

### **GREENHEART GROUP LIMITED**

### 綠心集團有限公司

(Incorporated in Bermuda with limited liability)
(Stock Code: 94)

# ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

**YEAR 2015** 

### **ABOUT THIS REPORT**

Greenheart Group Limited ("Greenheart" or the "Company") (Stock Code: 94) is a Hong Kong listed company engaged in log harvesting, timber processing, marketing, sales and trading of logs and timber products.

This is the first Environmental, Social and Governance ("**ESG**") Report (the "**Report**") of the Company and its subsidiaries (collectively the "**Group**"). It covered the reporting period from 1 January 2015 to 31 December 2015 (the "**Year**") on information and activities of our headquarters in Hong Kong and our overseas operations in New Zealand and Suriname.

The Report is prepared in accordance with the requirements of the "ESG Reporting Guide" contained in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited.

The Report contains forward-looking statements that are based on certain assumptions and expectations at the time of its publication, which we have deemed to be reliable after careful consideration. These statements involve known and unknown risks and uncertainties, which means that actual results may differ from the expectations, forecasts and/or conclusions made herein. No guarantee is expressed or implied as to the accuracy of these forward-looking statements and the Company expressly disclaim any liability for and assume no responsibility to correct or update these forward-looking statements in the event that any of these statements does not materialize or turns out to be incorrect.

### **GREENHEART VISION AND MISSION**

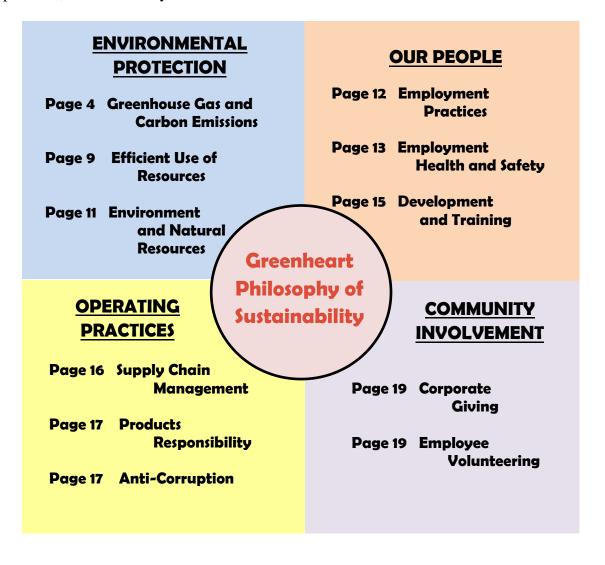
Our vision is to grow sustainable forestry assets around the world to serve the growing wood deficits in China and the demands of other markets. We grow sustainably and responsibly and we grow to increase the value of our lands and our value to our employees, customers and shareholders.

Greenheart understands that as the demands placed on our planet increase for commodities and natural resources, finding a balance between the needs of mankind and the preservation of our planet is increasingly important. Our biggest asset is our forests. We have set ourselves the highest standards in research and in developing and operating our forests in order to preserve our key assets.

Greenheart is firmly committed to implementing measures to improve the three pillars of sustainability – Environmental, Social and Governance. We believe that sustainability in business is not just window dressing, but is essential to the development of the Company. By adopting sustainable practices, we will gain competitive edge, increase our market share and eventually bring value to our shareholders in the long run. On top of that, we will continuously extend our efforts to improve the local communities that we work with, with a constant focus on social responsibility and to improve the livelihood of the people who live there.

### **CONTENTS**

This Report covers the 2015 fiscal year and the data herein covers all of our operations around the world. We have evaluated the materiality of the key ESG issues arising from our business and have prioritized the issues that the management of the Group ("the **Management**") believed are most important to our business and stakeholders in this Report. This Report sets out the Group's overall sustainability approaches and policies through four different areas, including environmental protection, our people, operating practices, and community involvement.



# ENVIRONMENTAL PROTECTION

Greenheart has been persistent in conducting its business in an environmentally responsible manner and takes measures to reduce the possible impact on the environment arising from its production and operating activities. We will closely monitor our greenhouse gas emissions and energy consumption and will stay abreast of environment-related regulatory developments in the respective areas where the Group operates.

Our ultimate goal is to achieve the balance between business growth and environmental protection by improving the operations and practices as well as encouraging the employees to adopt environmentally responsible behavior in workplace.

### (A) GREENHOUSE GAS AND CARBON EMISSIONS

As a forestry and plantation company, Greenheart is aware of the essential role of trees in reducing carbon emissions and hence, we strive to protect the forests and take a sustainable forest management approach so as to maintain the balance between harvesting forest resources for business and the need for the environmental protection. We believe this is also the utmost concern of our stakeholders.

Majority of our carbon footprint is created in the harvesting, trucking and processing activities. Below is the detailed analysis by different divisions:

#### **New Zealand Division**

Our New Zealand division's operations consist of plantation, forest management, harvesting and sale of logs. Below are the types of emissions and respective emission data regarding different activities:

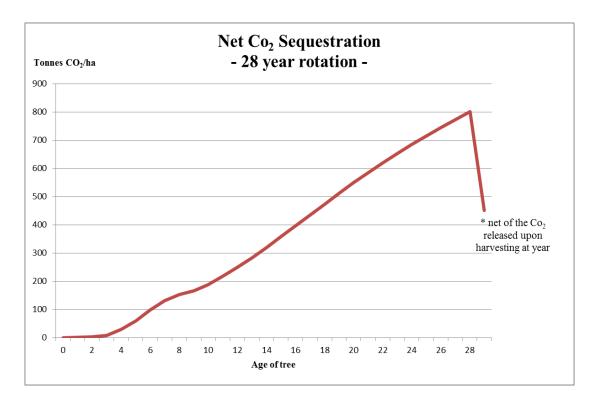
#### **Plantation**

All our New Zealand plantations are developed on lands which are unsuitable for farming. As at 31 December 2015, the stocked area is projected to be 9,770 hectares with a further 1,104 hectares awaiting replanting. The estate is planted almost entirely on freehold land. The sole commercial specie is radiata pine. To ensure a sustainable resource is maintained, the plantations are replanted within 12

months after harvesting and strict environment controls are in place to minimize harm to the environment as well as the local community. The average age for harvesting is 28 years.

The graph below shows the carbon we capture per hectare based on a 28 years rotation.

The drop at the tail-end (at  $28^{th}$  year) accounts for the roots and branches that rot on the ground and release  $CO_2$ . The table below assumes that most of the radiata pine we harvested and sold are used for infrastructure and construction and therefore  $CO_2$  will be locked in these products as long as they are in service.



In summary, the net  $CO_2$  absorbed by our plantation activities throughout the life of the radiata pine (i.e. 28 years) is approximately 451 tonnes  $CO_2$  per hectare (after netting of approximately 350 tonnes  $CO_2$  released from residual roots and branches). Given that Greenheart has a total of 10,874 hectares of plantation lands, it is estimated that the net  $CO_2$  absorbed in a full 28-year rotation cycle of our plantation could be as high as 4.9 million tonnes.

### Harvesting and sales

The emissions from harvesting activities are limited to the exhaust fumes emitted by harvesting machinery, log transport trucks and light vehicles.

It is estimated that a total of 68,892 tonnes of CO<sub>2</sub> are emitted based on the volume of fuel used in the harvesting and sales activities during 2015. A further breakdown is provided in the following table:

Harvesting	6,878 tonnes or approx. 9.80kg/tonne of logs		
Local Transport	4,516 tonnes or approx. 6.00kg/tonne of log		
Export Sales	57,498 tonnes or approx. 0.01 kg/tonne of logs/km		
(Shipping)			
Domestic Sales	The quantity of CO <sub>2</sub> released already included in "Local		
	Transport" category		

Regarding other Greenhouse Gas ("GHS") emission from our New Zealand operation in 2015, the following were calculated based on the fuel consumption data available.

GHS Released in 2015						
(tonnes)	Harvesting	Local Transport	Export Sales (Shipping)	Total		
$CO_2$	6,878	4,516	57,498	68,892		
CO	41	27	282	350		
$NO_x$	155	102	1,067	1,324		
SO <sub>x</sub>	10	7	72	89		
CH <sub>4</sub>	0	0	3	3		
VOC	5	3	36	44		

### **Suriname Division**

Greenheart continually adheres to the standards required for responsible forest management and complies with all applicable laws and regulations in order to promote rational use of forest resources. Greenheart adapts CELOS harvesting system ("CHS") for all its forestry operation in Suriname. CHS aims to diminish logging damage and to improve the efficiency of logging operation. It is achieved

mainly through more focus on planning, timing of operations, directional felling, and winched extraction techniques. Another important requirement of CHS is that the attention to long-term aspects of forest management goes beyond efforts to minimize damage to vegetation and soil: the entire infrastructure, including the main skid trails, is designed in such a way that it can be utilized again in future harvests.

Other than the harvesting method, CHS also restricts the maximum harvest quantity to not more than  $40\text{m}^3$  per hectare over a 20-years growth cycle. Greenheart's harvested volume in 2015 is only  $6\text{m}^3$  per hectare which is far below the harvesting volume requirement under CHS.

Our efforts have been recognized by Forest Steward Council ("FSC") again in 2015, and the Group has successfully renewed the full FSC certificate accreditation for all its Suriname forestry and sawmill operations.

At present, there is no record about the quantity of CO<sub>2</sub> that is released from trees due to our harvesting activity in Suriname. Given that our Suriname operation has adopted CHS, it should help minimize the damage to vegetation and soil. Moreover, given that our harvesting volume is substantially lower than the CHS requirement (i.e the annual growth rate of the forest), the forest should be able to regenerate and absorb CO<sub>2</sub> during its growth.

Regarding other GHS emission from our Suriname operation in 2015, the following were calculated based on the fuel consumption data available.

GHS released in 2015						
(tonnes)	Energy (generators)	Harvest and Roading	Trucking	Barging	Export Sales	Total
$CO_2$	1,643	746	854	200	6,821	10,264
CO	8	4	4	1	33	50
NO <sub>x</sub>	30	14	16	4	187	251
$SO_x$	2	1	1	0	151	155
CH <sub>4</sub>	0	0	0	0	1	1
VOC	1	0	1	0	4	6

### Non-Hazardous Waste Produced

The only type of non-hazardous waste Greenheart produces during its production process is the roots and branches left in the forests after harvesting and waste wood produced when log bolts are cut into lumber in sawmill.

#### **New Zealand Division**

The wood waste from the operation in New Zealand division is mainly the roots and branches left in forest after the harvesting. As mentioned above, there will be approximately 350 tonnes  $CO_2$  per hectare released from roots and branches after harvesting. Based on the total hectares of plantation which are harvested in 2015, a total of 417,445 tonnes  $CO_2$  were released due to the harvesting activities.

### **Suriname Division**

Same as New Zealand division, Suriname harvesting activity will also cause roots and branches left in the forest. On top of that, most of the waste wood in Suriname division is produced when log bolts are cut into lumber in the sawmill.

On average, the sawmill turns log bolts into Green Rough Sawn (GRS) with an efficiency of 43%, resulting in 57% wood waste that can be used for, for example, bio-energy production.

The setup of a wood-based bio-energy plant in West Suriname is nearly completed. This plant will be used to maximize the use of the wood waste for bio-energy to power the wood processing facility and substantially reduce carbon emissions by reducing the consumption of diesel.

### **Hong Kong Head Office**

The Group's HK office generated

**67,443** Mwh purchased electricity in 2015.

During the Year, the indirect GHS emission in Hong Kong Head Office mainly generated from the consumption of purchased electricity amounted to 52.6 tonnes.

### (B) <u>EFFICIENT USE OF RESOURCES</u>

#### Wood

Wood is the Group's main product and producing materials, thus the optimization of the use of wood is of the utmost importance to the Group from both commercial and environmental perspectives. Therefore, there are constant strives across the Group for the best and efficient methods on the usage of wood.

### Targets includes

- Improve the yield regarding the conversion of log bolts into timber
- Strictly complied with CHS (direction felling and reduced impact logging in Suriname)
- Re-use most if not all waste wood for either bio-energy production or other, more useful application.

### Electricity and Others

The Group has always placed great emphasis on energy conservation. To achieve this, we continually apply efficient energy consumption strategy to improve energy saving and reduce energy consumption.

To green our office, Greenheart actively promotes the 3R concepts - "Reduce, Reuse and Recycle" in daily business activities.

### **REDUCE**

- √ maintain the office temperature at 25.5°C
- ✓ install energy-efficient light tubes and use natural daylight for office as far as possible
- ✓ remind employees to switch off all computers, office equipment and air-conditioners when not in use
- ✓ use audio/video conferencing to reduce business travels
- promote paperless office which encourage staff to read and send documents electronically to reduce printing and to print and photocopy documents on both sides of paper

### REUSE

- a clear label tray with onesided printed paper is placed near the photocopies to encourage staff to use those paper print informal documents or draft
- reuse paper boxes for storage or archiving documents instead of throwing them away

### **RECYCLE**

- collection of waste paper for recycling
- collection of toner cartridges for recycling

During the Year, we have:

- ✓ as much as we could, retain and reuse our original furniture during relocation for the purpose of reducing waste and making rational use of existing resources
- ✓ joined the "No Air-con Night" organized by Green Sense
- donated computers and equipment for the Refurbish Project organized by Caritas Computer Workshop
- bought environmental bags for Sanrio Volunteer team organized by Haven of Hope Christian Service

### (C) ENVIRONMENT AND NATURAL RESOURCES

Greenheart is committed to conducting its business activities in an environmentally conscious manner and it strives to mitigate the environmental impacts caused by our operations. To achieve this, the Group has established the "Corporate Environmental Policy" which sets out the measures for controlling the forest/plantation operations in both New Zealand and Suriname divisions. Measures include, but not limited to:

- Conduct environmental impact assessments on a regular basis;
- No exotic species or genetically modified organism are used at any stage of production process;
- The use of chemicals is limited and whenever chemicals are used, a register will be kept for monitoring purpose;
- The timber harvesting never exceed the sustainable yield of the forest;
- Production activity will be stopped during period of heavy rainfall to protect the soil; and
- No production activity will take place in vulnerable areas and high conservation value forests.

### **OUR PEOPLE**

Greenheart cares about our employees and regards them as one of the important resources for the development of the Company. To attract and retain the best people for the Group, we endeavor to build a comfortable, healthy and equal working environment for our employees and ensure that all their rights and interests are protected.

### (A) EMPLOYMENT PRACTICES

As at 31 December 2015, the Group has a total of 363 employees who located in Suriname (344 employees) and Hong Kong (19 employees). All our activities in New Zealand are carried out by local contractors and therefore the Group does not retain any direct employee in New Zealand in 2015. To the best knowledge of the board of directors of Greenheart (the "Board"), the Group strictly complies with all applicable labour standards and employment laws and regulations of its respective operating bases. The Group prohibits child labour and forced labour in any workplace.

We believe that each employee should be treated equally and ensure that employees in the workplace or job applicants during the recruitment process will not be subject to any form of discrimination.

NO appeals or investigation incidents about non-compliance with any employment regulations or violation of employees' rights during the Year

All employees and job applicants are assessed based on their skills, qualification and performance irrespective of their ages, marital status, races, religions and nationality, gender, disability, sexual orientation or political background.

Depending on the needs of the job positions, the Company recruits talents through different recruitment channels, including internal recommendation, internal promotion, job transfer or social recruitment.

All employees of the Group have entered into written employment contracts and such contracts shall include dismissal term where the Company has the right to terminate such contract with an employee who willfully violates local laws and regulations and the Group's policy.

Employees' remuneration packages include basic salaries and performance-based bonuses which shall be determined by their qualifications, experience and prevailing market rates. Salaries and promotion opportunities are normally reviewed annually based on individual performance appraisals. Apart from the basic remuneration package, Greenheart also offers a wide range of benefits including medical and hospital insurance coverage, Chinese New Year red packet and paid leaves for sick, marriage and bereavement in addition to statutory holidays.

All employee enjoy rest days, statutory holidays and paid annual leave according to the respective government laws and regulations. No employee is paid less than the minimum wage specified by the government regulations in different jurisdictions.

As mentioned in the 2015 annual report of the Company, Suriname division has undergone workforce rationalization to improve the operation efficiency and save cost. Headcount therefore reduced by 16.9% from 402 to 334. To the best knowledge of the Board, we have complied with all the laws and regulations in Suriname regarding termination of employment during the entire workforce rationalization process. Moreover, we have worked with the labour union and maintained direct communication with them to ensure the transparency of the process, including but not limited to the selection and the compensation etc.

### (B) EMPLOYEE HEALTH AND SAFETY

Greenheart places the highest priority on securing health and safety of all our employees. We endeavor to protect them from work-related accidents or injuries and the Group pledges full compliance with the relevant occupational health and safety legislation of Hong Kong, New Zealand and Suriname.

The Company provides insurance covering medical treatments and accidents to eligible employees. In order to avoid accidents and ensure that all employees work in a safe manner, we implement tailor-made "Workplace Health and Safety Manual" for different working conditions and needs which stipulates clearly the safety procedures as well as emergency response plans. Those established policies and guidelines will be reviewed periodically and further improved to better protect our employees. At the same time, first aid kit is available at each workplace to ensure that any employee who is injured or ill at work can receive immediate attention.

### **New Zealand Division**

In New Zealand, in view of the passing of a new Health and Safety Bill which came into force in April 2016, our New Zealand forest managers has arranged training to the employees of our contractors to enhance their health and safety knowledge and to strengthen their understanding on the new requirements. Moreover, in the coming year, a new safety management system will be implemented to assist the contractors and their employees to better identify and manage risks factors in the workplace.

### **Suriname Division**

Some of our operation areas go a step further in enhancing the safety standard - for example, in Suriname, personal protective gear are provided to all sawmill workers and all of them are well-trained with respective safety knowledge before working in the respective areas. In addition, we regularly co-operate with different institutions such as Red Cross, Forestry Training Center Inc. (Guyana) to organize various occupation safety talks for our workers.

An overview of performance of the Group's health and safety area during the Year:

		2015			
Indicators	Unit	Hong Kong	New Zealand (Note)	Suriname	Total
Fatality or permanent disablement cases recorded	number	0	0	1	1
Number of employees died during duty	person	0	0	0	0
Number of working days loss from working injury	days	0	0	45	45

 $Note: Including\ contractors'\ employees\ who\ are\ working\ for\ Greenheart\ during\ the\ Year.$ 

### (C) DEVELOPMENT AND TRAINING

Greenheart strives to provide an environment where our employees can grow professionally and develop their career path that meets the long-term growth of our business simultaneously. In view of that, we always encourage our staff to participate in the continuous learning activities.

Education allowances are offered to our employees to attend training courses organized by professional institutions from time to time to enhance their professional and technical knowledge. The Group also provides its directors with regular reading materials to ensure that they keep abreast of the latest regulatory requirements, corporate governance practices, financial information and market trends.

In our Suriname division, we have created "Standard Operational Procedures Manual" for most of our activities which set out instructions for workers to carry out routine operations. It not only forms the basis of on-the-job training to our employees but also assists us to improve the overall operation efficiency and uniformity of performance in the long run. The procedures will be explained to each new employee before they begin their job. All trainings are registered in a database which allows the managers to trace back the training records of each employee even if the training was given in another location.

## OPERATING PRACTICES

Providing the highest quality of timber to customers around the world is not only our commitment to customers, but also our core business strategy aiming to stay competitive in the ever-changing global market and to maintain our leading position amongst industry peers. Also, throughout its operations, the Group ensures that it is in strict compliance with all national and regional policies regarding anti-corruption.

### (A) <u>SUPPLY CHAIN MANAGEMENT</u>

The Group has its standard operating procedures in place with periodical audit and reassessment of the procedures. Each operating unit has its supply chain and purchasing department with clear lines of segregations.

The procurement of equipment, products and services is undertaken through an open and fair competition to ensure we engage a product/service provider that can best meet the Group's particular needs. To better enhance the sustainability of the Group's development, priority will be given to those product/service providers with environment-friendly products and are actively fulfilling social responsibilities.

Formal agreements will be entered into with each product/service provider before cooperation, listing out all the legal, regulatory, and various additional sustainability requirements. Internally, an authorization process is in place to ensure that no engagement of product/service provider is made without the approval of the Company's authorized personnel.

All product/service providers are treated in an equal manner in order to develop a long-term working relationship with each of them. Also, we will carry out quality review on the selected product/service providers based on price, quality and aftersale service periodically to ensure sustainable quality material and services are received.

To better manage our production process, we have specially developed a system for the Company to track the entire supply chain and trace a specific product at any given time.

### (B) PRODUCT RESPONSIBILITY

Greenheart understands that apart from the quality, customers are becoming more concerned about environmental matters and more likely to purchase and use eco-friendly products. Greenheart is fully aware of and in fact supports this market trend and implements product certification and well-established quality inspection procedures to ensure that all our products meet quality standard and sustainable development requirement.

The FSC accreditation is a recognition of the Group's responsible forest management practice and it gives customer confidence that our products are from well-managed forests and are able to provide environmental, social and economic benefits.

At the same time, the Group emphasizes the importance of protecting the privacy of our customers and business partners. The Group's Information Technology Department has maintained a comprehensive data protection system to ensure that the data we collect is protected and our customer's privacy is respected.

NO complaints
received from customers
or business partners due
to disclosure of
information during the
Year

The Group strictly abides by the regulation regarding the collection, processing and use of the information collected from our customers and business partners. When signing a contract with a customer or a business partners, a term on confidentiality of their information will be included to avoid disclosure of their information.

### (C) <u>ANTI-CORRUPTION</u>

Greenheart values credibility and integrity and prohibits any form of corruption or malpractice such as bribery, money laundering, extortion and fraud. We believe that strong ethical conduct is essential in building a sustainable business and gaining the trust from our employees, customers, suppliers and other business partners.

Binding terms have been included in their respective employment or service contracts to ensure that directors and employees act in accordance with the Group's requirements on anti-corruption. Under no circumstances are they permitted to use inside information for their own private gains. At the same time, the Company has been consistently improving its internal control system in order to prevent corruption and fraud.

Staff handbook which lays out the Company's expectations and guiding principles on bribery prevention is provided to each employee. Meanwhile, we encourage employees to report any malpractice and misconduct directly to the Human Resources Department or the senior management. All reports will be treated at all times with confidentiality.

NO confirmed legal case brought against the Group and its employees concerning corruption during the Year During the product/service providers' selection or procurement processes, employees are reminded to avoid misuse of authority or being engaged in situations which could affect their ability to make decisions.

# COMMUNITY INVOLVEMENT

Being a responsible corporate citizen, Greenheart has been actively involved in community projects near the towns and cities where we worked. Our strategy is focused on working with other non-profit organizations to improve underprivileged people's lives and promote environmental awareness.

### (A) <u>CORPORATE GIVING</u>

During the Year, Greenheart has donated a total of approximately HK\$46,000 to different charity organizations. We have also donated used computers and equipment for refurbished projects led by non-profit organization.

### (B) EMPLOYEE VOLUNTEERING

In addition to donations, we also encourage our employees to contribute their time and efforts in various local community projects in the regions where we operate.

### **Hong Kong Head Office**

- (i) Join the recycling of toner cartridges (Organizer: Greeners Action)
- (ii) Our employees has purchased eco-friendly bags to support the Sanrio Volunteer Team (Organizer: Haven of Hope Christian Service)
- (iii) Join the No Air Con Night 2015 (Organizer: Green Sense)
- (iv) Our employees participated in the Qile Cake ( 耆樂餅 ) charity sale project, which aimed at raising funds for the elderly care service (Organizer: Haven of Hope Christian Service)



Greenheart has been awarded the "Caring Company" Logo by the Hong Kong Council of Social Service in March 2016 in recognition of our significant efforts on social responsibility.

### **New Zealand Division**

We have worked closely with schools, police and trucking companies to improve safety on the roads and ensure children are made aware of the possible dangers. Greenheart has also liaised with the Department of Conservation to ensure that the New Zealand public can have access to safe areas of the forest for recreation.

### **Suriname Division**

The local management and employees are committed to giving back to the community through various channels. For instance, collaboration and alliances with institution and conservation groups for the betterment of wildlife, agricultural and environment, provide education to local workforce and senior stakeholders, and provide assistance to local community and government department to expand business opportunities.

On top of this, we respect and care about the cultures and institutions of the indigenous and tribal people in Suriname. Although Suriname has not ratified The Indigenous and Tribal Peoples Convention, 1989 (the "ILO Convention 169"), we have incorporated the principles laid down in the ILO Convention 169 into our Group's policies which include:

- Sonsult with the indigenous people concerned with regard to the management of forest resources that may affect them
- ecognize the rights of ownership concerned over the lands that the indigenous people traditionally occupy
- Insure that the indigenous people enjoy equal opportunities and fair treatment in employment

In order to build and maintain good enduring relationship with our local communities, regular meetings were taken place to ensure complaints, issues and questions are addressed in an efficient way.