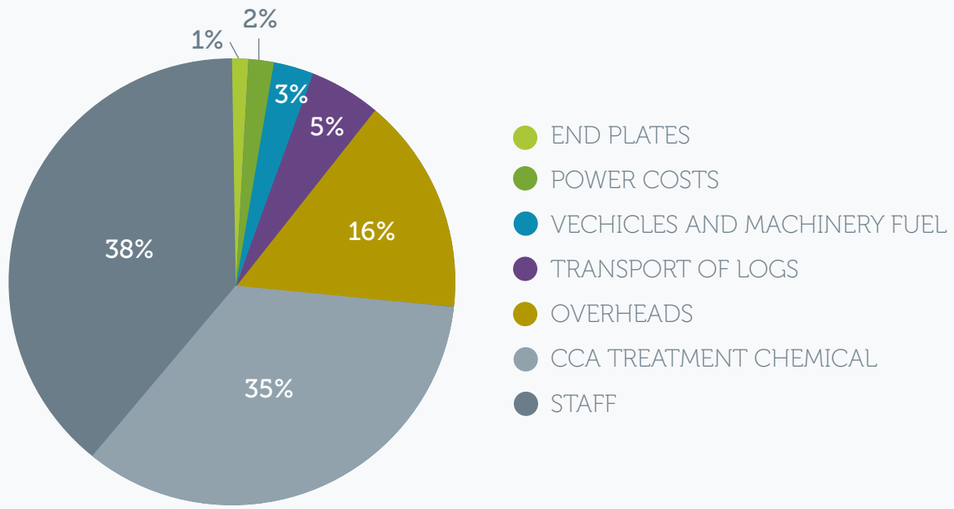
1. . Arms length price providing margin to Miro's plantation division.

We plan to be able to install such a treatment facility around the end of 2018 and we have started discussions with the Electricity Distribution and Supply Authority of Sierra Leone (which typically purchase 15-20,000 poles per annum) and other agencies working to increase electrification in the country and to maintain the grid. Given that all poles are currently imported into Sierra Leone from comparatively higher cost countries, with shipping and import duty costs (and the requirement of buyers to purchase locally where possible), we expect a strong margin on this product where also the utilisation of the log is near 100%. The following outlines margin expectations:

Pole Treatment Economics



Pole Treatment Production Costs Breakdown



2. Arms length price providing margin to Miro's plantation division.

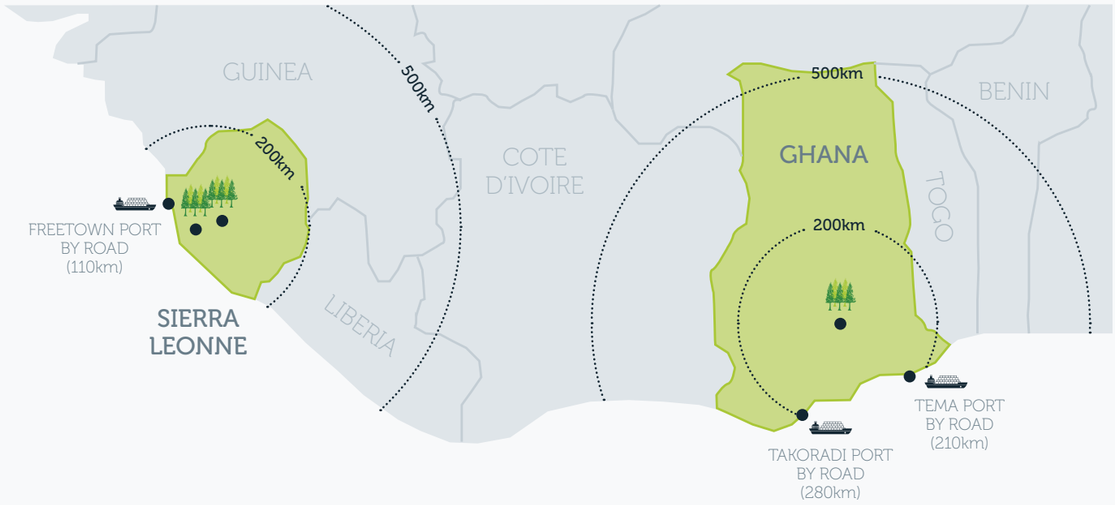
THE MARKET

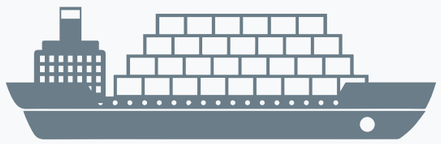
Over 100 million population within competitive transport distance

>50million m³ of timber demand vs Miro's maximum long term Group supply of up to 400,000m³/annum

ECOWAS free trade region

c. 2.75% population and >5% GDP growth rate





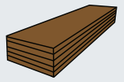
World Market

- Competitive distance from Miro to ports
- Competitive Miro FOB (free on board) timber prices due to high biological growth and low cost production
- Optionality of sales into world market

Competitive Transport Distance

- Competition from other producers within ECOWAS minimal given regional timber supply shortage
- Plywood and poles import parity priced due to them being predominantly imported.

ECOWAS demand vs. Miro Full Scale Supply

	Price Range	Approx ECOWAS consumption/ annum	Miro max Supply	Forecast Miro Margin	Approx % currently supplied by imports*
Plywood** 	$400/m³ - $1,000/m³	c. 650,000m³	c. 200,000³	27%	>70%
Sawn Timber	$200/m³ - $300/m³	c. 8,000,000m³	c. 160,000m³	19%***	>10%
Timber Utility Poles	$450/m³ - $550m³	>500,000 poles	c. 60,000m³	37%	>80%

** 23% average duty on import of timber products. ** Business allows optionallity to increase plywood production vs sawn timber*
**** Based on Miro's actual magrin currently achieved.*

Acacia Mangium, Sierra Leone.

OUR PRODUCTS

Door and Frame.

Sawn Timber.

Tongue and Groove Panels

Teak Furniture made by Local Artisans.

Miro Charcoal.

FSC Teak Export to India.

Sawn Timber.

Utility Transmission Poles.

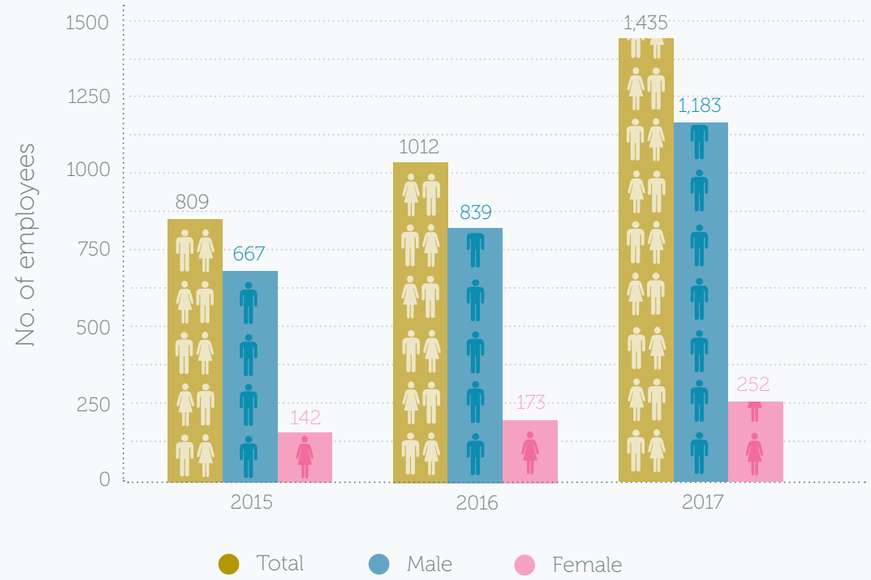
OUR PEOPLE

In 2017 Miro employed an additional 400 people, reflecting a 28% growth in employment. Miro continues to increase emphasis on training, with over 70% of employees receiving training in 2017.

Where requisite experience and skills exists, Miro always tries to recruit locally in preference to nationally or from overseas. The group is an equal opportunities employer and has a zero tolerance approach to all forms of discrimination. Miro is committed to having a minimum of 10% women in the workforce.

Miro Forestry's goal is to create a good work place for all employees. Miro provides a safe working place by complying with International Labour Organisation's (ILO) Forestry Standards. As the company expands its industrial wood processing operations, Health and Safety becomes increasingly important. Miro has well established policies and procedures, safety awareness campaigns run throughout the year and the company is proud to have a decrease in the all incident frequency rate. The all incidents frequency rate (AIFR) reduced from 4.5 to 2.76 compared to this time last year. The lost time incident frequency rate (LTIFR) reduced from 2.5 to 1.44 compared to this time last year.

Consistent Employee Growth



18% workforce is female

Equal remuneration for women and men

6% voluntary staff turnover

1,409 Clinic visits with access to medicines

Lost time injury frequency rate decreased

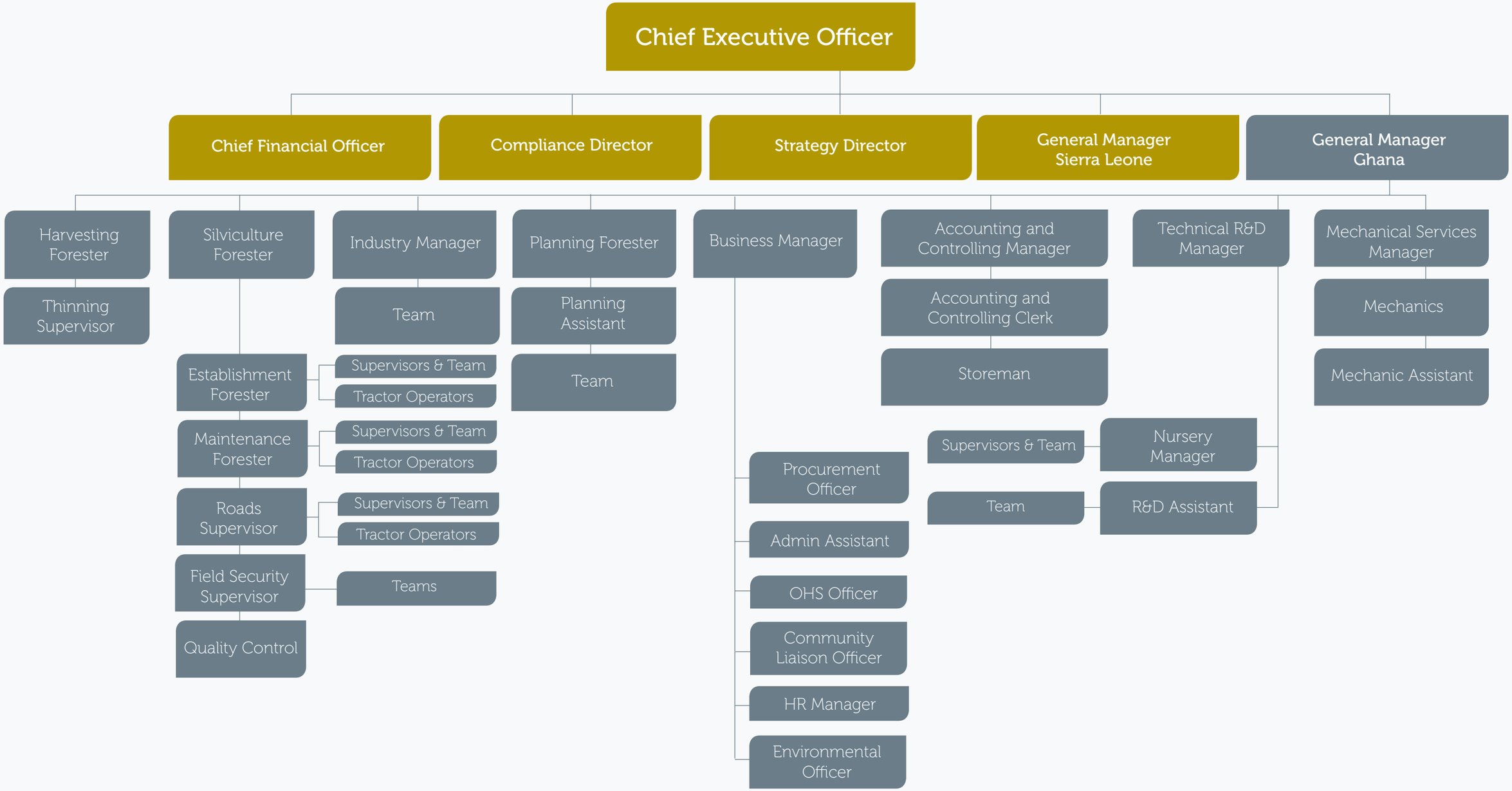
Over **1,000** people trained

Focus on occupational health and safety training

Business Integrity:

Miro complies with the United Kingdom UK Bribery Act (2010). Miro does not pay nor accept bribes, kickbacks, or facilitation/speed payments, either directly or via third parties, in any circumstances (implemented and monitored through: Company Policy, Business Integrity Report and training records).

OUR PEOPLE
CONTINUED



The structure above is approximately replicated in Ghana and Sierra Leone.

"Miro plans all of its plantations with a holistic approach, respecting people and the environment"

James Fornah, Land Preparation Forester, Sierra Leone.

OUR IMPACT

At the heart of the sustainability agenda are the Global Goals for Sustainable Development, also known as the Sustainable Development Goals (SDGs). These are 17 goals and 169 targets chosen to tackle major development challenges across the globe by 2030. Miro is measuring its impact against the most applicable of these global goals.

Climate Action

- Forestry is one of the key mitigation measures against climate change. Miro is constantly increasing its sustainably managed forest, limiting its own emissions and increasing carbon storage
- Sustainable management of the land strengthens the environments resilience
- Environmental awareness campaigns involving communities, including women and youth, increasing climate change awareness

Life on land

- 4,562 ha of managed conservation area protecting natural habitats
- Biodiversity loss reduced through conservation areas, security and conservation awareness
- Sustainable management over 10,000 ha of reforested land

Gender equality

- 18% of workforce is female
- Equal renumeration for women and men
- Discrimination free work place

Industry, innovation and infrastructure

- 2,135 km of road construction, linking communties with markets

Good health and well being

- All employees have access to healthcare, through company resources and medical cover contributions
- Maternity and sick pay for all employees
- One clinic built
- Health and Safety campaigns reaching over 2,000 people
- All employees provided with Personal Protective Equipment (PPE) and training to ensure well-being

Responsible consumption and production

- No signifiicant spills in 2017
- No emissions to water
- Input material sourced responsibly and recycled where possible
- 256,433 tonnes carbon sequestered
- Continusously trying to reduce hazardous material

SDG'S & MIRO

No poverty

- USD5.6 million benefitting the immediate local economy (2017 salaries and the procurement of goods and services)
- More than USD 1.5 million projected to reach communities by 2022 through benefit sharing agreement
- Employment targeted at low income groups

Decent work and economic growth

- Over 1,400 directly employed
- Over 100 contractor jobs created
- Salaries approximately 35% higher than national minimum wage

Quality education

- Four schools built
- 400 scholarships awarded, including 5 university degrees
- Over 70% employees trained in 2017

Affordable and clean energy

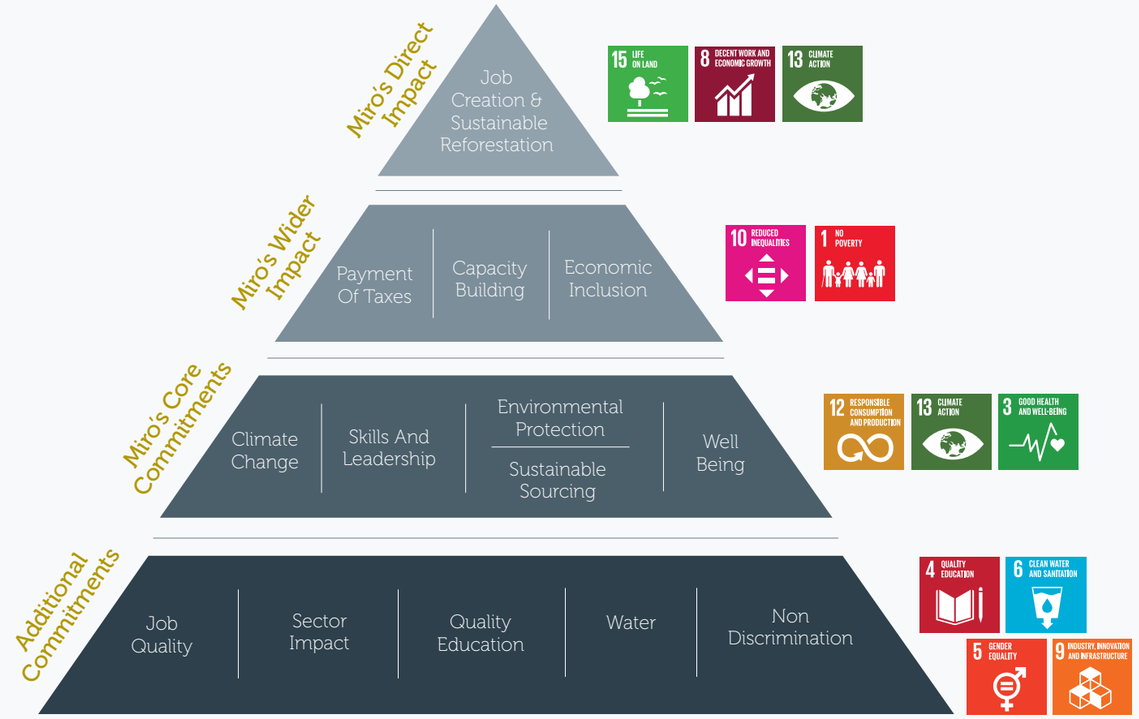
- Waste wood used for renewable energy
- 72 tonnes sustainable charcoal produced in 2017

Clean water and sanitation

- 9 boreholes constructed, supplying clean drinking water to six communities
- Water consumption monitored and controlled.

OUR IMPACT
CONTINUED

Accommodation Construction wing Miro's poles, Sierra Leone.



Direct monetary benefit to the local economy in 2017:

Total Approx. US$'000 Equivalent	Ghana	Sierra Leone
Rural Employment	US$907	US$965
Purchase of Goods and Services	US$1,803	US$1,711
Land Lease Fees	US$46	US$127
Corporate Social Responsibility	US$27	US$43
TOTAL	**US$2,783**	**US$2,846**

c.US$5.6 million
(c.55% of 2016 budget) has directly benefited the immediate local economy around the company plantations (on salaries and the procurement of goods and services)

c.US$215,000
paid for land rent, government taxes and fees in the year

c.US$6.5 million
future benefit to local communities upon harvest of existing trees planted (from benefit sharing arrangements directly with communities)

CERTIFICATION

Spraying Team, Sierra Leone.

Miro manages its plantations to high environmental and social standards in order to give its stakeholders and customers the assurance that its products come from responsibly managed sources. We have chosen one of the largest international independent and credible certification schemes – the Forest Stewardship Council (www.ic.fsc.org) – to certify our operations and products.

In 2017 100% of Miro's plantations were certified and Miro's charcoal production plant in Ghana was certified for Chain of Custody. Miro is certified for five years, dependent on results from annual surveillance audits. Miro is audited by SGS South Africa.

FSC
www.fsc.org
FSC® C136035
The mark of responsible forestry

FSC
www.fsc.org
FSC® C135138
The mark of responsible forestry

FSC
www.fsc.org
100%
Charcoal from well-managed forests
FSC® C136035

FSC lumpwood charcoal.

COMMUNITY DEVELOPMENT & STAKEHOLDER ENGAGEMENT

Miro strives for a proactive, mutually respectful and lasting relationship with all of its stakeholders and in order to achieve this Miro proactively engages with all stakeholders. Miro spends 1% of its annual budget on community development projects, these have a focus on education, access to water and healthcare. Going forward the company will focus on income generating livelihood projects.

CSR Primary School Project opening, Ghana.

Primary School Opening, Ghana.

Womens Group, Ghana.

3 schools built

2 refurbished

1 vocational centre built

1 clinic refurbished

9 boreholes constructed

$US23,660 spent on education in 2017

Accessible grievance mechanism

10 Community meeting shelters constructed

over 400 scholarships awarded in 2017

USD 50,000 directly into community projects in **2017**

Ongoing stakeholder mapping and resulting stakeholder engagement plan

12,000 estimated number of people benefitting from the company's community projects

ENVIRONMENTAL PROTECTION AND ENHANCEMENT

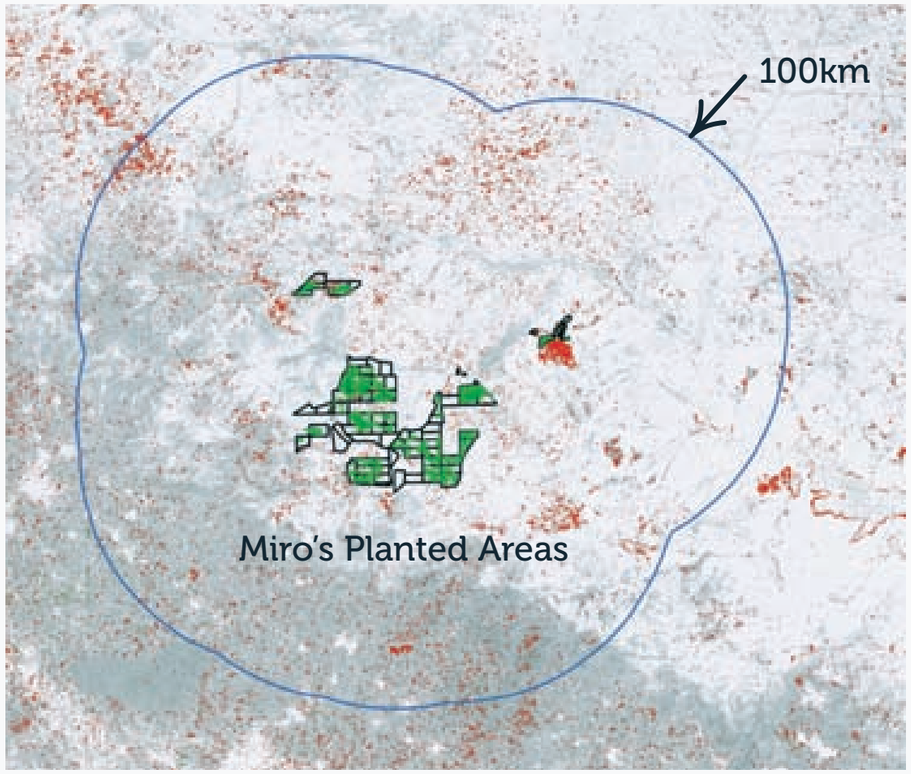
West Africa has lost over 80% of its forest cover over the last 100 years and with growing economies and demand for wood fuel, the pressure on forests is increasing. In order to reduce this pressure on remaining natural forests and biodiversity, sustainably managed commercial forest plantations are vital.

James Fornah, Land Preparation Forester, Sierra Leone.

In addition to managing sustainable forest planations, Miro works with relevant stakeholders to conserve remaining indigenous forest. Miro does this through preserving its own conservation areas, of which there are 4,562 ha but also through wide-spread conservation and environmental awareness campaigns and working with authorities to improve security of reserves and standing forest. Miro is committed to having no less than 10% of its land holding as managed conservation area.

The following maps show forest gain and loss within and surrounding Miro's plantations. Within the plantations there is 100% gain in tree cover. Within a radius of 100km from the plantation there is an average of 10% forest gain and 90% tree cover loss. Through Miro's expansion and environmental awareness campaigns, we hope to facilitate the restoration of the immediate landscape and lesson the rapid rate of deforestation.

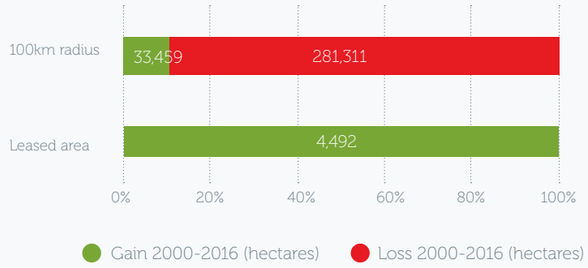
GHANA



Key

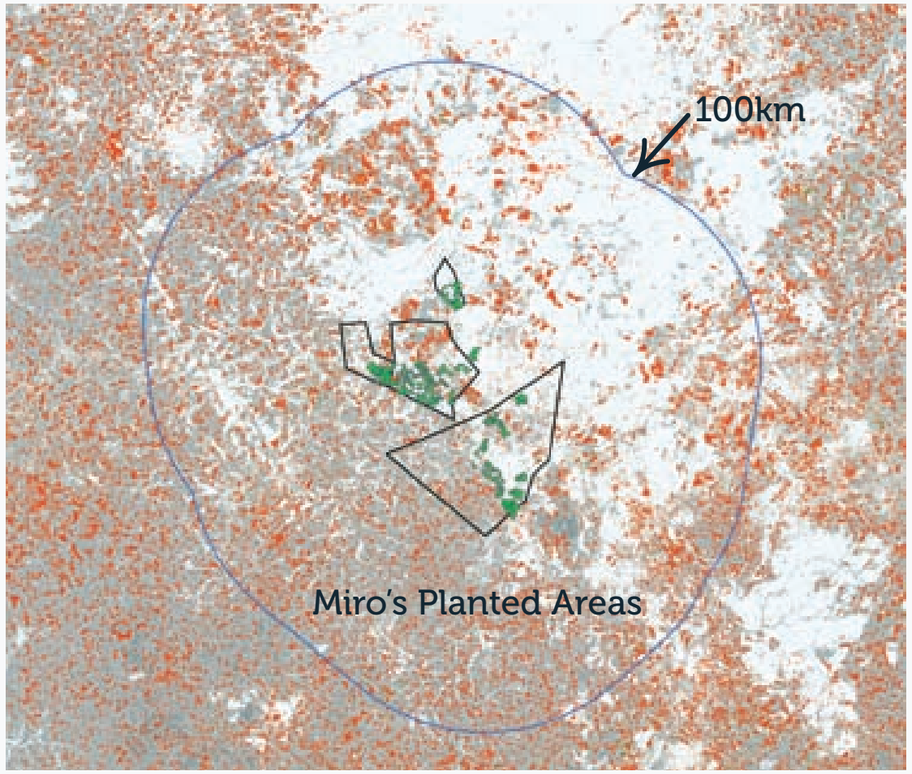
- Tree cover loss 2000-2016
- Tree cover gain 2000-2016

Forest Cover - Gain and Loss



ENVIRONMENTAL PROTECTION AND ENHANCEMENT - CONTINUED

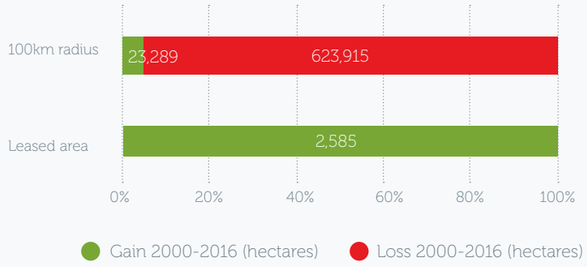
SIERRA LEONE



Key

- Tree cover loss 2000-2016
- Tree cover gain 2000-2016

Forest Cover - Gain and Loss



Responsible waste management

Increased animal and bird species spotted in 2017

4,562 ha managed conservation areas

35% conservation areas critical to conserving water catchments

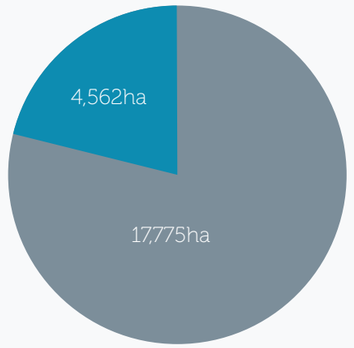
Responsible and accountable energy consumption and water use

Conservation awareness campaigns reaching over **14** Communities and over **700** employees

c.US$10,000 Spent on managing conservation areas

1,561 ha of Miro's conservation area have been identified as High Conservation Value (HCV)

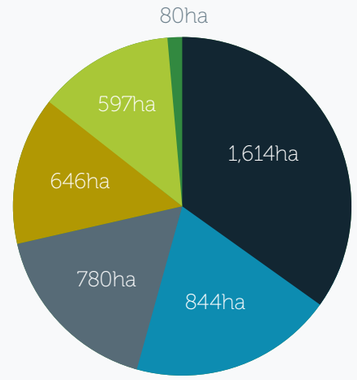
Landholding (ha)



- PLANTATION*
- CONSERVATION

* *This includes all current plantation and yet unplanted area*

Conservation Areas (ha)



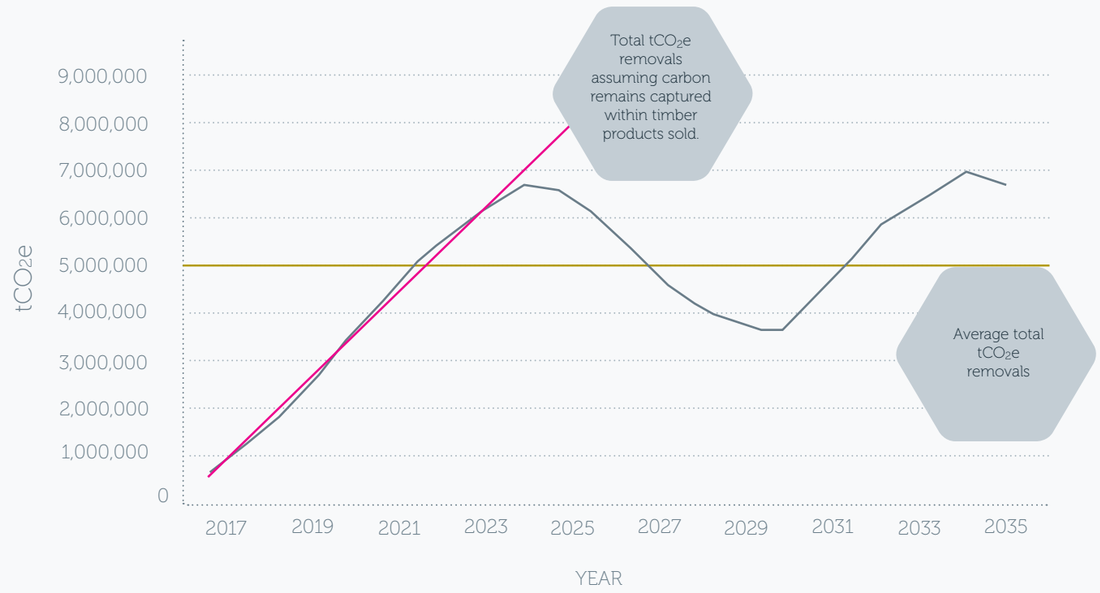
- FOREST
- GRASSLAND
- WETLANDS
- ROCKY AREA
- WOODLAND
- RIPARIAN ZONE

CARBON SEQUESTRATION

Eucalyptus Pellita,Ghana.

- Commercial forestry has the potential to contribute to climate change mitigation through providing a sustainable source of biomass and wood products, relieving pressure on natural forests and reducing deforestation, whilst acting as a carbon sink in the process. Commercial forestry is therefore an important part of the climate change solution
- Miro has applied a United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) methodology to develop a model to estimate the net carbon benefit from the Company's operations. The model works by quantifying the carbon sequestration from the trees planted, both above ground biomass (stem, branches) and below ground biomass (roots), as well as the change in soil organic carbon (after leakage).
- Miro will cumulatively sequester approximately 5,000,000 tCO_2e (this excludes the carbon locked in Miro's wood products sold, instead assuming these are released). This would offset the carbon emitted from c.4.5 million passengers flying from London to New York and back (c.1.2tCO_2/flight). It would also offset the carbon footprint of c.500,000 people in the UK for a year (c.9.5tCO_2/annum average; vs. the world average of 1.2tCO_2/annum).

Cumulative Group tCO_2e Removals



- Most of the timber Miro sells will remain in buildings etc. for many years, but importantly also, in many instances, replaces either unsustainably sourced timber (which is already stored carbon, which human intervention has had no part in capturing) or concrete, steel, or other materials which create very significant atmospheric carbon in their making (one of the many reasons why wood as a building material is increasing, despite the emergence of new materials). As a result, assuming, in accordance with the CDM methodology, that atmospheric carbon stored in all our wood sold is then immediately released (i.e. is in effect burned) is a very conservative approach.
- On the assumption that the wood we sell remains as captured carbon or avoids materials that would emit equivalent carbon to what the trees sequester, then Miro under this methodology sequesters just under 1,000,000 tCO_2e / annum on average over a 10-20 year time horizon (thus total removals keeps increasing in accordance with the initial upward gradient of the curve, as shown by the red line in the above chart). This is equivalent to offsetting the carbon emitted from c.1 million passenger return flights between London to New York every year.

"The only sustainable way to reduce the pressure to log natural forest areas for timber is the expansion of sustainable timber plantations"

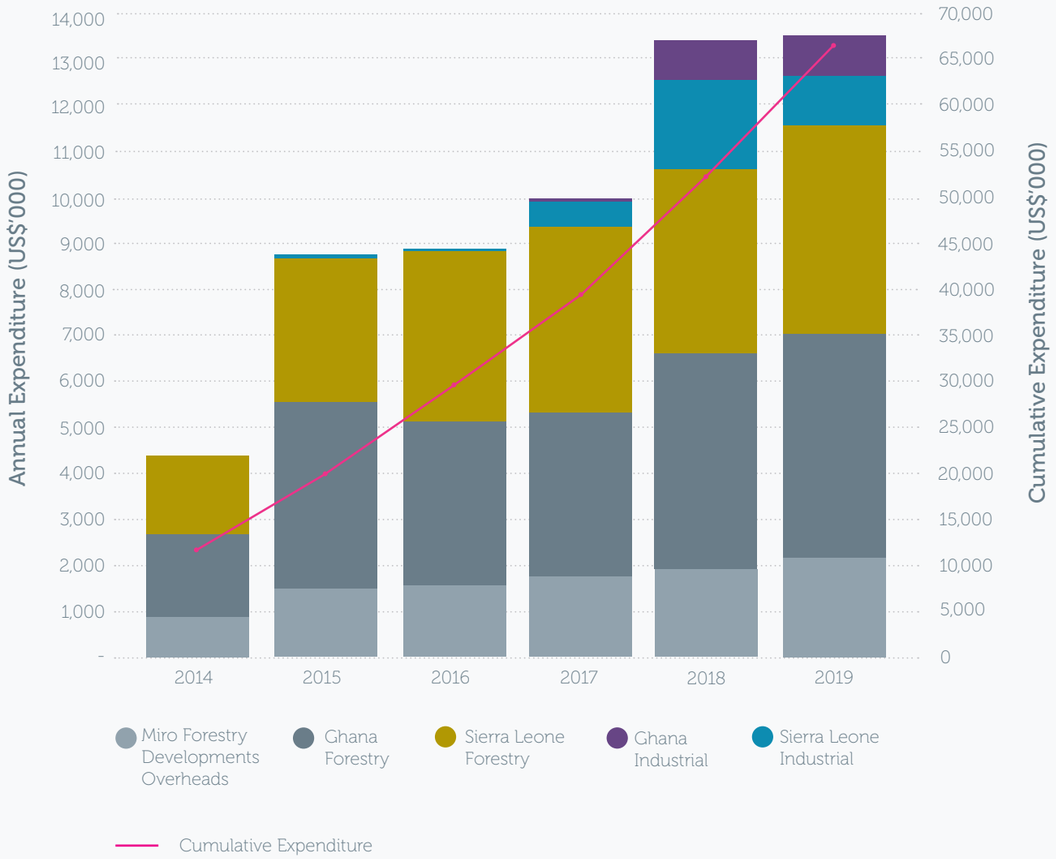
Sunset by Miro's Yoni Plantation, Sierra Leone.

INVESTMENT AND PLANTATION ECONOMICS

Miro has invested a total of US$39.2 million into its operating activities across the Group[1]. Of this US$18.1 million has been invested into Ghana and US$14.7 million into Sierra Leone[2]. The Company is therefore one of the most significant investors into plantation forestry in either country.

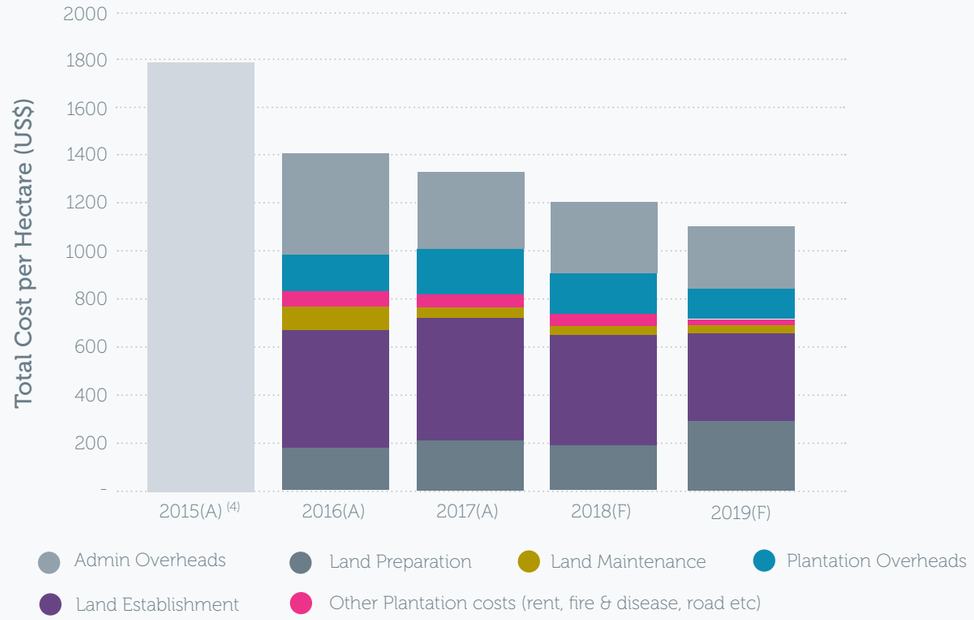
The use of funds by Miro Forestry Development Limited the group holding company, and by operational subsidiaries in Ghana and Sierra Leone to year-end 2017 is detailed in the table below:

Annual Expenditure by Company (US$'000)



The chart below shows Miro actual total costs per hectare since 2015 and the forecast total cost per hectare over the next two years.

Total Cost per Hectare[3]



1) Total investment of c.US$44.6 million including non-cash share based expenses and rolled up loan interest.
2) The remaining US$6.4m has directly financed the UK parent company costs, (fundraising, consulting, salaries, operational costs and other costs incurred on behalf of the Group)
3) Cost and expenditure does not include share based expenses and rolled up loan interest (ie. it excludes capital structure effects). Acronym (A) denotes actuals and (F) forecasts.
4) 2015 costs have been included in total as the breakdown by classification is not available.

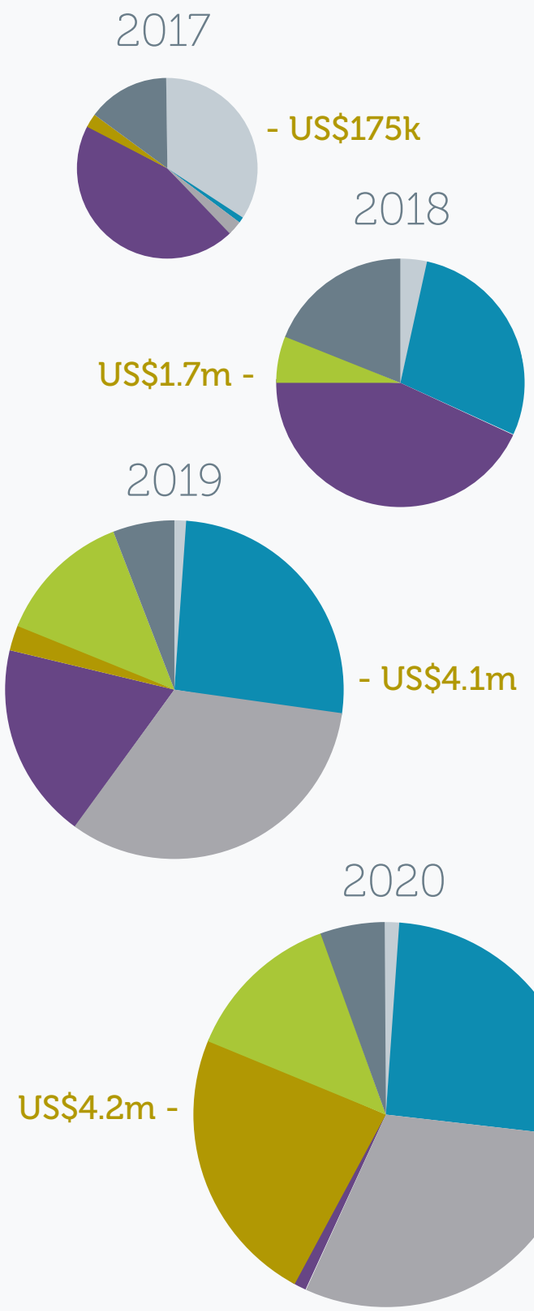
INVESTMENT AND PLANTATION ECONOMICS - CONTINUED

Nursery, Ghana.

Felled Pole, Ghana.

- SEEDLINGS
- CHARCOAL
- POLES
- SAWN TIMBER BRADFORD
- SAWN TIMBER - MIRO PLANTATIONS
- VENEER
- BIOMASS

Target Revenue by Product



As Miro's commerical thinnings increase, and we bring additional industrial operations online, our product base diversifies. Revenue from the Bradford plantation, Sierra Leone which is expected to finish in 2019, is replaced by Miro's plantations, utilising this equipment efficiently.

USE OF FUNDS BY COUNTRY

Miro has a policy to always acquire materials and services locally, in Ghana and Sierra Leone, when such materials and services exist at equivalent or lesser price, and to not less than equivalent standards elsewhere internationally. Not only is this best value for money, but it also maximises the Company's development impact and serves to add local support to operations.

Nursery Empolyee, Sierra Leone.

Miro's office block built on plantation, Sierra Leone.

Beneficiary countries of Miro Forestry's investment over 2017

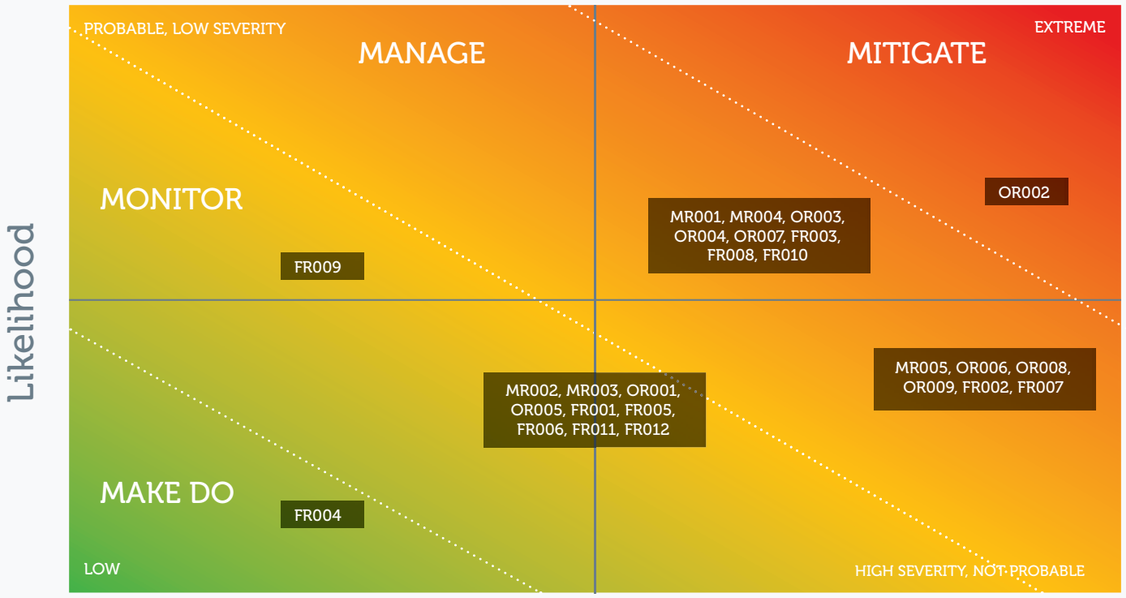
The table following shows the ultimate beneficiary countries of Miro Forestry's investment over 2017. This has been calculated based on the jurisdiction from which goods and services have been purchased and to show the country which ultimately benefits (in the case of Miro Forestry Developments this is before the charge-down for goods and services purchased on behalf of subsidiaries).

Miro Forestry (Ghana) Limited (Ghana)	US$3,305k (87%) Ghana	US$172k (5%) United Kingdom	US$318k (8%) Other Countries
Miro Forestry (SL) Limited (Sierra Leone)	US$3,735k (81%) Sierra Leone	US$239k (5%) South Africa	US$642k (14%) Other Countries
Miro Forestry Developments Limited (UK)	US$1,133k (63%) United Kingdom	US$420k (23%) South Africa	US$256k (14%) Other Countries (includes Ghana and Sierra Leone)

RISKS

Miro Forestry faces risks in growing, manufacturing and marketing sustainable timber products in West Africa. We have identified the following key risks and are proactively overcoming them through a well-managed risk mitigation strategy.

Risk Assessment Heatmap



Risk ID/Ref	Risk Description
MR001	Exchange rate fluctuations lead to liquity issues and loss in value of investment
MR002	Hyperinflation leading to excessive costs
MR003	Ghana: Political decisions, events, or conditions significantly affect the profitability of a business
MR004	Sierra Leone: Political decisions, events, or conditions significantly affect the profitability of a business
MR005	Community relationships deteriorate leading to a loss of workforce and potential conflict
OR001	IT failure resulting in a loss of all IT data - either caused by a service provider or hacking
OR002	Fire at the plantations resulting in significant losses
OR003	Key personnel are lost resulting in deterioration in business practices and quality of plantations
OR004	Disease and pests cause significant damage to the plantations
OR005	Theft / Fire result in the destruction of infrastructure / vehicles resulting in business disruption
OR006	Death/Injury as a result of operations
OR007	Electricity supply is intermitent or disrupted leading to signifcant downtime
OR008	Non-compliance with health and safety / labour / environmental laws
OR009	Regulatory risk where FSC stiuplate new requirements which are not complied with
FR001	Fraud is committed using banking / petty cash facilities
FR002	The company cannot continue as a going concern due to an unexpected event
FR003	A customer with a significant balance owing to Miro defaults on the credit terms provided
FR004	Short terms funds are not available to meet current liabilities
FR005	A rise in interest rates resulting in significant effects on profitability
FR006	Market risk due to excessive exposure to a single market and / or customer
FR007	Non compliance with tax legislation resulting in increased tax liabilities
FR008	Export complexities result in delays and potential financial loss from contractual obligations
FR009	Investment funds performs worse than expected resulting in loss of funding
FR010	Performance risk whereby a project, when complete, fails to perform as intended or fails to meet business requirements that justified it.
FR011	Model risk resulting in a loss from using insufficiently accurate models to make decisions
FR012	There is a global timber price crash

Children local to plantation, Sierra Leone.

RISKS - TOP 5 EXPLAINED

Acacia Mangium, Sierra Leone.

RISK	LEVEL	MITIGATION
Fire at the plantations resulting in significant losses	Very High	Fire breaks are designed to reduce the risk of large fires. Fire detection equipment has been setup and fire management procedures implemented. Plantation insurance is assessed and extended to a level where the risk is mitigated to an acceptable level for a reasonable cost. Currently this is self insured but management are investigating further insurance to protect shareholder investment.
Financing cannot be obtained to fund the ongoing operations and future investment of the Group	High	Miro has a track record of achieving its targets, is one of the lowest cost forestry businesses in Africa, and has a strong reputation in financial markets. Miro's business model allows it to significantly scale down operations, whilst remaining profitable, if any remaining financing requirement was not available – by harvesting existing timber stock at a lower rate whilst they continue to grow in volume and value, generating cash-flow from sawmilling operations.
Political decisions, events, or conditions significantly affect the profitability of a business	High	Miro has the wide team skillset to navigate local and national political environments while adhering to global standards of governance and ethics.
Key personnel are lost resulting in deterioration in business practices and quality of plantations	Medium	Miro operate effective recruitment systems and provide attractive employee retention incentives to retain key employees (Miro has never yet had a key employee resignation). Miro always ensures institutional knowledge and contacts are held by at least two people.
Community relationships deteriorate leading to a loss of workforce and potential conflict	Medium	The Company implements a highly proactive community engagement programme and aims to recruit labour locally wherever possible, aligning interests. The local community are also aligned with shareholders through revenue-share (Ghana) and profit-share (Sierra Leone) schemes.

GRI G4 REPORTING

Eucalyptus Pellita, Ghana.

GRI is an international independent organization that helps businesses, governments and other organizations understand and communicate their impacts on critical sustainability issues such as climate change, human rights, corruption and many others. GRI provides the world's most widely used standards on sustainability reporting and disclosure, enabling businesses, governments, civil society and citizens to make better decisions based on information that matters. Given Miro's particular attraction to impact investment entities Miro aims to best report on business aspects that matter to such organisations.

General Standard Disclosures		
Categories	**Indicator(s)**	**Pages**
Strategy and Analysis	G4-1, G4-2	6-13, 18-49, 80-83
Organisational Profile	G4-3 to 16	2-5, 20-25, 52-79
Identified Material Aspects and Boundaries	G4-17 to 23	2-7, 14, 15, 18-21, 52-79
Stakeholder Engagement	G4-24 to 27	52, 53, 58-61, 64, 65
Report Profile	G4-28 to 33	85, 90
Governance	G4-34 to 55	14-17
Ethics and Integrity	G4-56 to 58	17, 52, 53, 63

Specific Standard Disclosures		
Categories	**Indicator(s)**	**Pages**
Economic	G4-EC1, G4-EC5 to 9	2-15, 18-49, 74-79, 86-89
Environmental	G4-EN11, 13, 34	58-61, 66-71
Social	G4-LA1, 6, 9-13, 16; G4-SO1, 3-5, 11	52, 53, 58-65, 78, 79

Note: Not all requirements of each GRI-G4 indicator listed above are addressed fully by this report (going forward it is an intention of Miro to increasingly report against these GRI-G4 standards).

This report covers the Company's fiscal year from 1 January to 31 December 2017. Unless otherwise stated, all areas of Miro's business have been considered under each indicator, including: the offices, plantations, processing plants of the Group in Ghana, Sierra Leone and the United Kingdom.

The GRI has four principles of defining report content: materiality, stakeholder inclusiveness, sustainability context, and completeness. In addition the GRI has six principles of defining report quality: balance, comparability, accuracy, timeliness, clarity and reliability. This report details Miro's business in a manner that addresses these principals – but aims to provide a complete overview of the business in 2017 and thus goes beyond only these measures.

2017
ABBREVIATED FINANCIALS
MIRO FORESTRY GROUP

ABBREVIATED FINANCIALS
Miro Forestry Group
Consolidated Statement of Comprehensive Income (unaudited)
For the year ended 31 December 2017

	2017 USD	2016 USD
Revenue	**175,327**	44,720
Cost of sales	**(145,843)**	(47,105)
Gross Profit	**29,484**	(2,385)
Fair value gains on Biological assets	**5,237,321**	4,993,082
General, administrative and selling expenses	**(7,209,202)**	(6,032,918)
Operating loss	**(1,942,397)**	(1,042,221)
Other income	**4,082**	
Finance costs	**(1,310,963)**	(800,177)
Loss before tax	**(3,249,278)**	(1,842,398)
Taxation	**-**	-
Loss for the year	**(3,249,278)**	(1,842,398)
Other comprehensive income	**-**	
Total comprehensive income	**(3,249,278)**	(1,842,398)

ABBREVIATED FINANCIALS

Miro Forestry Group

Consolidated Statement of Financial Position (unaudited)

As at 31 December 2017

	2017 USD	2016 USD
Non-Current Assets		
Property, plant & equipment	**3,154,130**	2,680,042
Biological assets	**21,139,292**	12,146,496
	24,293,422	14,826,538
Current Assets		
Trade and other receivables	**345,020**	464,787
Inventory	**891,581**	528,250
Cash and cash equivalents	**96,775**	335,500
	1,333,376	1,328,537
Total Assets	**25,626,798**	16,155,075
Equity		
Share capital	**4,302,773**	3,714,738
Share premium	**19,098,649**	12,806,684
Share options	**2,729,201**	1,395,377
Retained losses	**(12,870,936)**	(9,621,658)
Total equity	**13,259,687**	8,295,141
Current liabilities		
Trade and other payables	**682,789**	406,575
	682,789	406,575
Non-Current liabilities		
Loans and borrowings	**11,684,322**	7,453,359
Total Liabilities	**12,367,111**	7,859,934
Total shareholders' fund and liabilities	**25,626,798**	16,155,075

ABBREVIATED FINANCIALS

Miro Forestry Group

Company Statement of Cash Flow (unaudited)

For the year ended 31 December 2017

	2017 USD	2016 USD
Operating activities		
Operating loss	**(1,942,397)**	(1,042,221)
Adjustment for:		
Share based payments	**1,333,824**	1,333,824
Depreciation and impairment of property, plant and equipment	**1,214,018**	787,204
Fair value gains	**(5,237,321)**	(4,993,082)
Interest received	**4,082**	-
Exchange differences	**(4,619)**	1,357
Loss on disposal of property, plant and equipment	**5,247**	6,215
Operating cash flow before movement in working capital	**(4,627,166)**	(3,906,703)
Changes in working capital		
Decrease/(Increase) in receivables	**119,767**	177,042
Increase in inventory	**(363,331)**	(102,950)
Increase/(Decrease) in payables	**276,214**	(106,014)
Net cash outflow from operating activities	**(4,594,516)**	(3,938,625)
Investing activities		
Purchase of property, plant and equipment	**(1,700,030)**	(1,340,106)
Biological assets acquired	**(3,754,112)**	(3,665,136)
Investments in subsidiaries	**-**	-
Net cash outflow from investing activities	**(5,454,142)**	(5,005,242)
Financing activities		
Proceeds from issue of share capital	**6,880,000**	7,450,000
Proceeds of sale of property, plant and equipment	**6,676**	-
Increase in borrowings	**2,920,000**	1,420,000
Net inflow from financing activities	**9,806,676**	8,870,000
Decrease in cash and cash equivalents	**(241,982)**	(73,867)
Analysis of changes in cash and cash equivalents during the period		
Balance at 1 January	**335,500**	402,692
Effects of exchange rates	**3,256**	6,675
Decrease in cash and cash equivalents	**(241,982)**	(73,867)
Balance at 31 December	**96,775**	335,500
Analysis of cash and cash equivalents		
Cash and bank balances	**96,775**	335,500

MIRO
FORESTRY COMPANY

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