



# 2016

## ANNUAL REPORT

**MIRO**  
FORESTRY COMPANY

# Introduction



Miro Forestry is a commercial forestry and timber products group operating in West Africa, and selling sustainable solid wood products into the local, regional and export markets. Miro Forestry is primarily growing fast-rotation eucalyptus and acacia for the production of sawn timber, plywood and transmission poles, also producing charcoal and biomass as by-products.

## Values

**Integrity:** We're committed to conducting our operations with integrity and transparency, ensuring we maintain the highest ethical standards in everything we do and wherever we operate.

**Leadership:** We aim to have a happy and engaging work environment where individuals take leadership and initiative to deliver the positive impacts of the Company.

**Sustainability:** We are committed to running our business to the highest safety, environmental and operational standards. We are accountable for our actions and seek to make a positive contribution to our local communities and other stakeholders.

**Excellence:** We work to be the leader in our field. We're committed to continuously improving the way we operate and being a highly effective and adaptable Company.

## Mission Statement

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

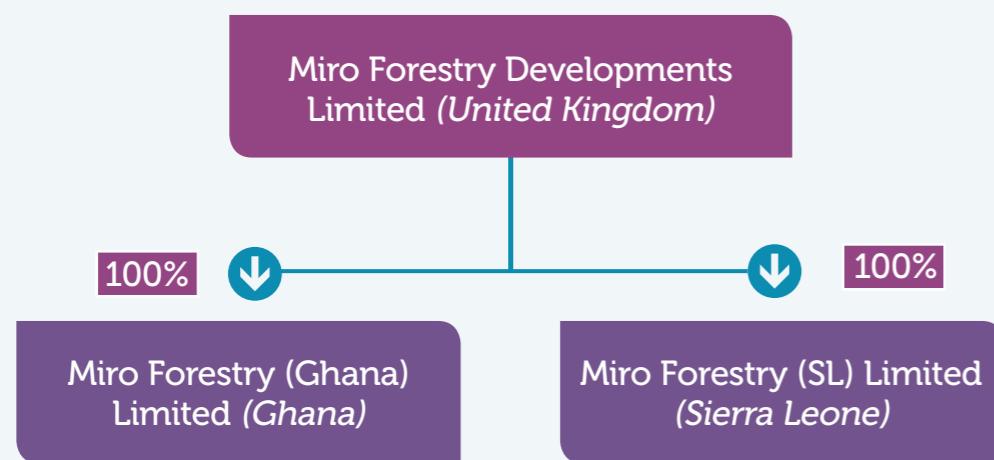
## Vision

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.

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# The Group at a Glance



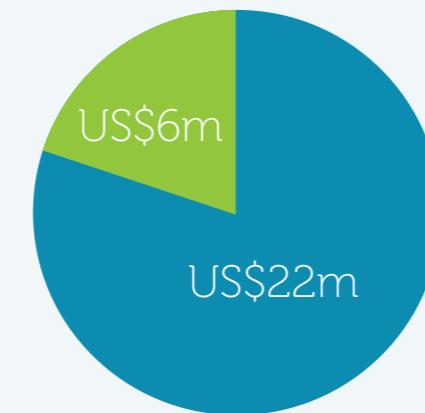
Land Holding<sup>(1)</sup>  
31,754 hectares  
of which - Ghana: 9,637 hectares  
- Sierra Leone: 22,117 hectares

Plantation Forest Area Established  
7,076 hectares  
of which - Eucalyptus: 3,810 ha  
- Acacia: 1,226 ha  
- Teak: 1,803 ha  
- Gmelina, Pine, Other: 237 ha

## Valuation and Financing



## Total Group investment to year-end 2016:



● Mezzanine Debt    ● Equity



## Investment and Commitments

- Private Investors: US\$ 2 million
- Family Offices: US\$ 6 million
- Institutional Investors<sup>2</sup>: US\$ 30 million



## Key Data<sup>(3)</sup>

Year-End	2015(A)	2016(A)	2017	2018	2020	2025	2030
Hectares of Planted Standing Timber	4,047	7,076	9,630	12,630	18,630	32,821	36,223
Biological Asset Value (BAV) (US\$m)	-	15	25	38	71	219	305
Hectares Clearfell Harvested <sup>4</sup>	-	-	-	-	-	614	2,750
Cumulative Investment <sup>5</sup> (US\$m)	19.3	28	38.3	49.6	69.8	140	140
Revenue (US\$m)	-	0.1	0.4	2.1	2.0	56	195
EBITDA (US\$m)	-	-	-	-	-	25	116
Valuation (US\$m)	27	38	50	66	104	>250	>250

1) Includes only land signed under a ratified lease agreement or Public Private Partnership (PPP) arrangement.  
Additional strategic land is under negotiation in both Ghana and Sierra Leone.

2) Investment commitments of US\$ 15 million by each of CDC Group plc and the Finnish Fund for Industrial Cooperation Ltd consisting of 70% equity and 30% mezzanine debt.

3) Current estimate figures. Acronym (A) (eg 2015 (A)) denotes numbers are actuals realised.

4) Harvesting of commercial thinnings starts in 2017.

5) Includes all Group investment (into plantations, saw milling and industrial operations).

# Our Impact

## COMMUNITY

In the course of  
2016 **1,000**  
jobs created



**over 7,000**

people sustainably supported by Miro's employment (typically 7 people are supported by each Miro employee)

 **c.175**  
**17%**  
women employed

**>200,000**  
estimated number of people that have benefited from our community development programs



**3** school blocks built since inception



**>450** scholarships provided to enable children's school attendance in 2016



**US\$40,000** directly invested into community projects in 2016

**over 600** people trained by Miro in forestry, vocational and business skills



**20** lost time accidents and injuries occurring at work in 2016 with a lost time injury frequency rate (LTIFR) of 3.6



**20** external training programs provided in 2016



No individual lost time injury more than 7 days

## CONSERVATION & ENVIRONMENT

over **9 million** trees planted by Miro to date



over **350,000** net tonnes of atmospheric carbon dioxide equivalent (tCO<sub>2</sub>e) sequestered by Miro's plantations

**<10 hectares** of fire damage in the year (from 15 controlled fires)

over **3,000** hectares of managed conservation area

over **7,000** hectares of sustainable forest land developed and managed by Miro

This will produce over **1.5 million cubic metres** of sustainable timber (timber that may otherwise be cut unsustainably from indigenous forests)



*Seedling germination, Ghana.*

## CONSERVATION & ENVIRONMENT

**c.US\$5 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)

**1 sawmill of 6,000 cubic metres**  
output capacity per annum producing sustainable quality timber for the regional market



**100%** substituting unsustainable timber and imports

**300 tonnes** of monthly sustainable charcoal production capacity

**c.US\$5 million**  
to local communities upon harvest of existing trees planted (from benefit sharing arrangements directly with communities)

**US\$16 million** biological asset value (current value of the plantations)

**c.US\$250,000**  
paid for land rent, government taxes and fees in the year



**240 km** of roads built

# Chairman's Statement



*Delivering against stated targets is paramount in business. In 2016 we have again achieved and exceeded all operational targets. This has further increased our brand strength and value proposition. We are now in a strong position to focus on the production of timber products and the resultant turnover from our initial wood-flows.*

*Richard Laing, Chairman*

## Performance

The Group performed well over 2016 achieving all financial and operational targets. Notably in 2016 the Group:

- Expanded its forest plantation areas by over 3,000 hectares to in excess of 7,000 hectares
- Started to develop sawn timber and biomass production, building sales channels and customers
- Secured a mature plantation, forecast to yield 25,000m<sup>3</sup> of utilisable timber with which to expand sawn-timber production in 2017; and
- Continued to improve personnel, plantation infrastructure, and operational systems and controls.

We achieved the above, including our targets for financing, at 6% under our 2016 budget of US\$9.4 million. As a result, we have now drawn-down 2017 equity financing from our institutional shareholders at US\$11.70 per share, a 15% premium on the 2016 price.

## Strategy

Since the inception of Miro Forestry we have been focused on developing our plantations to a high quality and cost effectively. Whilst our total planted area will continue to increase to c.30,000 hectares (when we reach sustainable rotations) we have now expanded our plantations at a long-term consistent annual rate of 1,500

hectares per country, proving that we can manage such ongoing expansion scale, again with high quality and at efficient cost.

Looking forward our business development focus is shifting towards developing industrial operations: sawmilling, utility transmission pole treatment, plywood, charcoal and biomass production. We are doing this in a similar manner to our plantation operations: starting small, proving operations, before then scaling up.

As we do this, we will be focused on the development of customer relationships and turnover, ultimately with a focus on profit margins. I have every confidence that the next few years will be transformational for the company as we grow sales, supported by our maturing plantations and corresponding build-up of wood-flows.

## Board Focus

The Board remains focused on shareholder value, strategy and execution, ensuring the Group has effective people and high standards of corporate governance, not least to facilitate a possible exit for shareholders in future years. In our sector, it is essential that a company such as ours makes special efforts on its environmental and social impact. I am delighted to report that we have made considerable progress in this regard during 2016, details of which are given



*3 year old Teak, Ghana.*

later in this document. As a consequence, the Group is aiming to complete the major milestone of FSC certification in 2017.

Over 2017 we will be raising new capital (equity and debt) to finance the business from 2018 for a three year period or, depending on investment terms then available, to 2023 and EBITDA positive. Having built a solid track record and good brand over the last few years, we are confident of being able to raise the necessary capital (US\$35-65 million) from supportive investors, at a share price premium, whilst significantly lowering our cost of capital.

Our additional aim, is to use this process to further diversify our shareholder base and to market the Group widely, and build up an

increased investor following to facilitate future liquidity for shareholders.

## Our People

Our achievements to date have been a result of the dedication, passion and hard work of all our people. On behalf of the Board I would like to thank all of them for their contribution and the considerable progress made in 2016.



**Richard Laing, Chairman**

# CEO's Statement



*We are developing Miro Forestry into a mature and robust integrated plantation forestry and industrial timber production business – putting in place the right infrastructure, capabilities and people to achieve our strategic goals. We now aim to leverage the strong business platform we have built to develop timber processing operations with a emphasis on shortening time to cash-flow.*

*Andrew Collins, Chief Executive*

2016 has been a good year for the Company. Over the year, we have achieved all operational targets, and have started to develop initial, value-added timber-processing operations and sales ahead of plan. Our outlook and opportunities for 2017 are exciting.

## 2016 Highlights:

### Plantation Development:

**3,000ha Established in 2016:** We have successfully established over 1,500 hectares of new plantations in both Ghana and Sierra Leone (3,233 hectares in total) within budget. This equates to approximately 4 million trees planted.

**Over 7,000ha of Plantations:** We now have over 7,000 hectares of plantations established by the Company (c.4,500ha in Ghana and c.2,500ha in Sierra Leone).

**High Growth and Survival:** Given that we are operating in a comparatively new region for plantation forestry, we place significant focus on tree research and development (R&D). This aims to ensure we are growing a high performing mix of trees, suitable for our site conditions, and with optimal fertiliser and other management regimes.

Typically, our new eucalyptus and acacia plantations are reaching canopy closure within a year, with tree heights of 5-7

metres, translating to growth rates between 25 and 35 cubic metres of new timber volume per hectare per annum.

**High Quality:** In addition to our focus on R&D, we are constantly aiming to improve the quality of seedlings we produce in our nurseries, and the quality of our silviculture, plantation maintenance operations and infrastructure. Whilst we can and must improve further, the quality of our plantations is of a high standard.

### Solid Wood Product Production / Industrial Value-Add Operations:

**Sawmilling:** In 2016 we started experimental scale sawmilling in Sierra Leone. From this we have sold over 130m<sup>3</sup> of sawn timber into the local market and have also commenced trial exports to Europe of our premium grades of timber.

We have also started dry-mill experimentation including finger-jointing to minimise wastage by joining shorter lengths together and to secure price premiums from the sale of long timber lengths.

**Charcoal and Biomass:** Where possible, forestry businesses must generate a margin from non-commercial thinnings and waste wood which is not of sufficient size for solid wood products. We are now and will continue to generate very

significant quantities of thinnings and wood waste. Thus, we have been producing and selling charcoal into the local market generating a modest margin, and are in the process of making trial sales into the UK retail market, where prices are at a premium.

### Team:

People are the determining factor in the success of any business. Over 2016 we have improved the quality of our team, through internal promotion as well as external recruitment. We now have a total workforce of over 1,000 people, including approximately 60 managers. We are a motivated and happy team, well capable of achieving our 2017 targets and beyond.

### Systems and Controls:

The capture and reporting of operational data, and management action on this information, is critically important but complex in forestry businesses. It is complex because we necessarily record each operation and expenditure spatially (linked to the specific land areas), in time (in certain areas transmitting this in real time electronically through smartphones to our central database).

This enables us to control costs, ensure high utilisation of our capital assets, and to inhibit theft. Whilst the standard of our systems and controls is good, this is still an area we will improve upon in 2017 and beyond (principally improving our data flow and the simplicity of our reporting).

### Environmental and Social Improvement:

**Corporate Social Responsibility Projects:** In 2016 we have constructed a kindergarten, provided scholarships to over 500 children,

constructed ten community centres and sponsored various smaller projects.

**Liquidity into Local Communities:** Of our annual spend in 2016, approximately US\$5 million (55%) has directly benefited the immediate local economy around the Company plantations (on salaries and the procurement of goods and services). Each of our 1,000 plus labour force typically supports more than seven family members.

**Conservation Areas:** We protect over 3,000 hectares of conservation area within and around our plantations, protecting indigenous flora and fauna, and facilitating landscape restoration. Our goal is to create a mosaic landscape of commercial and conservation areas with wildlife corridors.

**Carbon Sequestration:** We have currently sequestered (in accordance with the United Nations Framework Convention on Climate Change, Clean Development Mechanism methodology) more than 350,000 net tCO<sub>2</sub>e from our operations.

Miro will cumulatively sequester approximately 5,000,000 tCO<sub>2</sub>e (this excludes the carbon locked-in Miro's wood products sold). This would offset the carbon emitted from c.4.5 million passengers flying from London to New York and back (c.1.2tCO<sub>2</sub>e/flight).

**Stakeholder Engagement:** In 2016 we increased our stakeholder engagement at a local and corporate level. The grievance mechanism rolled out in 2015 has been a successful tool in addressing stakeholder concerns. Our dedicated community liaison teams continue to build long-term relationships and partnerships with a range of stakeholders.

### Total Costs:

Our total cost (including all Group overheads) per hectare established in 2016 was under US\$2,900 (our total cost per hectare established to date being less than US\$4,000, which will continue to drop to less than US\$3,000/hectare with scale). This makes us one of the most cost-competitive plantation-forestry operations in sub-Saharan Africa, in most cases by a significant margin.

Potential profit margins in plantation forestry businesses are maximised by growing the highest volume of useable timber, in the shortest timeframe, at the lowest cost. Miro has progressed well toward this goal, and whilst we will continue to drive for improvement, we can be very pleased with the level we have attained. We have succeeded in building a robust and cost-efficient plantation forestry business, which is now operating at full-scale.

Looking forward over the next five years, our strategic focus is towards the development of timber product sales and profit margins. Our plantations are in naturally globally-competitive locations, where we can grow highest utilisable timber volume in the shortest timeframe and at lowest cost. These location also allow us low cost access to timber markets, both regional and export, giving us the opportunity to secure higher prices for premium grades and to receive foreign exchange.

The regional markets near our plantations are characterised by increasing demand and rapidly dwindling supply of timber, leading to consistent price increases significantly above inflation.

Whilst we are a low-cost operator and strategically well-located for efficient access to these markets, we are nevertheless operating in Africa where product sales, no matter how good the macro fundamentals, are often complex and not straightforward.

Thus, our focus is to continue to expand our timber product production and sales, starting small as we have already done, building expertise and customer relationships early as we scale-up.

Considering the above, our key aims for 2017 are as follows.

### 2017 Aims:

#### Plantations:

Establish 1,500 hectares of quality new plantations in each of Ghana and Sierra Leone, within budget. This will take our total plantation area to approximately 10,000 hectares.

We will commercially plant not less than 200 hectares of clonal seedlings selected from our R&D program.

In 2017 we will secure Forestry Stewardship Council (FSC) certification. This is a mark of the highest social, environmental and operational forestry standards and will be a significant achievement.

#### Sawmilling:

##### Mature Plantation Harvest and Sawn Timber Production:

**Production:** We have this year secured rights to over 25,000m<sup>3</sup> of mature plantation in Sierra Leone (planted about 30 years ago, by the Government). This allows us to develop a commercial sawmill operation of 6,000m<sup>3</sup> sawn timber output capacity in Sierra Leone this year.

The installation of this sawmill, together with the associated infrastructure and equipment, should be completed in the first half of 2017, and we aim to produce over 1,500m<sup>3</sup> of sawn timber in the second half of the year (approaching 6,000m<sup>3</sup> the following year).

This allows us to continue developing our sawmilling capability, and much more importantly our routes to market and sales channels, both in the region and for export.

We forecast generating c.US\$1.5 million of net value (profit and residual machinery value) from this plantation project over the next 30 months.

Utility grade poles will also be available from this mature plantation, and we therefore anticipate being able to also design and install a transmission pole treatment operation by 2018.

### Sawmilling of Commercial Thinnings and Third Party Plantation Logs:

In Sierra Leone, we plan to continue our existing experimental scale sawmilling operation (delivering up to 1,000m<sup>3</sup> output), developing the same in Ghana.

#### Charcoal and Biomass:

**Charcoal:** In both Ghana and Sierra Leone we will upscale our charcoal production from first thinnings, selling into the local market and for export.

**Biomass:** We have conducted trial biomass sales in Ghana this year, and we plan to continue with, and scale this, in 2017. In Sierra Leone, we have an opportunity in development to sell waste biomass to a 30MW biomass power station near our plantation. If we secure this opportunity, we expect this to be highly beneficial for the Company.

#### Plywood:

We will complete plans for a small-scale veneer production line in Ghana during 2017, with the aim of installing such a line in 2018. This would initially sell veneers to the existing plywood manufacturers in Ghana, before thereafter installing a plywood production line to secure full value-add.

#### Revenue:

We aim to generate revenue in 2017 exceeding US\$400,000 across the Group. Thereafter this will increase as our own commercial timber becomes mature, to more than US\$3 million in 2019, more than US\$56 million in 2025, and more than US\$150 million by 2027 (with profits of c.US\$100 million resulting from the processing of the valuable standing plantations now being developed).

#### Environmental and Social Developments:

In 2017 Miro intends to work increasingly with selected NGOs to further maximise the long-term impact of our CSR projects. In Sierra Leone, we are focusing on access to water, improved agriculture, and education. In Ghana our focus is on education and agriculture.

### Fundraising:

We are fully financed for 2017 but will be raising money during the year to finance us to 2021 (US\$35m) or potentially to take us through to EBITDA positive from 2023 which requires c.US\$65 million (including all value-add/industrial sawmilling installations over the period).

This fundraising is well supported by our strategic shareholders and we are confident that we should be able to raise the necessary funds in good time from targeted groups.

Forestry is a large scale and time-consuming business to develop from scratch. We are very proud of what we have built together and should now look forward to developing a vertically integrated plantation forestry business over the next five years.

Andrew Collins, Chief Executive

# Plantations Overview

**Miro Forestry operates two plantations in West Africa, in Ghana ("Boumfout" plantation) and Sierra Leone ("Yoni" plantation) totalling over 30,000 hectares of forestry land**

Country	Eucalyptus	Teak	Acacia	Gmelina/Pine Other	Total Planted Area
	2,455ha 	1,803ha 	211ha 	23ha 	4,492ha
	1,355ha 	0ha 	1,015ha 	215ha 	2,585ha
<b>TOTAL</b>	<b>3,810ha</b>	<b>1,803ha</b>	<b>1,226ha</b>	<b>237ha</b>	<b>7,076ha</b>



## Boumfout and Yonibana Plantations

### Sierra Leone - Yonibana

- 22,117 hectares Land Leased
- 2,585 hectares commercial plantations established
- c. 3.5 million trees planted
- c. 1,500 hectares managed conservation area
- 2,500-3,000mm of rainfall annually
- 22-28°C temperature
- 8 degrees North latitude - high sunlight
- Rainy season April-December

### Ghana - Boumfout

- 9,637 hectares Land Leased and under Public Private Partnership Agreement
- 4,492 hectares commercial plantations established
- c. 6 million trees planted
- c. 2,500 hectares managed conservation area
- 1,300-1,700mm of rainfall annually
- 22-28°C temperature
- 6 degrees North latitude - high sunlight
- Rainy season March-August, October-December

Map showing Yonibana Plantation in Sierra Leone



Map showing Boumfout Plantation in Ghana



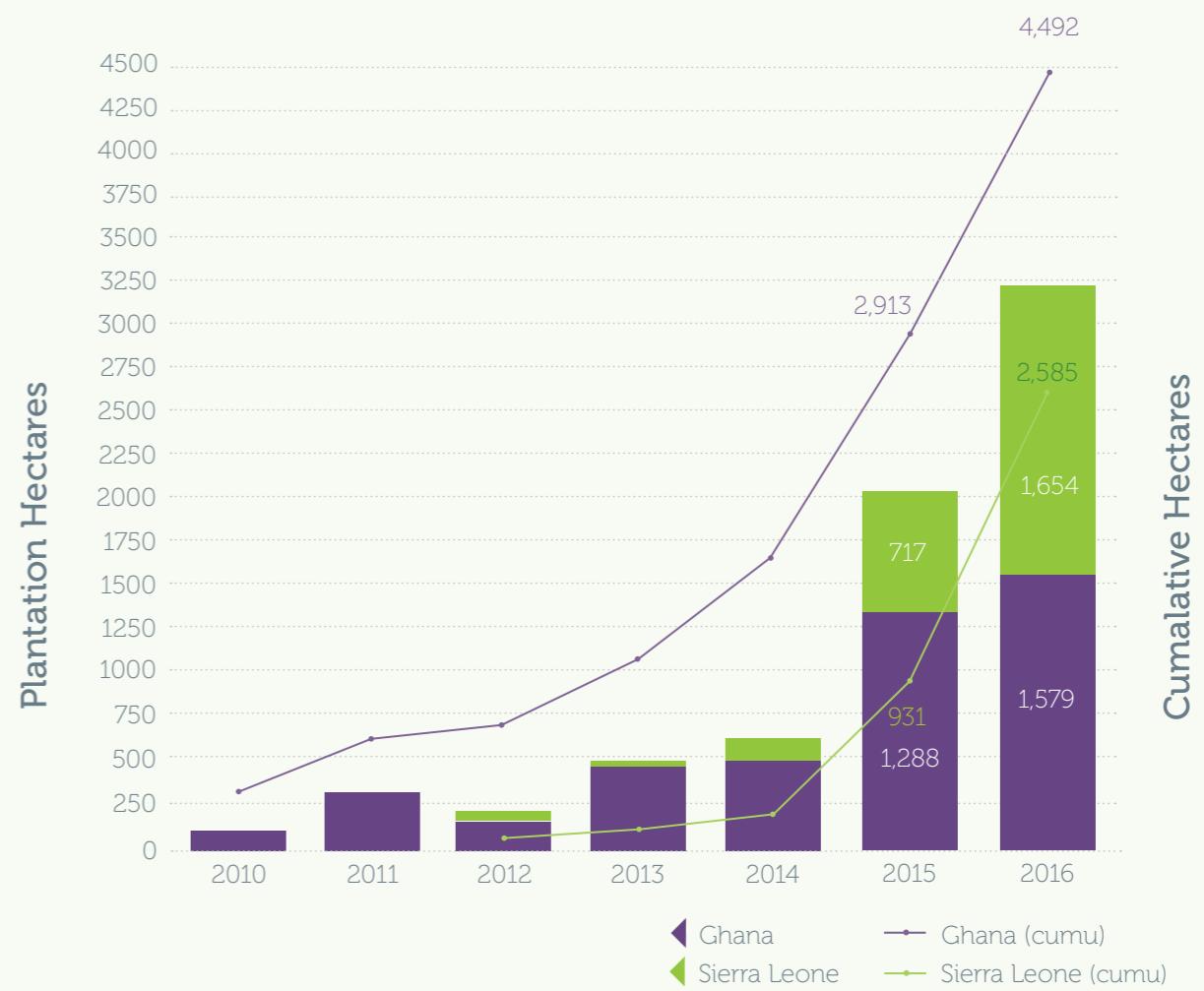
# Plantations Overview

*Miro is focused on maximizing the production of usable timber from its plantations at lowest cost. This means minimizing total plantation development and management costs, without compromising silviculture standards for maximum tree growth rates and qualities*



Miro is a globally low cost plantation developer with a total cost per hectare established (including all indirect group corporate overheads) less than US\$3,000 per hectare. This translates to an average round log wood production cost (for Eucalyptus) of less than US\$20 per m<sup>3</sup>.

## Boumfout and Yonibana Plantations



Focused on West Africa naturally one of the lowest cost timber production regions globally

- Ideal conditions for maximum tree growth
- Low land and operating costs
- Miro is continuing to plant 1,500 hectares per country per annum



# Plantation Forestry

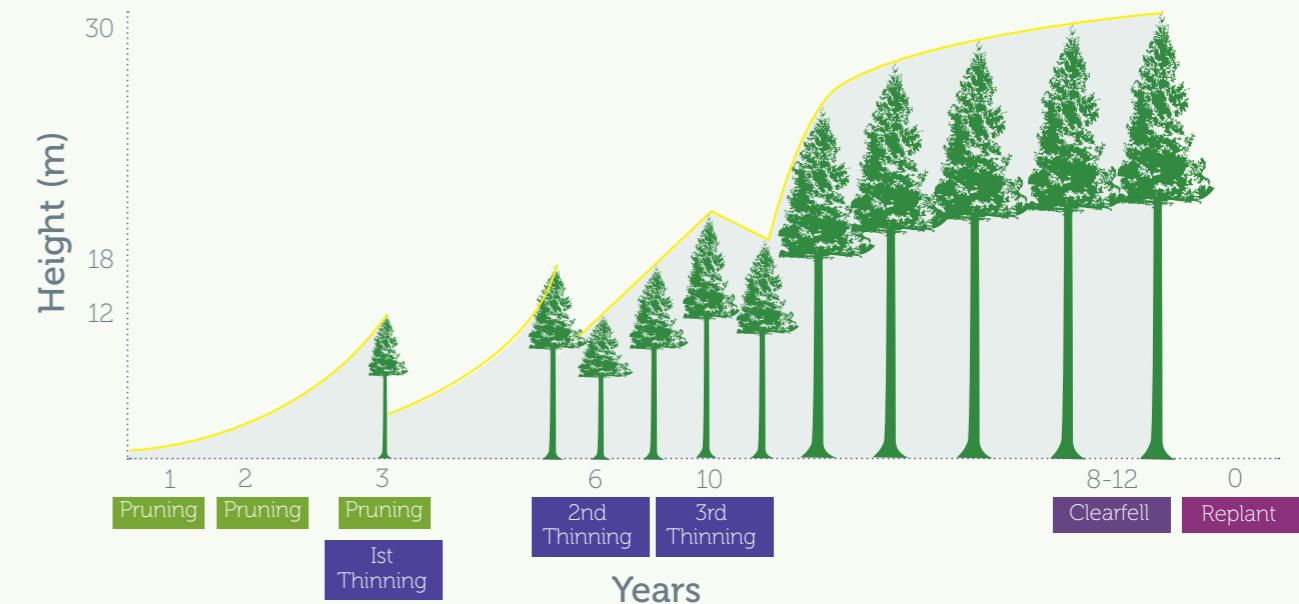
A renewable asset that grows in volume and value indefinitely



**Forest plantations are a renewable asset with significant option value**

- A sustainable crop with a portion harvested each year to generate annual income.
- On maturity, generates an annuity cash-flow stream which is uncorrelated to the capital markets.
  - Reduced felling in a year creates a temporary cash shortfall, but the trees continue to grow in volume and value and can be harvested for a super-annual return in the future (timber is the only commodity with this characteristic).
- In the US, timber investment has outperformed the bond, stock and real-estate market over the last 30 years.

Management regime of a typical Miro plantation



## Eucalyptus Plantations

- 8-12 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

- 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

The following shows the age distribution of Miro's existing plantations in Ghana and Sierra Leone and how harvest log flows will result from both plantations

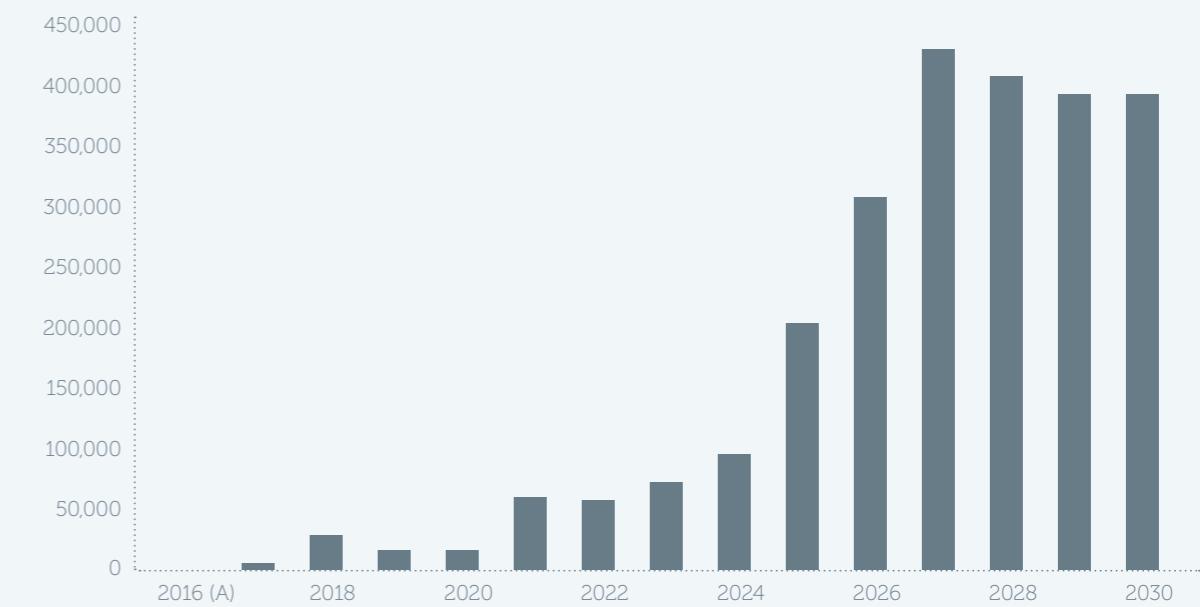


Newly planted Eucalyptus, Ghana.

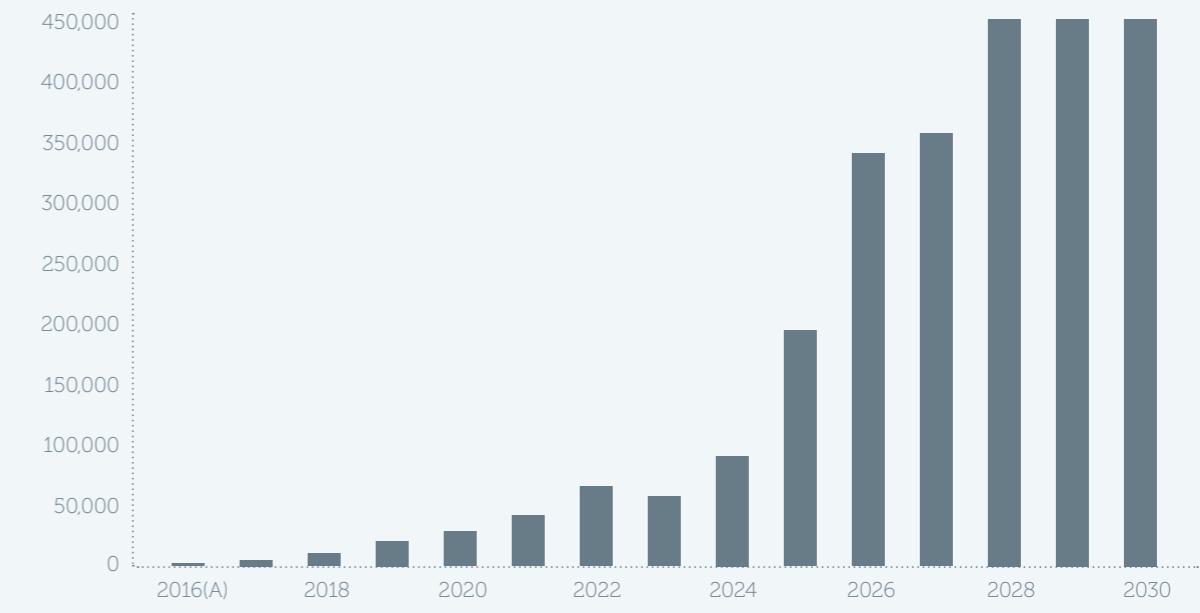
Existing Plantations Age Class Distributions

Age Year	Year Planted	Ghana	Sierra Leone	TOTAL
0	2016	1,579	1,654	3,233
1	2015	1,288	717	2,005
2	2014	477	133	611
3	2013	447	31	479
4	2012	136	49	185
5	2011	264	-	264
6	2010 and earlier	300	-	300
<b>TOTAL</b>		<b>4,492</b>	<b>2,585</b>	<b>7,076</b>

Ghana - Total Wood Flow Volume  
(m<sup>3</sup> by year)



Sierra Leone - Total Wood Flow Volume\*  
(m<sup>3</sup> by year)

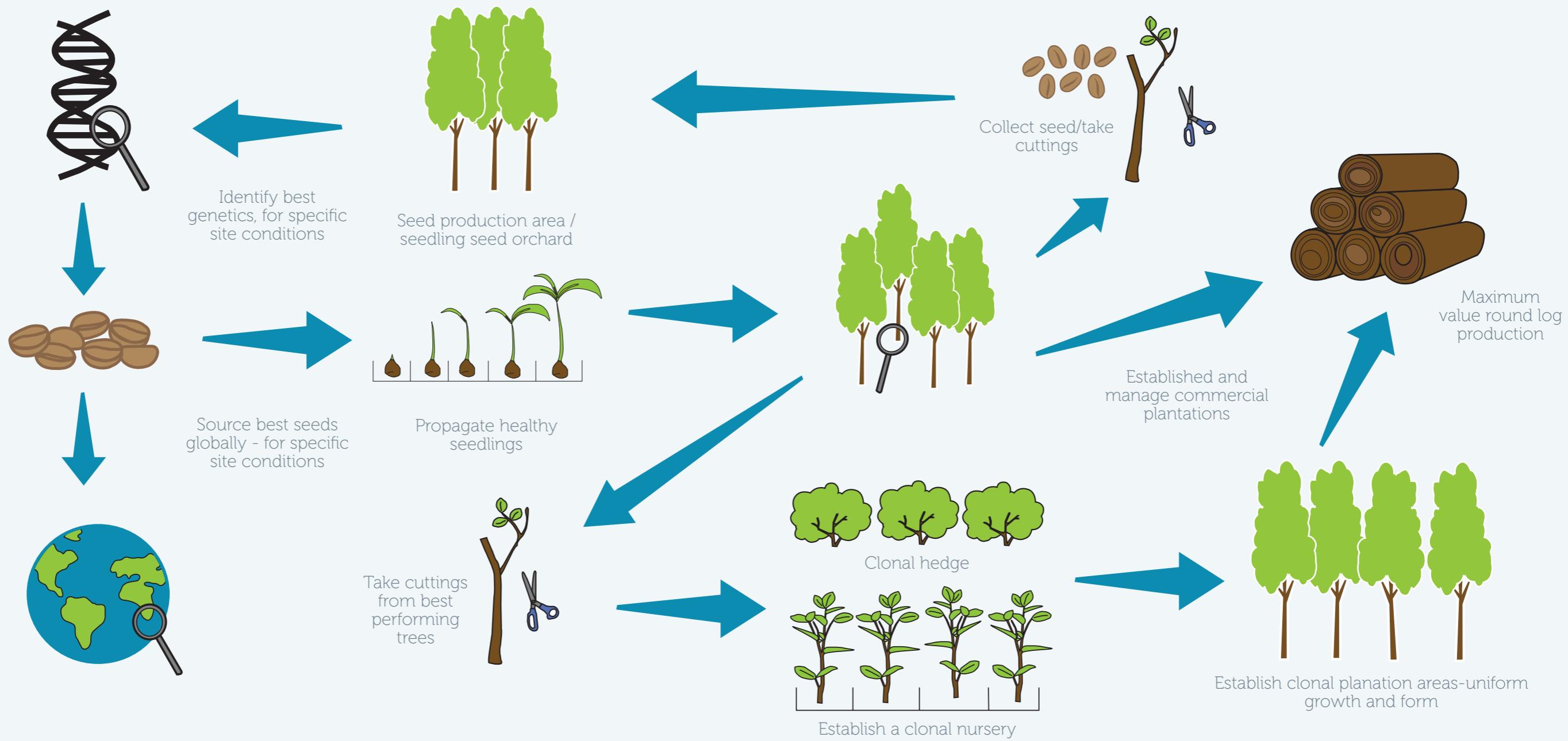


\* NOTE: This excludes 25,000m<sup>3</sup> of round logs forecast to be extracted from Miro's Bradford Plantation in 2017 and 2018 (see page 9 sawmilling).

# Research & Development

**Research and development (R&D) into tree nutrition, genetics, nursery and silviculture practices is one of the most critical and value-adding parts of Miro's business. Miro's R&D team source the highest quality seeds globally and breed for genetics most suited to Miro's site conditions.**

Miro aims for optimal nutrients and conditions for growth to maximize timber output volume and quality at lowest cost. Miro believes, and evidence suggests, that Miro will be able to improve tree growth and hence timber output by c.50% over the first three crop rotations.





*Miro Forestry's seedling nursery in Sierra Leone. This nursery has an annual seedling output capacity of c.3,000,000 seedlings.*

# 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 & Business Development 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.

### **Andrew Tillary, 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.

### **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 ten 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.

### **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 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 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 is being audited for Forestry Stewardship Council (FSC) certification (the highest forestry sustainability standard), and we expect the Group to be certified in the year.

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 company's 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 1).

# Country Facts



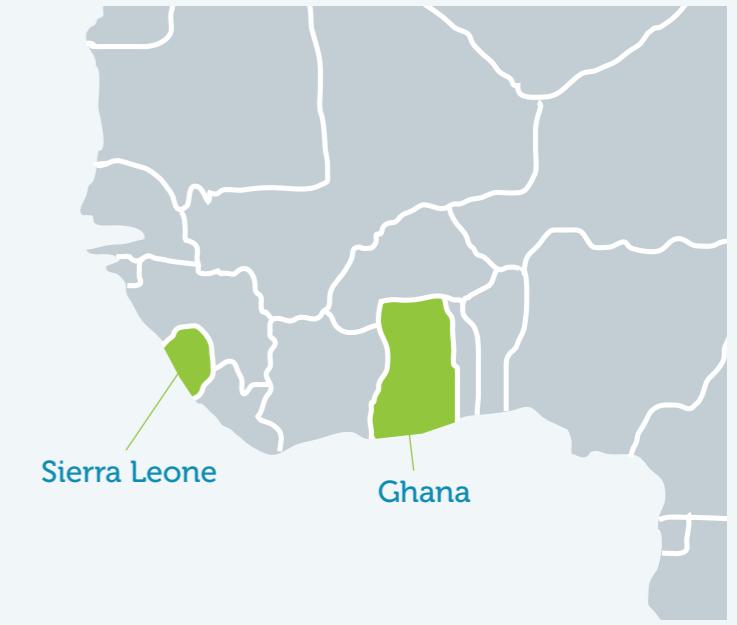
## Ghana

GDP (2016):	US\$37.5b
GDP growth:	
2013:	7.3%
2014:	4.2%
2015:	3.9%
2016:	5.0%
Population (2015):	27m
Pop. growth rate:	2.5%

*Source: The World Bank*

## Sierra Leone

GDP (2016):	US\$4.2bn
GDP growth:	
2013:	20.1%
2014:	4.6%
2015:	-20.0%
2016:	4.3%
Population (2015):	6.5m
Pop. growth rate:	3.0%



## Ghana

Ghana's GDP growth rate was c.5% in 2016, with strong services sector performance offsetting the effect of oil price deterioration. In 2017 the economy is expected to improve to c.8% GDP growth which assumes that commodity prices start to rebound.

Ghana ranks favorably in the 2016 World Bank ease of doing business index (at 108 out of 190 countries globally), above Brazil, Argentina, Uganda and Swaziland for example. In addition, the country ranks very high in Africa (6th) in the Transparency International anti-corruption index (and at 70 out of 176 countries).

## Sierra Leone

Sierra Leone's economy proved resilient in the face of two major exogenous shocks: the Ebola epidemic and collapse of iron ore prices and associated loss of production in 2014-2015. In 2016, economic growth resumed, and it remains on an upward trend, supported by new investments in mining, agriculture and fisheries.

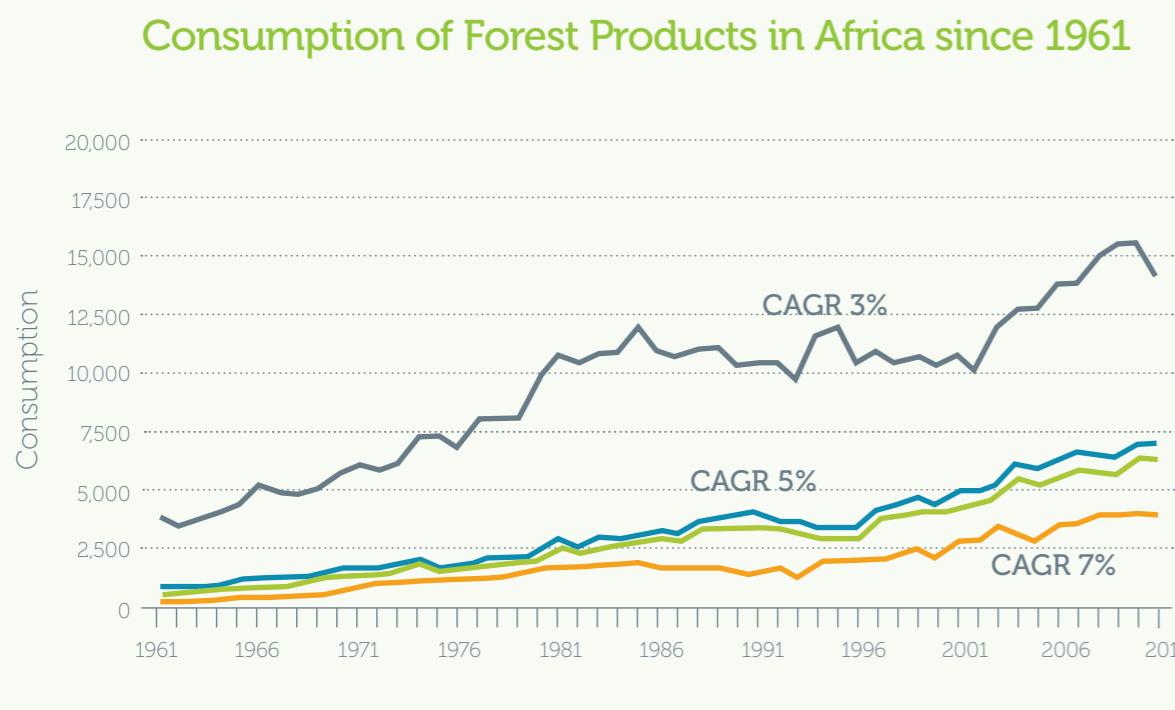
The recovery underway, according to International Monetary Fund projections, is expected to remain sustainable over the medium term. Under the baseline scenario, the IMF projects the medium-term growth to pick up to

around 6.5% by 2020 from 4.3% in 2016. Sierra Leone ranks high in the 2016 World Bank ease of doing business index in starting business, protecting investors and taxation categories, at 87 out of 190 (but overall at 148, pulled down by a lack of availability of electricity and credit particularly). The country ranks at 123 out of 176 countries in the Transparency International anti-corruption index, but is making major strides, supported by international bodies, against corruption.

# Timber Markets

## Demand for Wood in Africa is Rising Rapidly due to Population Growth and Economic Development

Africa has seen steady, sustained growth in demand for all solid wood products (sawn timber, poles and wood-based panels), particularly in recent years.

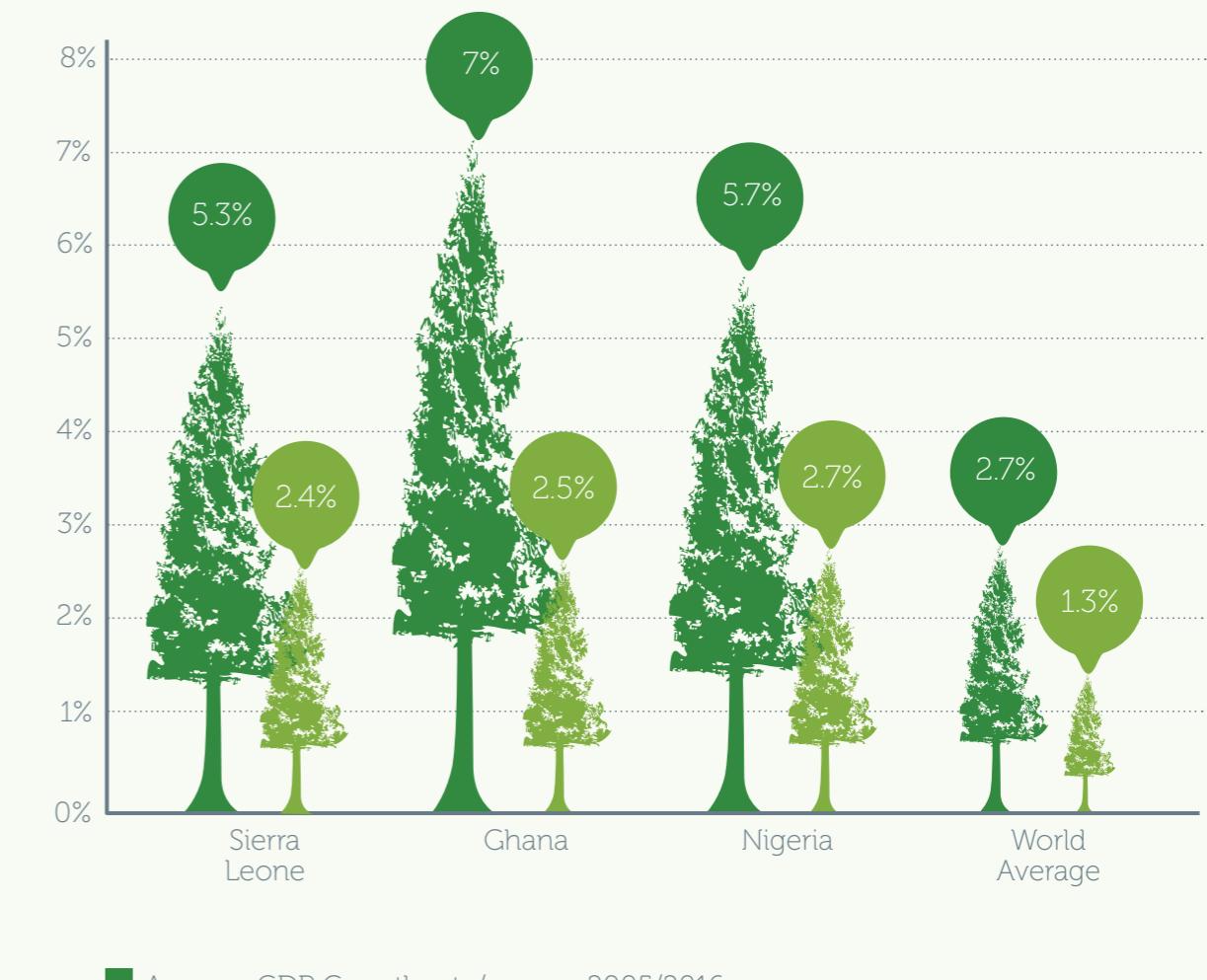


The key drivers of this timber demand growth are rising populations and economic development:

- West Africa's population is growing by c. 2.5% per annum
- Africa is a motor of growth – average GDP growth in Sub-Saharan Africa over last 10 years was 5.8%
- Per capita wood consumption in Africa will rise as economic development continues – currently 0.02m<sup>3</sup> per capita per annum vs. 0.13m<sup>3</sup> per capita in UK (a 6.5x difference).

Over the past 50 years, the average rate of growth in demand has been:

- Sawn timber: CAGR 3%/annum
- Wood-based panels: CAGR 7%/annum
- African demand for timber products is growing faster than in all other regions of the world, and growth has been particularly robust for the past 10-12 years



# Timber Markets

## **Supply of Timber is under Severe Pressure**

West Africa's timber has historically come from natural forest extraction – severe deforestation in the region means that remaining forest resources cannot come close to sustainably supplying current demand.



Population growth has driven deforestation due to conversion of land for agriculture, which is compounded by over-logging of the few remaining forest resources.

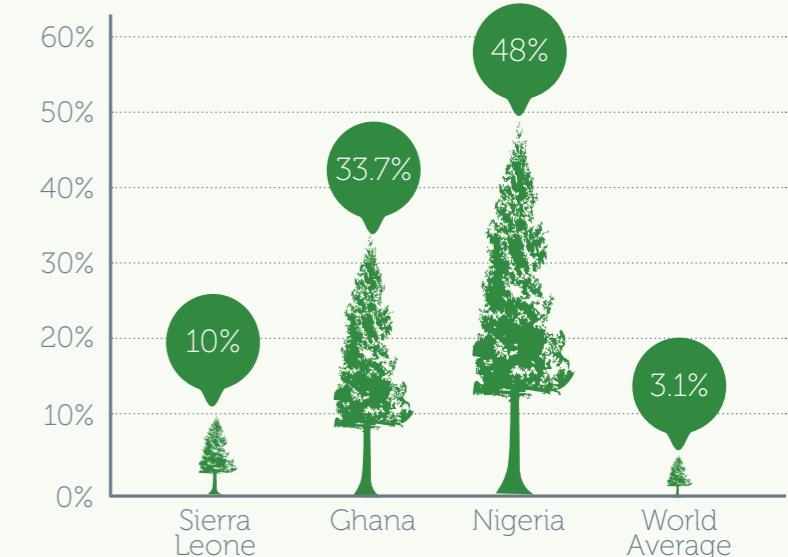
High prices for timber drive demand for illegal and unsustainable chainsaw-milled timber (c. 90% of Ghana's domestic demand is filled through illegal chainsaw milling). This further reduces remaining timber resources.

There has been almost no investment into timber plantations in West Africa - Ghana has one twelfth of the plantation land per capita vs. the world average.

c. 90% of sawmills in Kumasi, Ghana's timber industry centre, have gone out of business in the past 10 years due to lack of raw material.

There are no active commercial sawmills operating in Sierra Leone due to a lack of availability of timber stocks.

**Total Forest Loss 1990-2010**



Source: FAO Global Forest Assessment

**Planted Forest per capita (ha)**



Source: FAO Global Forest Assessment



# Timber Markets

## Highly Attractive Competitive Landscape and Macro Economic Conditions



- Supply vs. demand imbalance cannot be fixed without very significant plantation expansion
- Barriers to entry into the plantation industry are very high and there is a long lead-in time before new timber becomes available from plantations
- Miro is competing against import parity priced industrial timber products.

- Early mover advantage is secure
- High and rising demand, and supply under increasing pressure with no solution
- Rising prices – Ghana's sawn timber prices have risen at an average of 11% per annum since Miro's inception

### DEMAND INCREASING

Demand rising and will continue to rise as populations grow and economies develop

### SUPPLY DECREASING

Supply under drastic pressure due to deforestation and resultant legislation

Africa's inability to sustainably supply domestic demand is leading to increasing imports of timber

### African Solid Wood Trade 2001-2014

Export, Import and Trade Balance (USD Million)



Source: ITC

# Timber Supply vs Demand

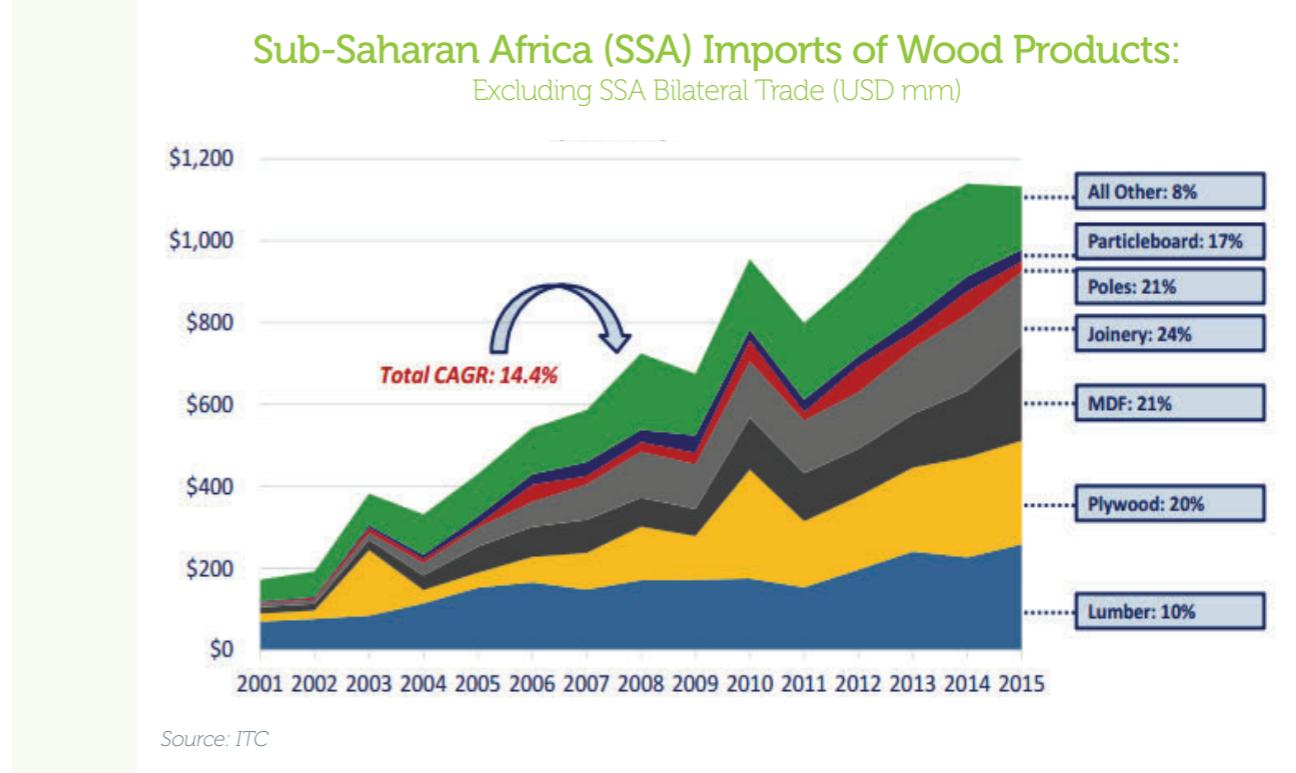
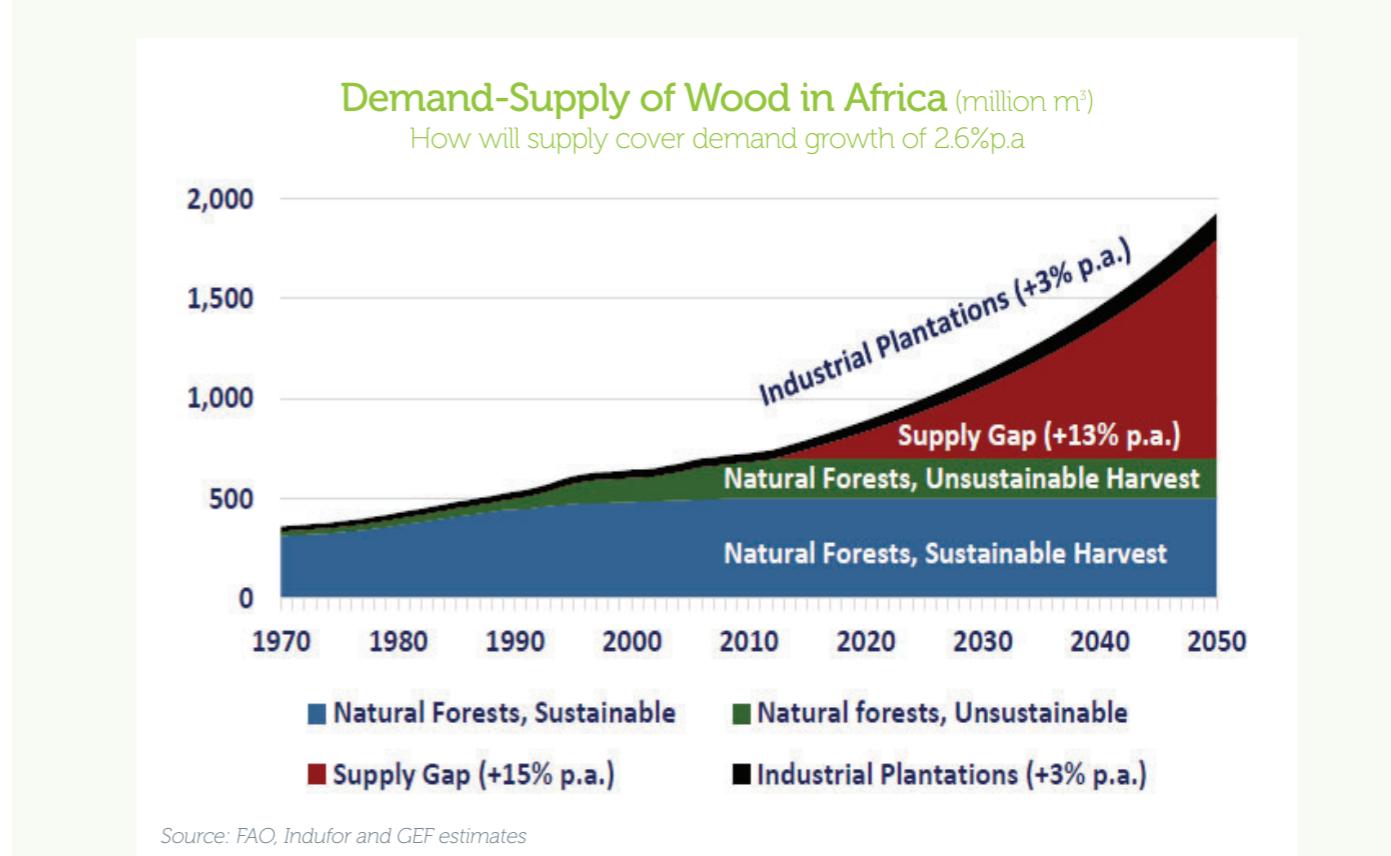


## Supply

- > Dwindling local timber stocks (increasingly inaccessible)
  - Ghana <14yrs of timberland left at 2015 rate of deforestation
  - West Africa now reliant on imports (import parity priced) to meet industrial demand

## Demand Drivers

- > Continued real GDP growth across West Africa of c.5%
- > Population growth of 3%+
- > Growth and development driving infrastructure expansion:
  - Industrial timber, biomass power, transmission poles
  - ....and increased material possession / consumption



# Timber Processing and Industrial Operations

During 2016, Miro produced small quantities of sawn timber from planted timber logs sourced from third-parties, in order to establish a market presence and develop a customer base in Sierra Leone. In 2017, having secured 25,000m<sup>3</sup> of mature plantation pine timber, Miro is expanding its sawmilling operations significantly, installing a 6,000m<sup>3</sup> output sawmill.

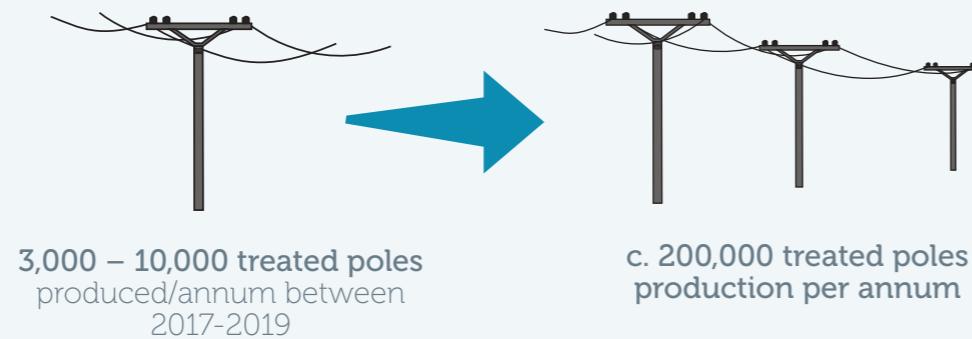
- In 2018, Miro will install a pole treatment autoclave in Sierra Leone to begin to produce treated poles from its plantation timber.
- Miro is also expanding its charcoal production business unit, having produced small quantities for market research using pilot kilns during 2016. Working with a South African charcoal production expert, Miro is constructing a large container-kiln in Ghana and will begin processing charcoal from eucalyptus, teak and acacia thinnings for sale into the local market and for export.

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

## Sawn Timber



## Treated Poles



2016

2017

2018-2023

2024-2030

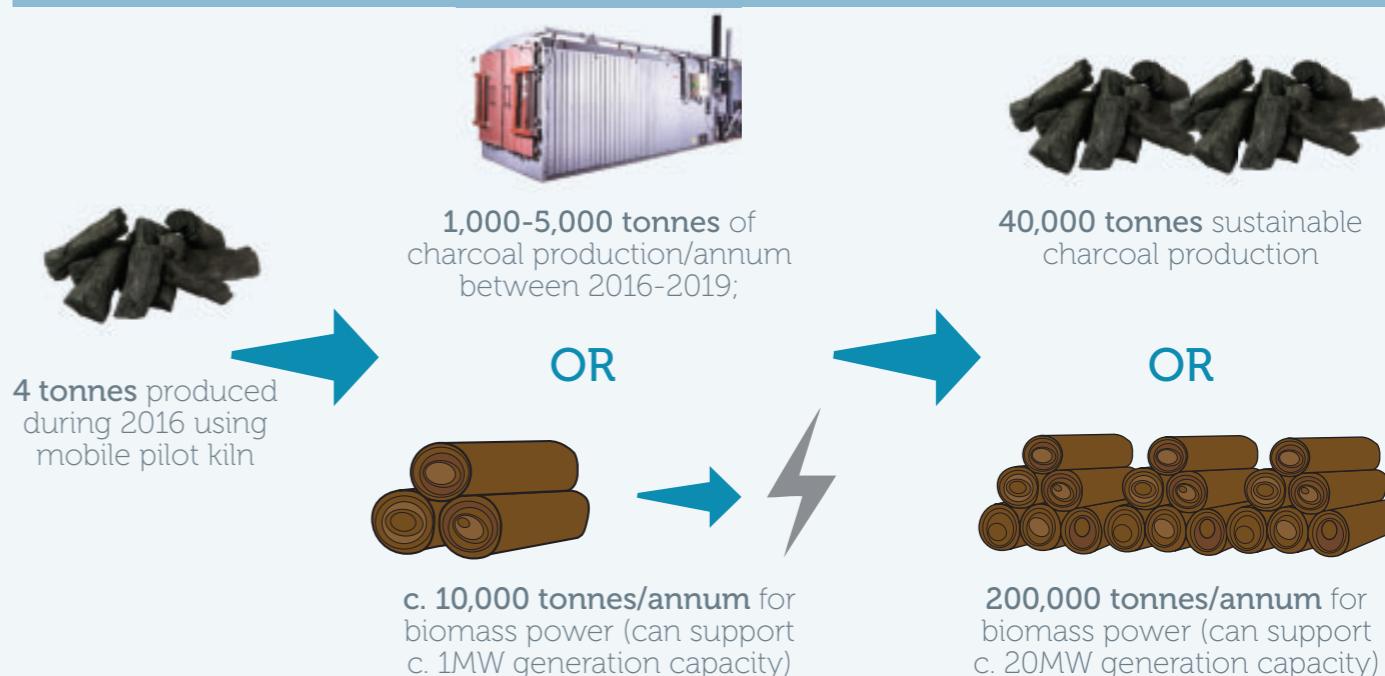
2016

2017

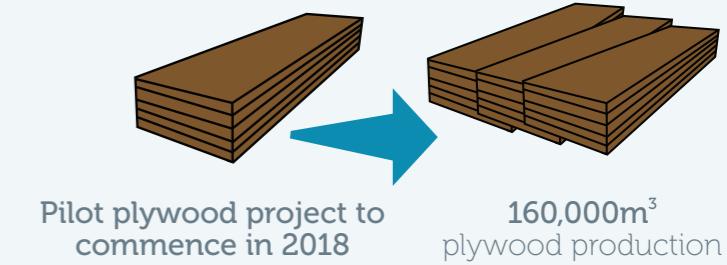
2018-2023

2024-2030

## Charcoal/Biomass



## Plywood





## Our People

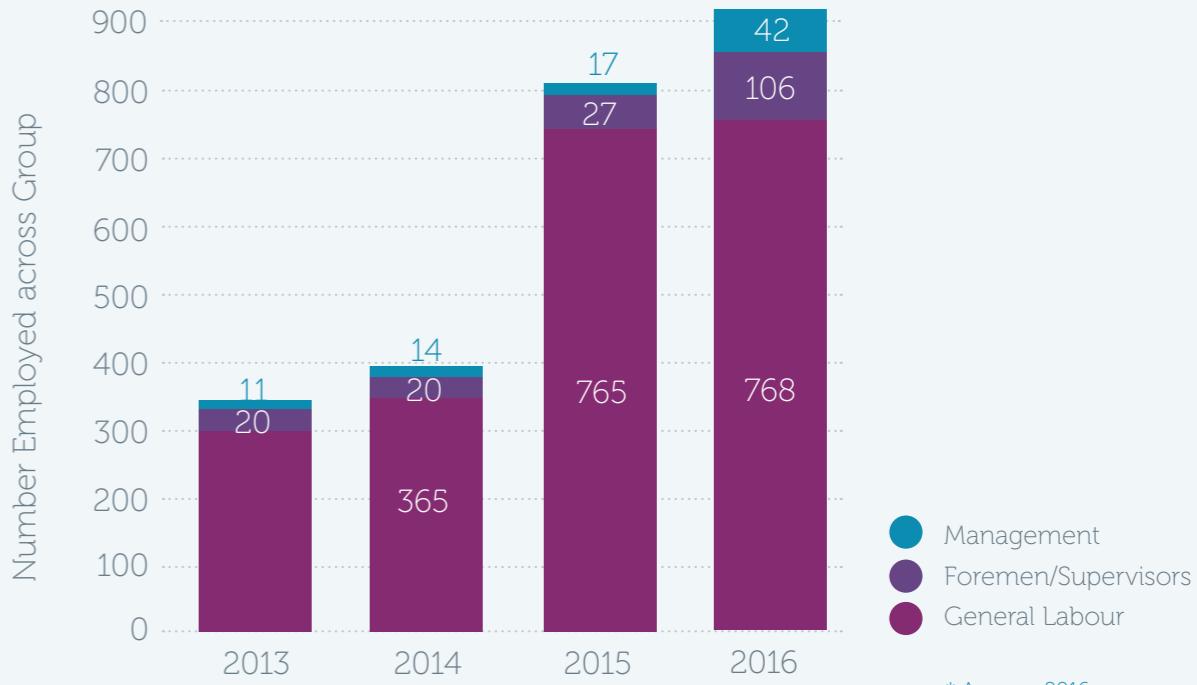
Miro advertises all employment opportunities locally and only where the required skills cannot be found locally does the company recruit internationally. In 2016 77% of employees lived within 30km of the company's operations.

Miro Forestry's goal is to create a good work place for all employees. The Company is an equal opportunities employer and has a zero tolerance approach to all forms of discrimination. No incidents of discrimination were reported in 2016. Miro has a formal grievance mechanism for employees as well as a whistleblowing facility (complaints and grievances can be made through various channels and can be made anonymously).

All employees are paid above the minimum wage. In 2016, company salaries for unskilled labour were on average 34% above the national minimum. All employees have access to collective bargaining mechanisms. In 2016 48% of employees were registered as members of a Union. Miro has a strict policy against forced and underage labour. This is controlled internally by Human Resources and with contractors through contracts and spot checks on documentation. Miro follows the International Labour Organisations (ILO) standards for all aspects of employment.

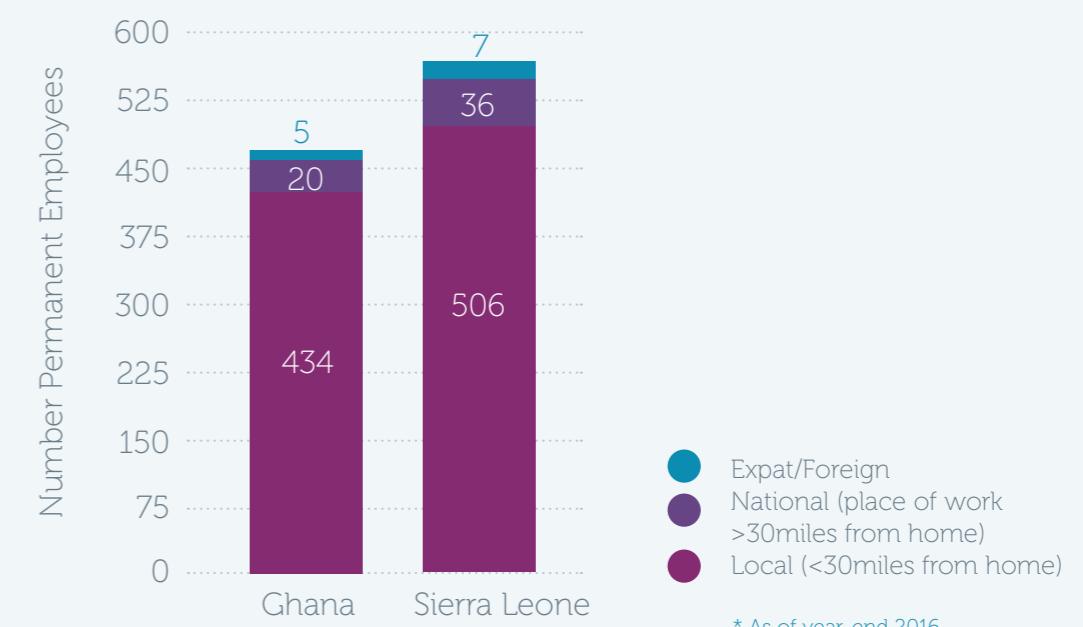
In 2016 the Company finalised an internal Code of Conduct, this uses the Guiding Principles on Business and Human Rights (United Nations) and ILO's Standards to outline the rights of our employees.

### Consistent Group Employment Growth\*

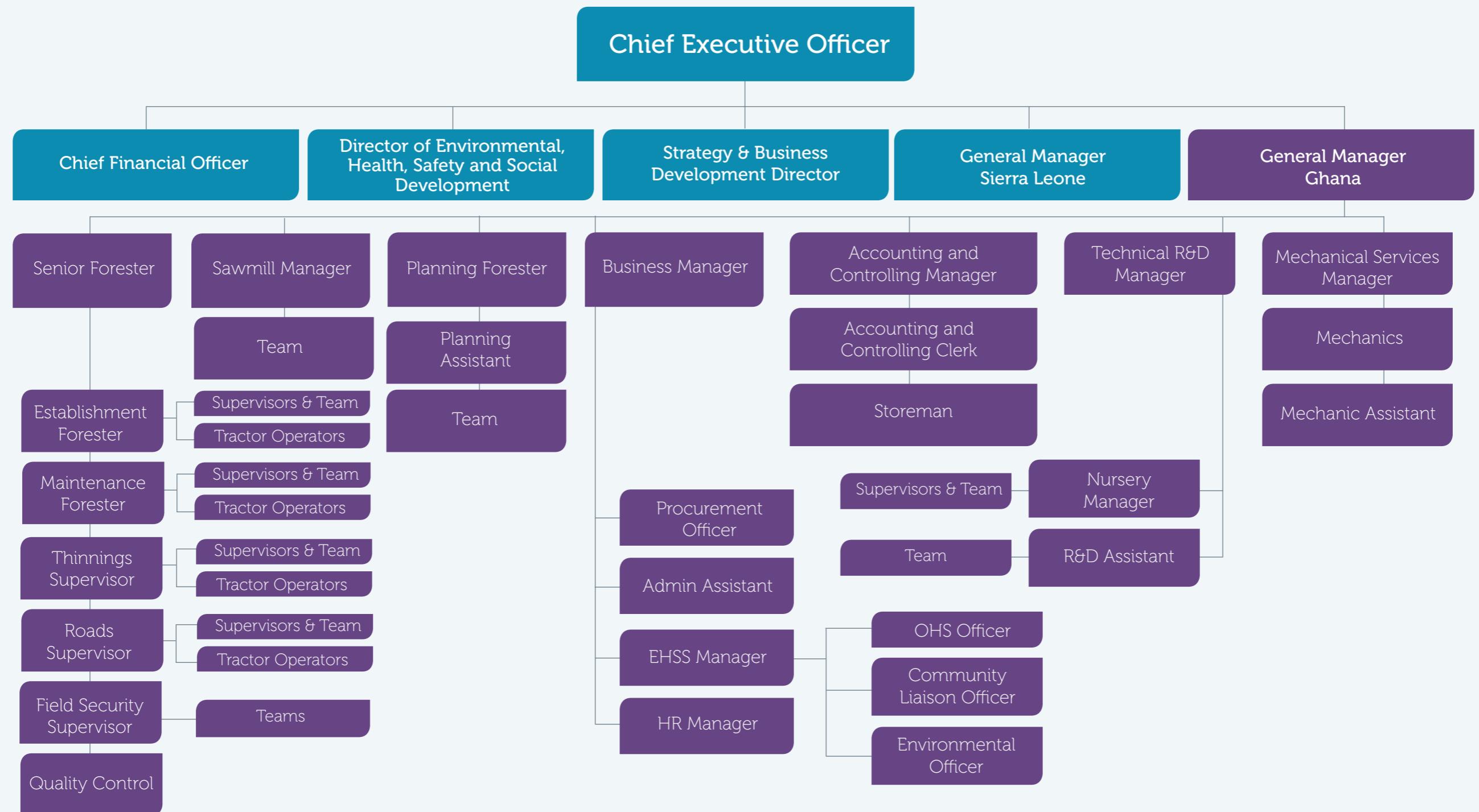


### Permanent Employees\*

Where requisite skills and experience exist Miro Forestry always recruits locally



# Our People

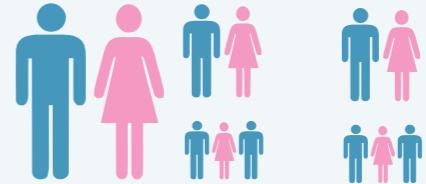


The structure above is approximately replicated in Ghana and Sierra Leone.



## Our People

### Employee and Contractor Demographics at year-end 2016

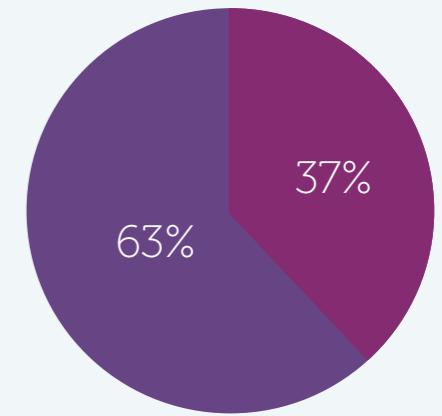


	Miro Employees	Contractors
United Kingdom	3	1
Sierra Leone	507	42
Ghana	329	130
<b>TOTAL</b>	<b>839</b>	<b>173</b>
	<b>1012</b>	<b>150</b>

### Injury Rates (Group Average)

Lost time injury frequency rate (LTIFR)	3.6
Lost time injury severity rate (LTISR)	16

Non-lost time injuries  
Lost time injuries



Over 30 employees trained as First Aiders



Over 1,200 medical cases treated by the company nurse or otherwise supported by company medical arrangements

All company work standards and equipment used is in compliance with **FSC**, **IFC-PS** and **ILO** standards

# Our People

Investing in our people and communities helps us to ensure the long-term sustainability of our business. To be the largest sustainable forestry company in West Africa we need a talented, motivated and resilient workforce



**55%** of total

operating budget directly benefits the immediate local economy around the Company plantations (salaries and the procurement of goods and services)

Annual Health and Safety campaigns reaching over

**2,000** people

Aiming to build an independent safety culture, based on international Health and Safety standards.

↑  
Salaries approximately  
**34%** higher

than national minimum wages

Directly employing over  
**1,000** people

in areas of little or no formal employment. Each employee supports an average of 7 dependents



Over  
**150**

contractor jobs created

17%

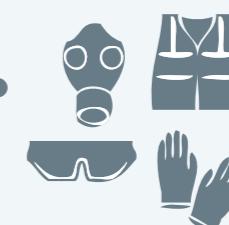
workforce is female,  
empowering females in rural Africa.  
Constantly working to enhance gender balance in the workforce.



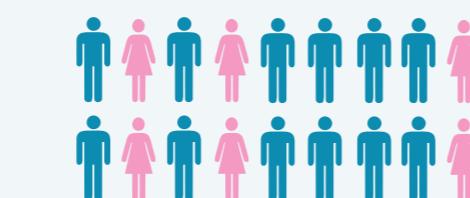
Specialised teams receiving regular training

**100%**

of employees provided with Personal Protective Equipment



Access to medical cover, maternity leave, compassionate leave and sick pay for all employees



Where requisite skills and experience exist Miro always recruits locally in preference to nationally or from overseas

Ensuring all employees and stakeholders can easily report possible compliance violations through an accessible grievance mechanism and confidential whistleblowing policy

# Impact Investing

The Company's intention is to have a positive social, economic and environmental impact in the areas which it operates. Miro Forestry manages its plantations to the highest international standards. The direct monetary benefit to the immediate local economy surrounding the Company's operations in 2016 is estimated at US\$5 million.



Direct monetary benefit to the immediate local economy around the Company plantations in Ghana and Sierra Leone in 2016.

Total Approx. US\$'000 Equivalent	Ghana	Sierra Leone
Rural Employment	US\$794	US\$670
Purchase of Goods and Services	US\$1,610	US\$1,724
Land Lease Fees	US\$49	US\$105
Corporate Social Responsibility	US\$28	US\$29
<b>TOTAL</b>	<b>US\$2,481</b>	<b>US\$2,528</b>

The Company delivers measurable social, economic and environmental development in the following ways:

## Rural Employment

- Miro Forestry directly employs over 1,000 people, 17% of which are females. Commonly there was no formal employment in the Company's areas of operation and frequently Miro Forestry's employees are the first generation to be formally employed. Operating in such areas, where the average income is less than US\$2 per day, Miro Forestry's presence in the area contributes significantly to local wealth creation. Estimating seven dependants per family, it is assumed that over 7,000 people have benefitted directly by Miro Forestry's presence (this increases to over 8,000 people when contractors are taken into consideration). The marked increase in disposable income has also resulted in numerous small businesses materialising in the local area.

## Purchase of Goods and Services

- Miro Forestry prioritises the local sourcing of goods and services. In 2016 the Company purchased goods and services from the immediate local areas around the plantations of approximately US\$5 million across both countries. When employing local contractors the Company offers assistance with building up the contracting business to meet international standards.

## Land Lease Fees and Government Taxes

- The Company paid US\$155,000 of land lease fees in 2016. Depending on the stipulations in the land lease these are dispersed differently. However, the majority of this is paid directly to the land owner and this has a major financial impact on the communities surrounding the operations.

## Benefit Sharing Arrangements

- As part of the Company's land lease agreements, the Company pays a proportion of income derived from plantation harvesting to the community. In the long-term this figure is estimated to be in excess of US\$1m per annum in both Ghana and Sierra Leone, making this payment the most significant direct financial contribution. This will be distributed transparently according to landholding and lease agreements.

# Impact Investing

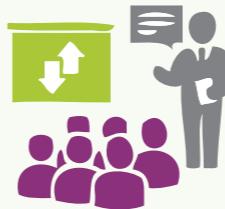


# Community Development & Stakeholder Engagement

Approximately 1% of the Company's annual operating costs are set aside for community projects. Miro Forestry aims to make meaningful and positive social contributions through its community development programmes. To do this Miro Forestry takes a participatory approach and involves the community in all projects from start to finish. To date the Company has funded projects related to education, access to water and healthcare.



Grievance mechanism communicated to all employees and surrounding communities



Stakeholder meetings conducted regularly

Approximately 1% of the Company's annual budget is set aside for community projects. All projects are implemented based on local needs, defined in a participatory process, communities are involved in all projects from start to finish

To date the Company has funded projects related to education (scholarships and school materials) for over 4,000 children in Sierra Leone and constructed two schools and a vocational centre in Ghana, access to water and healthcare.

The Company aims to collaborate with NGO's on community development projects for maximum benefit.

Miro strives for proactive, mutually respectful and lasting relationships with all of its stakeholders

Miro communicates meaningfully and transparently through its inclusive, country specific, stakeholder engagement plans. In this way we ensure we are listening to, learning from and taking into account the views of all of our stakeholders, using open and relevant dialogue that respect and uphold our values

Miro has a dedicated team of Community Liaison Officers who work to engage with and inform all of the communities surrounding our operations and other national stakeholders

2 Schools constructed



1 Vocational Centres Constructed



cUS\$45,000

For education projects for over 4,000 children since 2015



10

Community Meeting Shelters Constructed



cUS\$25,000

For access to safe water since 2015



# Environmental Protection & Enhancement

West Africa has lost over 80% of its forest cover over the last 100 years. With growing economies and continuing demand for wood fuel (accounting for 90% of heat/cooking energy demand) the pressure on forests is increasing. In order to reduce this pressure on remaining natural forests and indigenous biodiversity, sustainably managed commercial forest plantations are imperative.



# Environmental Protection & Enhancement



Improved Waste Management Systems



Sequestered Over  
**350,000**  
Tonnes of Carbon to 2016

## Business Integrity

Miro Forestry's policy is to comply with all applicable laws, rules, and regulations in all countries where it operates. Miro publishes all of its policies on its website and communicates them to all employees. All Miro Forestry's stakeholders are encouraged to raise concerns about compliance, ethics and business conduct if they arise.

Miro Forestry has a zero tolerance approach to corruption. The Company conducts anti-corruption and whistleblowing policy awareness campaigns with all employees every year. This policy stipulates that employees will not face discrimination or be reprimanded if they report in good faith a violation or suspected violation of the Company's legal, ethical, or policy obligations.

## Commitment to International Standards

Miro Forestry is working towards the attainment of Forest Stewardship Council (FSC) certification in 2017. In 2016 the Company completed external FSC pre-audits in Ghana and Sierra Leone with only a hand full of minor corrective actions required (in the top 30% vs other companies audited).

In addition to the FSC's Principles and Criteria, the Company is committed to complying with other internationally recognized guidelines and standards related to its business, including but not limited to the following:

- International Finance Corporation's (IFC's) Performance Standards
- International Labour Organisation (ILO)'s declaration on Fundamental Principles and Rights at Work
- ILO's Safety and Health in Forestry Work
- United Kingdom Bribery Act 2010
- Objectives of the United Nation's Convention on Biodiversity

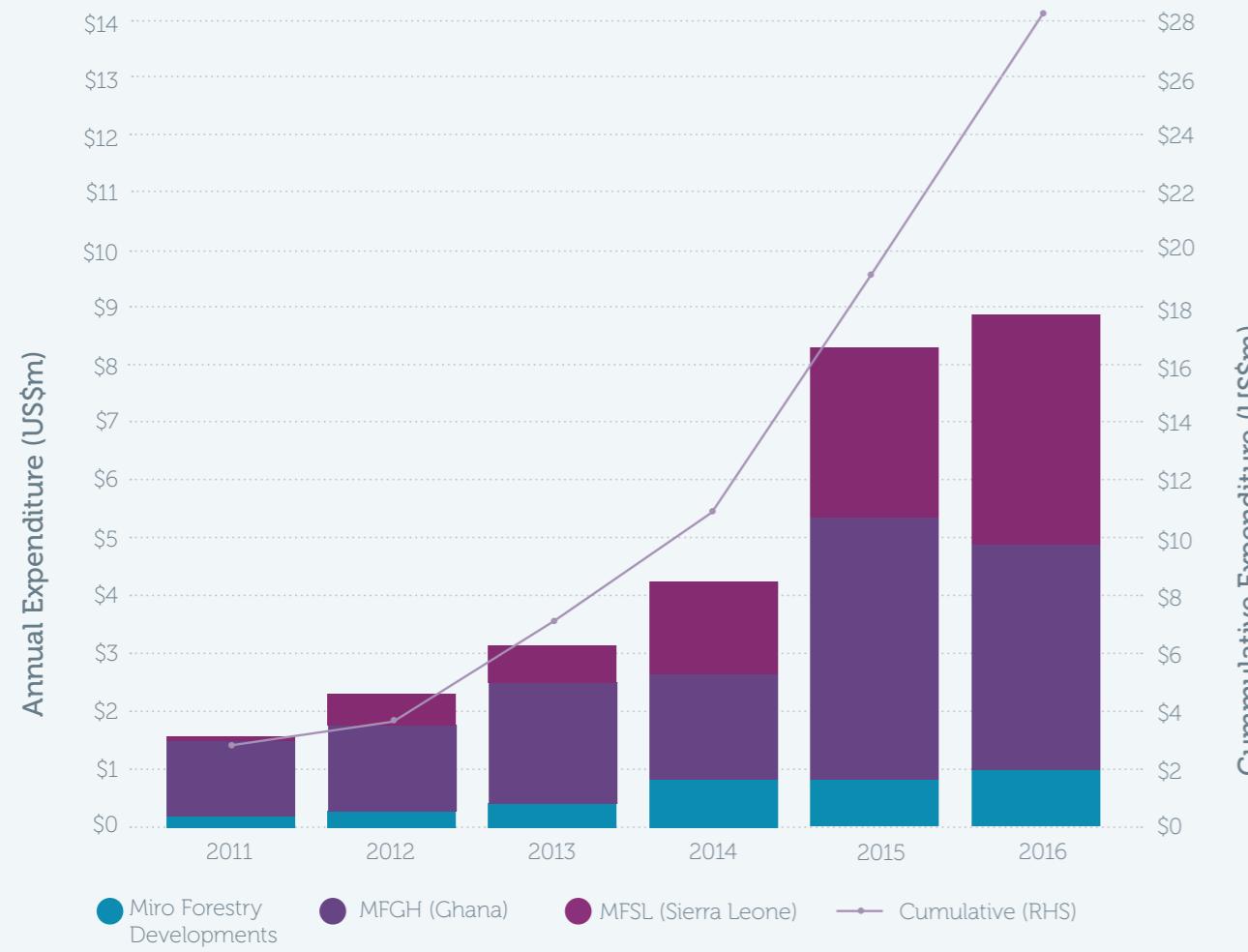


# Investment & Plantation Economics

Miro Forestry has invested a total of US\$28.1 million into its operating activities across the Group<sup>1</sup>. Of this US\$14.9 million has been invested into Ghana and US\$9.4 million into Sierra Leone<sup>2</sup>. The Company is therefore one of the most significant investors into plantation forestry in either country.

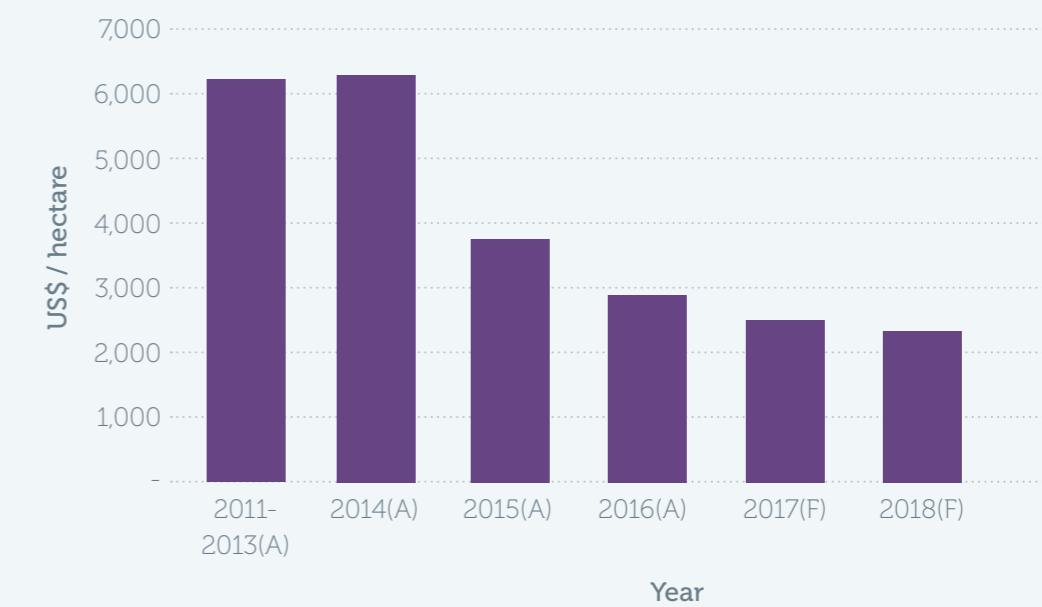
The use of funds by Miro Forestry, the group holding company, and by operational subsidiaries in Ghana and Sierra Leone to year-end 2016 is detailed in the table below:

**Annual Expenditure by Company (US\$m)**



The chart below shows Miro Forestry's actual total cost per new hectare established since 2011 and the forecast total costs per new hectare established over the next two years

**Total Cost per Hectare Established<sup>3</sup>**



- 1) Total investment of c.US\$30.9 million including non-cash share based expenses and rolled up loan interest.
- 2) The remaining US\$3.8m 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 is based on cash only and does not include non-cash accruals such as share based expenses and rolled up loan interest (ie. it excludes capital structure effects). Acronym (A) denotes actuals and (F) forecasts.

## Use of funds by Country

Miro Forestry has a policy always to 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.



### Beneficiary Countries of Miro Forestry's investment over 2016

The table following shows the ultimate beneficiary countries of Miro Forestry's investment over 2016. 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\$2,901k (82%) Ghana 	US\$302k (9%) United Kingdom 	US\$343k (10%) Other Countries
Miro Forestry (SL) Limited (Sierra Leone)	US\$2,580k (68%) Sierra Leone 	US\$359k (10%) South Africa 	US\$829k (22%) Other Countries
Miro Forestry Developments Limited (UK)	US\$983k (63%) United Kingdom 	US\$309k (20%) South Africa 	US\$258k (17%) Other Countries (includes Ghana and Sierra Leone)

# Risk Mitigation

Miro Forestry faces many 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 register and overall risk mitigation strategy.



*Miro's tree nursery, clonal production and species trial area, Ghana.*

## COMMERCIAL

RISK	MITIGATION
Financing	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. As a result Miro believes the risk of failing to raise funds as they are required is low.  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.
Currency	Miro will seek export markets in addition to local markets, ensuring that the business has access to dollar and euro forex. Prices of timber products are already substantially and increasingly import-parity priced in local markets due to the lack of domestic supply.
Land acquisition	Miro holds sufficient land rights for a minimum of one years operations, and have very good relationships with local communities and government bodies to acquire more as required. In all operating areas there are very significant quantities of suitable, degraded and unused land.
Political context	Miro has the wide team skillset to navigate local and national political environments while adhering to global standards of governance and ethics.
Key personnel loss	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.
Competition	Miro is one of the lowest-cost timber producers in Sub-Saharan Africa and Miro will continue to ensure that the business operates efficiently in order to remain a low cost producer vs. competitors.
Fraud	The Company has a clear Chart of Authorities and adequate purchase and sales procedures, ensuring checks and balances are in place. The Company and its local subsidiaries are audited annually by PKF. Regular inspection of transactions and contracts of significant levels of materiality are undertaken.
Corruption	Miro operates a zero tolerance approach to corruption. Whilst, very occasionally, this can inhibit operations Miro has the scale and relationships to overcome such factors.

# Risk Mitigation

## ENVIRONMENTAL

RISK	MITIGATION
Crop loss	Miro manage the risk of fire, pests, diseases and theft through prevention (by laying out plantations and infrastructure to mitigate the risk of e.g. fire spread), awareness, training, monitoring, research and development (by planning a range of pest and disease resistant species), and incentive alignment.
Pest and Disease	The Company plants a range of genuses, ensuring that inherent pest and disease risk is ameliorated. The Company employs sound forestry practices (silviculture) to ensure quality plants, nursery and plantation hygiene, and is developing its tree-breeding strategy to ensure it can breed for disease and pest tolerant genetic materials. The Company engages with FABI, of the University of Pretoria, a leading institution in pest and disease control, in order to stay abreast of pest and disease issues and to limit risk as far as possible.



## SOCIAL

RISK	MITIGATION
Community and labour	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.
Health and safety	Continuous training, incident reporting and prevention by operational managers and auditing.





## GRI G4 Reporting

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 has this year started to report to GRI-G4 standards, aiming 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	5-10, 3-4, 39-40, 43-58, 63-65
Organisational Profile	G4-3 to 16	1-4, 7-10, 39-62, 81
Identified Material Aspects and Boundaries	G4-17 to 23	1-10, 39-62, 68
Stakeholder Engagement	G4-24 to 27	45-52
Report Profile	G4-28 to 33	68, 81
Governance	G4-34 to 55	5-6, 23-24
Ethics and Integrity	G4-56 to 58	24, 39, 57

### Specific Standard Disclosures

Categories	Indicator(s)	Pages
Economic	G4-EC1, G4-EC5 to 9	1-10, 48, 51-52, 59-65, 69-80
Environmental	G4-EN11, 13, 34	4, 53-58
Social	G4-LA1, 6, 9-13, 16; G4-SO1, 3-5, 11	3-4, 39-52, 61-62

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 2016. 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 2016 and thus goes beyond only these measures.

# 2016 Abbreviated Financials

MIRO FORESTRY DEVELOPMENTS LIMITED

## ABBREVIATED FINANCIALS

Miro Forestry Developments Limited

Company Statement of Profit and Loss (unaudited)

For the year ended 31 December 2016

	2016 USD	2015 USD
General, administrative and selling expenses	<u>(2,349,900)</u>	(2,617,364)
Other income	(2,349,900)	(2,617,364)
<b>Operating loss before tax</b>	<b>(2,349,900)</b>	(2,617,364)
Taxation	-	-
<b>Net loss after tax</b>	<b>(2,349,900)</b>	(2,617,364)
Other comprehensive income <sup>1</sup>	-	5,697,076
<b>Total Comprehensive Income<sup>2</sup></b>	<b>(2,349,900)</b>	<u>3,079,712</u>

Notes:

- All 2015 numbers used in this section are extracted from audited accounts. All 2016 number are unaudited and may be subject to change.
- Group 2016 audited consolidated accounts will be available from May 2017.

1) Effect of asset transfer from Miro Forestry Company Limited (MFC) to Miro Forestry Developments Limited (MFD) in 2015 (when MFD replaced MFC as the Group parent company through a share exchange)

2) In 2016 this includes US\$800k of loan interest, US\$567k of costs not yet recharged to subsidiaries and US\$25k of currency exchange differences.

## ABBREVIATED FINANCIALS

Miro Forestry Developments Limited

Company Statement of Financial Position (unaudited)

As at 31 December 2016

	2016 USD	2015 USD
<b>Non-Current Assets</b>		
Investment in subsidiaries	6,908,417	6,908,417
Intercompany loans	<u>17,931,416</u>	10,617,217
<b>Non-Current Assets</b>	<u>24,839,832</u>	<u>17,525,634</u>
 <b>Current Assets</b>		
Trade and other receivables	43,001	51,015
Cash and cash equivalents	<u>58,873</u>	277,300
<b>Current Assets</b>	<u>101,874</u>	<u>328,315</u>
 <b>Total Assets</b>	<u>24,941,706</u>	<u>17,853,949</u>
 <b>Equity</b>		
Stated capital	16,512,975	9,132,975
Retained earnings	<u>729,812</u>	3,079,712
<b>Total Equity</b>	<u>17,242,787</u>	<u>12,212,687</u>
 <b>Non Current Liabilities</b>		
Third party loans	7,223,523	5,054,316
<b>Current Liabilities</b>		
Trade and other payables	<u>475,396</u>	586,946
<b>Total Liabilities</b>	<u>7,698,919</u>	<u>5,641,262</u>
 <b>Total Shareholders Funds and Liabilities</b>	<u>24,941,706</u>	<u>17,853,949</u>

## ABBREVIATED FINANCIALS

Miro Forestry Developments Limited

Company Statement of Cash Flow (unaudited)

For the year ended 31 December 2016

	2016 USD	2015 USD
 <b>Operating activities:</b>		
Operating loss before tax	(2,349,900)	(2,617,364)
<b>Adjustment for:</b>		
Depreciation	-	-
 <b>Operating Cash Flow before movement in Working Capital</b>	<u>(2,349,900)</u>	<u>(2,617,364)</u>
 <b>Changes in working capital:</b>		
Decrease/(increase) in receivables	8,014	(51,015)
Decrease/(increase) in payables	<u>(111,550)</u>	586,946
 <b>Net Cash Outflow from Operating Activities</b>	<u>(2,453,436)</u>	<u>(2,081,433)</u>
 <b>Investing activities:</b>		
Investment in subsidiaries	-	(5,030,578)
 <b>Net Cash Outflow from Investing Activities</b>	<u>-</u>	<u>(5,030,578)</u>
 <b>Financing activities:</b>		
Proceeds from issue of share capital	7,380,000	14,768,499
Third party loans	<u>2,169,207</u>	5,054,315
Intercompany financing	<u>(7,314,198)</u>	(12,495,055)
 <b>Net Cash Inflow from Financing Activities</b>	<u>2,235,009</u>	<u>7,327,759</u>
 <b>(Decrease)/Increase in Cash and Cash Equivalents</b>	<u>(218,427)</u>	<u>215,748</u>
 <b>Analysis of changes in cash and cash equivalents during the period:</b>		
Balance at 1 January	277,300	-
(Decrease)/increase in cash and cash equivalents	<u>(218,427)</u>	215,748
 <b>Balance at 31 December</b>	<u>58,873</u>	<u>215,748</u>
 <b>Analysis of cash and cash equivalents:</b>		
Cash and bank balances	58,873	277,300

# 2016 Abbreviated Financials

MIRO FORESTRY (GHANA) LIMITED

## ABBREVIATED FINANCIALS

Miro Forestry (Ghana) Limited

Company Statement of Profit and Loss (unaudited)

For the year ended 31 December 2016

	2016 USD	2015 USD
<b>Income</b>		
Direct expenses	(511,844)	(248,044)
<b>Gross loss</b>	<u>(511,844)</u>	<u>(248,044)</u>
General, administrative and selling expenses	(1,397,729)	(2,429,982)
Other income	(1,909,573)	(2,678,025)
<b>Operating loss before tax</b>	<u>(1,909,573)</u>	<u>(2,677,617)</u>
Taxation	-	-
<b>Net loss after tax</b>	<b>(1,909,573)</b>	<b>(2,677,617)</b>
Other comprehensive income	-	-
<b>Total Comprehensive Income</b>	<u><b>(1,909,573)</b></u>	<u><b>(2,677,617)</b></u>

## ABBREVIATED FINANCIALS

Miro Forestry (Ghana) Limited

Company Statement of Financial Position (unaudited)

As at 31 December 2016

	2016 USD	2015 USD
<b>Non-current assets:</b>		
Property, plant & equipment	1,180,590	1,136,283
Biological assets <sup>1</sup>	<u>3,450,669</u>	1,883,690
	<b>4,631,259</b>	3,019,974
Deferred tax asset	103,070	103,069
	<b>4,734,329</b>	<b>3,123,042</b>
<b>Non-Current Assets</b>		
<b>Current assets:</b>		
Trade and other receivables	188,940	208,355
Inventory	251,606	285,953
Cash and cash equivalents	<u>167,729</u>	56,049
	<b>608,275</b>	<b>550,356</b>
<b>Current Assets</b>		
<b>Total Assets</b>	<b>5,342,604</b>	<b>3,673,398</b>
<b>Equity:</b>		
Stated capital	3,205,583	3,205,583
Retained earnings	<u>(8,069,374)</u>	(6,159,801)
	<b>(4,863,791)</b>	<b>(2,954,218)</b>
<b>Total Equity</b>		
<b>Non-current liabilities:</b>		
Intercompany Loan	10,111,076	6,566,093
<b>Current liabilities:</b>		
Trade and other payables	95,319	61,523
	<b>10,206,395</b>	<b>6,627,616</b>
<b>Total Liabilities</b>		
<b>Total Shareholders Funds and Liabilities</b>	<b>5,342,604</b>	<b>3,673,398</b>

1) Biological assets are here shown at the direct costs of establishing the plantations. In the 2016 audited accounts these will be shown at the fair value (which is greater) calculated by a discounted cash flow in accordance with IFRS 39/41.

## ABBREVIATED FINANCIALS

Miro Forestry (Ghana) Limited

Company Statement of Cash Flow (unaudited)

For the year ended 31 December 2016

	2016 USD	2015 USD
<b>Operating activities:</b>		
Operating loss before tax	(1,909,573)	(2,677,617)
<b>Adjustment for:</b>		
Loss on sale of fixed assets	-	5,523
Write off fixed assets	-	2,868
Depreciation	<b>416,540</b>	335,290
<b>Operating Cash Flow before movement in Working Capital</b>	<b>(1,493,033)</b>	<b>(2,333,936)</b>
<b>Changes in working capital:</b>		
Decrease/(increase) in receivables	19,415	(122,002)
Decrease/(increase) in inventory	34,347	(239,393)
Increase in payables	<b>33,796</b>	24,674
<b>Net Cash Outflow from Operating Activities</b>	<b>(1,405,476)</b>	<b>(2,670,656)</b>
<b>Investing activities:</b>		
Purchase of property, plant and equipment	(460,847)	(1,242,503)
Biological assets acquired	<b>(1,566,979)</b>	(841,047)
<b>Net Cash Outflow from Investing Activities</b>	<b>(2,027,826)</b>	<b>(2,083,550)</b>
<b>Financing activities:</b>		
Proceeds from issue of share capital	-	1,877,295
Proceeds from disposal of fixed assets	-	21,643
Intercompany financing	<b>3,544,983</b>	2,851,030
<b>Net Cash Inflow from Financing Activities</b>	<b>3,544,983</b>	<b>4,749,967</b>
<b>Increase/(Decrease) in Cash and Cash Equivalents</b>	<b>111,681</b>	<b>(4,239)</b>
<b>Analysis of changes in cash and cash equivalents during the period:</b>		
Balance at 1 January	56,049	60,288
Increase/(decrease) in cash and cash equivalents	<b>111,681</b>	<b>(4,239)</b>
<b>Balance at 31 December</b>	<b>167,729</b>	<b>56,049</b>
<b>Analysis of cash and cash equivalents:</b>		
Cash and bank balances	167,729	56,049

# 2016 Abbreviated Financials

MIRO FORESTRY (SL) LIMITED

## ABBREVIATED FINANCIALS

Miro Forestry (SL) Limited  
Company Statement of Profit and Loss (unaudited)

For the year ended 31 December 2016

	2016 USD	2015 USD
<b>Income</b>	<b>24,273</b>	-
Direct expenses	(454,368)	(180,355)
<b>Gross loss</b>	<b>(430,095)</b>	<b>(180,355)</b>
General, administrative and selling expenses	(1,548,751)	(1,902,053)
Other income	(1,978,846)	(2,082,408)
	-	66,759
<b>Operating loss before tax</b>	<b>(1,978,846)</b>	<b>(2,015,649)</b>
Taxation	-	-
<b>Net loss after tax</b>	<b>(1,978,846)</b>	<b>(2,015,649)</b>
Other comprehensive income	-	-
<b>Total Comprehensive Income</b>	<b>(1,978,846)</b>	<b>(2,015,649)</b>

## ABBREVIATED FINANCIALS

Miro Forestry (SL) Limited

Company Statement of Financial Position (unaudited)

As at 31 December 2016

	2016 USD	2015 USD
<b>Non-current assets:</b>		
Property, plant & equipment	1,320,896	622,245
Biological assets <sup>1</sup>	2,125,164	1,074,471
<b>Non-Current Assets</b>	<b>3,446,060</b>	<b>1,696,717</b>
<b>Current assets:</b>		
Trade and other receivables	239,941	295,676
Inventory	273,739	116,820
Cash and cash equivalents	96,727	51,726
<b>Current Assets</b>	<b>610,407</b>	<b>464,222</b>
<b>Total Assets</b>	<b>4,056,467</b>	<b>2,160,939</b>
<b>Equity:</b>		
Stated capital	22,727	22,727
Share premium	1,775,873	1,775,873
Retained earnings	(5,697,595)	(3,718,749)
<b>Total Equity</b>	<b>(3,898,995)</b>	<b>(1,920,149)</b>
<b>Non-current liabilities:</b>		
Intercompany Loan	7,834,606	4,049,223
<b>Current liabilities:</b>		
Trade and other payables	120,856	31,864
<b>Total Liabilities</b>	<b>7,955,462</b>	<b>4,081,088</b>
<b>Total Shareholders Funds and Liabilities</b>	<b>4,056,467</b>	<b>2,160,939</b>

1) Biological assets are here shown at the direct costs of establishing the plantations. In the 2016 audited accounts these will be shown at the fair value (which is greater) calculated by a discounted cash flow in accordance with IFRS 39/41.

## ABBREVIATED FINANCIALS

Miro Forestry (SL) Limited

Company Statement of Cash Flow (unaudited)

For the year ended 31 December 2016

	2016 USD	2015 USD
<b>Operating activities:</b>		
Operating loss before tax	(1,978,846)	(2,015,649)
<b>Adjustment for:</b>		
Loss on sale of fixed assets	-	-
Write off fixed assets	-	(39,537)
Depreciation	380,963	266,853
<b>Operating Cash Flow before movement in Working Capital</b>	<b>(1,597,883)</b>	<b>(1,788,333)</b>
<b>Changes in working capital:</b>		
Decrease/(increase) in receivables	55,735	(272,907)
(Increase) in inventory	(156,919)	(19,754)
Increase in payables	88,992	20,597
<b>Net Cash Outflow from Operating Activities</b>	<b>(1,610,076)</b>	<b>(2,060,397)</b>
<b>Investing activities:</b>		
Purchase of property, plant and equipment	(1,079,614)	(547,829)
Biological assets acquired	(1,050,693)	(722,226)
<b>Net Cash Outflow from Investing Activities</b>	<b>(2,130,306)</b>	<b>(1,270,055)</b>
<b>Financing activities:</b>		
Proceeds from issue of share capital	-	-
Proceeds from disposal of fixed assets	-	-
Intercompany financing	3,785,383	3,373,456
<b>Net cash Inflow from Financing Activities</b>	<b>3,785,383</b>	<b>3,373,456</b>
<b>Increase in Cash and Cash Equivalents</b>	<b>45,001</b>	<b>43,004</b>
<b>Analysis of changes in cash and cash equivalents during the period:</b>		
Balance at 1 January	51,726	8,722
Increase in cash and cash equivalents	45,001	43,004
<b>Balance at 31 December</b>	<b>96,727</b>	<b>51,726</b>
<b>Analysis of cash and cash equivalents:</b>		
Cash and bank balances	96,727	51,726

## Miro Forestry

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