



# GREENHEART GROUP: IN PICTURES

New Zealand & Suriname 2011 & 2012







# 1. NEW ZEALAND: RADIATA PINE PLANTATIONS



**Greenheart Group**  
always growing

# Radiata Pine



Photo: *Radiata Pine*, a popular softwood species used predominantly in construction

# Mangakahia Forest

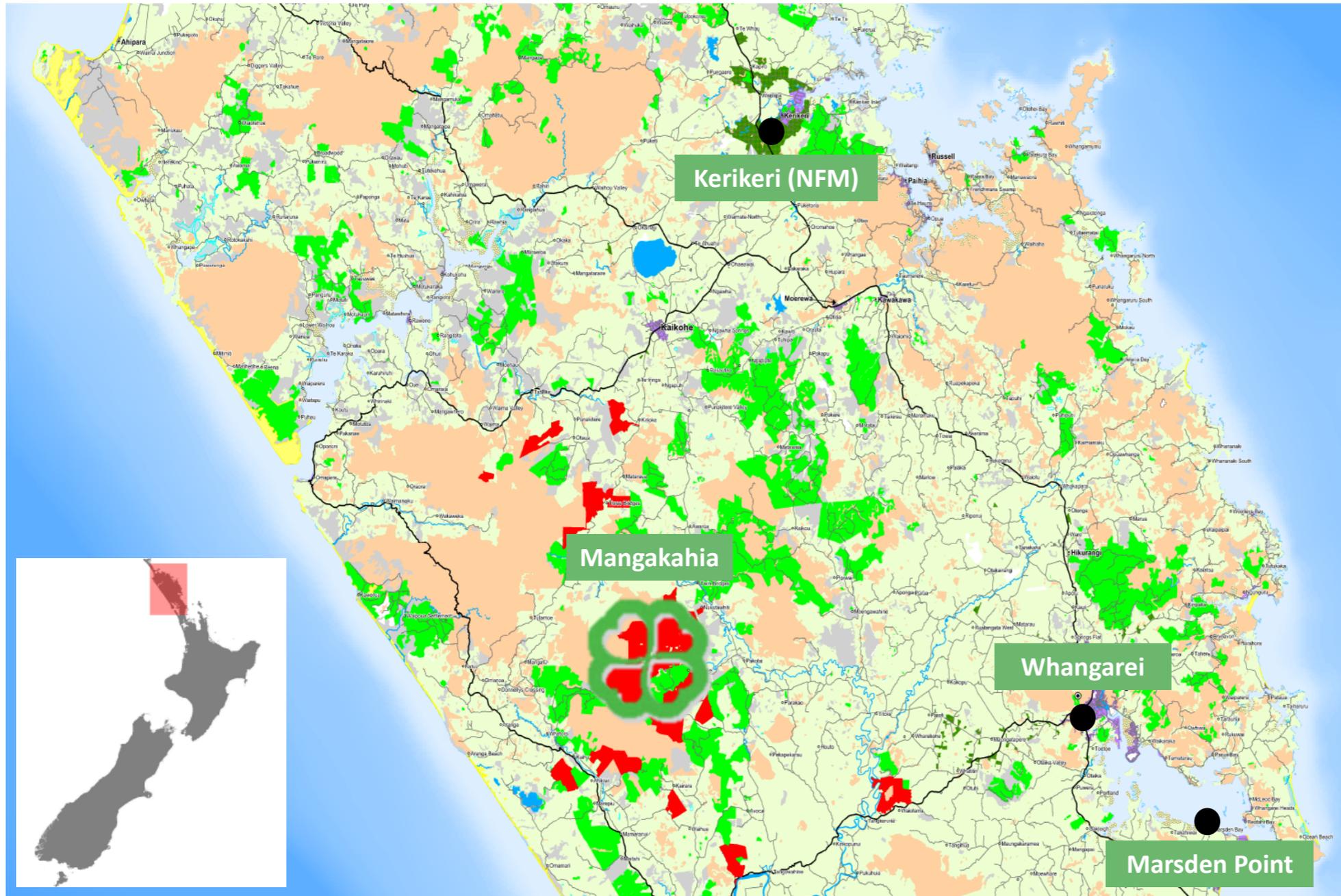


Photo: *Map of Mangakahia Forest Plantation*

**Mature forest**

**Trees average age 25-30 years**

**Northland region**

**Ideal climate for softwood growth**

**Excellent transportation to nearby shipping port**

# Mangakahia Operations



Photo: *Harvesting in Mangakahia – logs are harvested and pulled up via cable and then stored at the landing site*

# Mangakahia Operations



Photo: Log landing site

# Logs Transport



Photo: *Logs are transported by road to port*

# Storage, Inventory & Allocation



Photo: Greenheart logs stored for allocation. Approximately 70% are exported to China

## Log Scaling & Loading



Photo: Top left: **Registration** Bottom left & Right: **Ship loading**

**Marsden Point, the largest port in the Northland region is ideally suited for log exports**

**New Zealand expects to export over 7 million m<sup>3</sup> of radiata pine to China in 2011**

# World Class Logistics



Photo: Aerial view of Marsden Point, largest port in Northern Region of New Zealand, capable of storing up to 150,000 m<sup>3</sup> at any time

# Ship Loading in Marsden Point

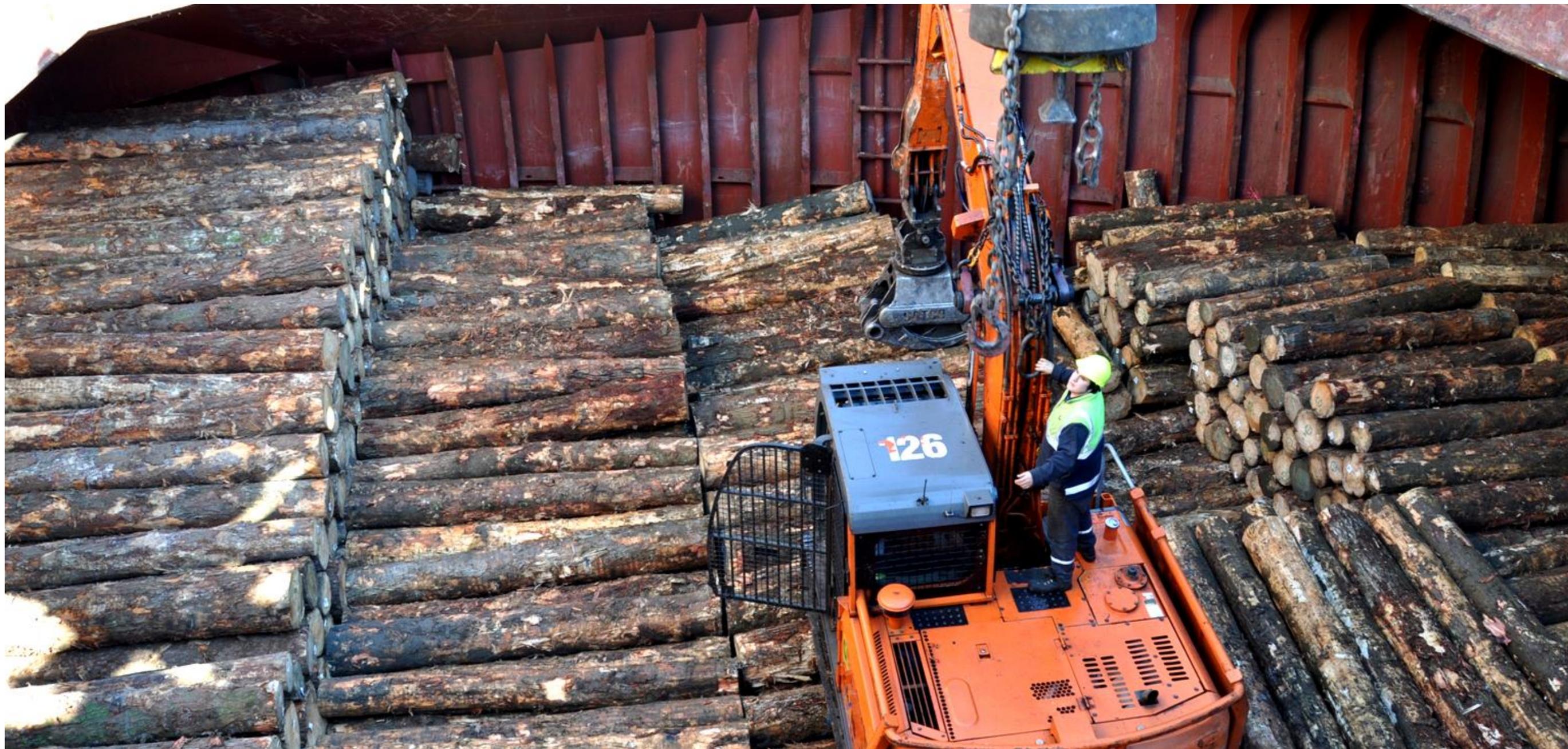


Photo: *Loading onto Ships*

# 30,000 Ton Log Export Vessel



Photo: *Special log ships are used to carry large volumes of timber*

# Softwood Uses



Photo: Top Left: **Framing Timber** Top Right: **Fencing** Bottom Left/Right: **Roofing** Source: [www.chhproducts.co.nz](http://www.chhproducts.co.nz)

**Softwood timber is ideal for construction, framing and roofing**

## Domestic Sawmill and Woodchip pile



Photo: *Marasumi Woodchip Pile*

**Logs are also sold  
to domestic  
woodchip and pulp  
mills**



## 2. SURINAME: TROPICAL HARDWOOD CONCESSIONS



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# Suriname

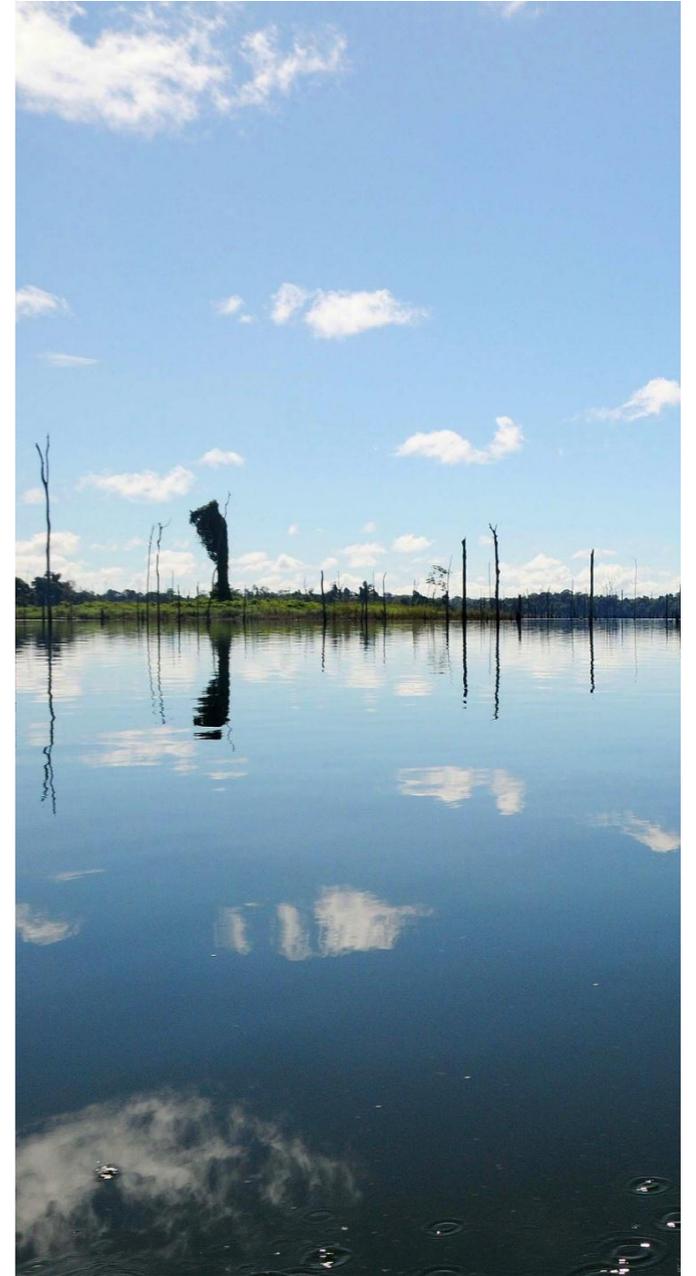


Photo: From left to right: Suriname Flag, Local Surinamese Woman, Statue of Johan Adolf Pengel, Natural Habitat of Suriname

# Diverse Cultures



Ethnic	Creoles	Chinese	Hindustanis	Javanese	Maroons	Amerindians	Whites
% of total population.	28%	8%	34%	15%	8%	2%	5%

Photo: From left to right: Locals at Paramaribo festival, Chinese Church, Local Maroons, Sand Landy local tribe

# Tropical Hardwood Concessions



Photo: *Aerial View of Suriname Forests*

# Greenheart's Hardwood Logs



Photo: Tropical Hardwood logs

# Greenheart's Operations



Photo: *Staff house in Eastern Suriname Concession*

**Greenheart owns tropical hardwood harvesting rights and concession rights in Suriname**

# Greenheart's Concessions



Photo: Top Left: *Western Suriname Concession* Bottom Left: *Greenheart Central Log Yard* Right: *Investors at Greenheart's Concession*

## Sustainable Forest Management



Using Geographic Information System (GIS), each tree is individually inspected, inventoried and marked before harvesting and every log receives a unique number which allows chain of custody throughout the harvesting and transport cycle

Photo: Top Left: *Explaining how selective harvesting works* Bottom Left: *Marking of tree* Right: *Tagging of tree*

## Reduced Impact Harvesting



Photo: *Directional Felling*

**Trees are harvested using directional felling techniques**

**Directional felling minimizes damage to the surrounding trees and forest vegetation**

**A maximum annual allowable cut of 25 m<sup>3</sup> per hectare per every 25 years**

# Greenheart's processing facilities



Photos: *Greenheart's new processing facilities have started production*

## Sawmill processing



Photo: Top Left: *Saw doctor* Top Right: *Current sawmill in operation* Bottom Left: *Further processing into finished products* Bottom Right: *Quality control*

**Processing logs into lumber and other high valued finished products increases profitability and benefits to the local economy through greater jobs and training**

# Common Tropical Hardwood Species

Boetrie



Djinja-udu



Ingipipa



Kimboto / Makagrín

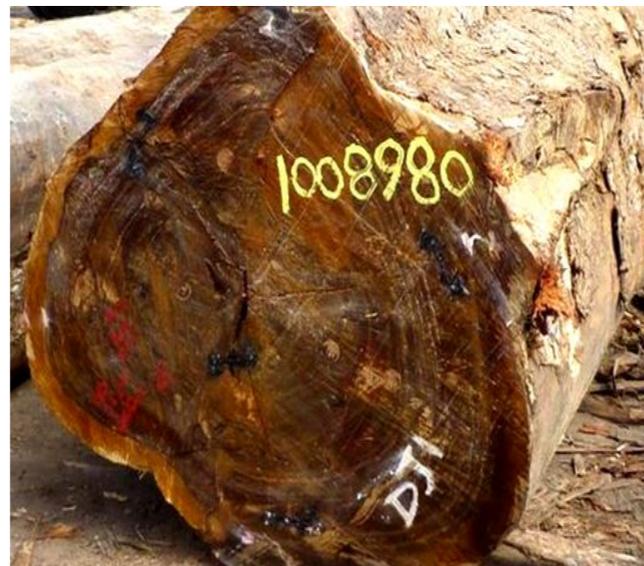
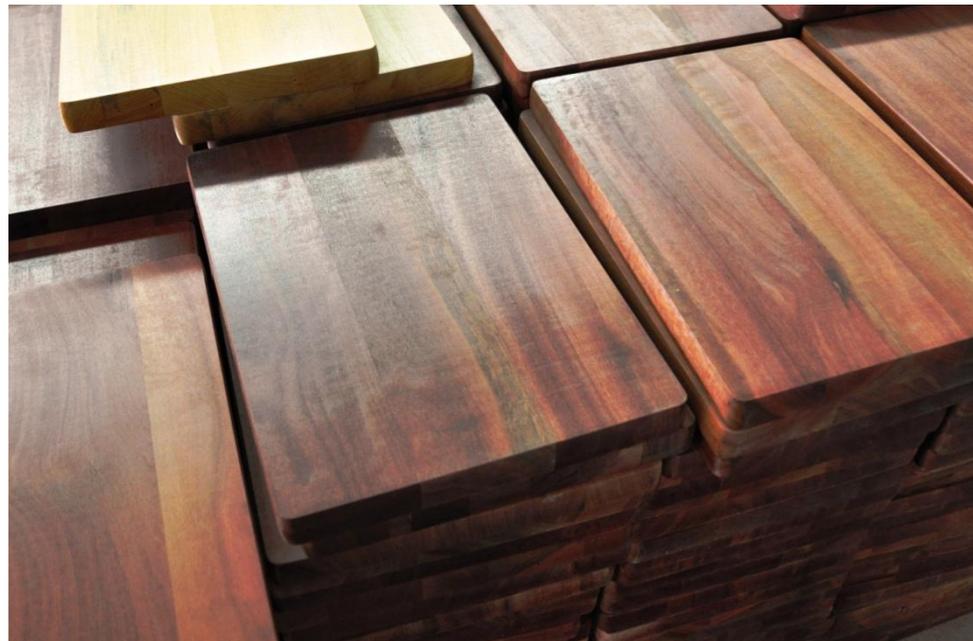


Photo: Tropical Hardwood logs from Greenheart's Western Suriname Concession

# Greenheart's High Quality Hardwood Products



**Greenheart's tropical hardwood products are exported to China, Europe and the Caricom nations**

Photo: Top Left: **Hardwood Sawn Lumber** Top Right: **Hardwood Panels** Bottom Left: **Hardwood boards** Bottom Right: **Hardwood Chopsticks**



### 3. ALWAYS GROWING



**Greenheart Group**  
always growing

# Our Employees



**Our people are our most important asset**

**Ongoing training is provided to all employees**

Photo: Top Left: Ty Wilkinson (Suriname Regional Director) Top Right: David Wu (VP Corporate Development & IR) speaking to Suriname staff Bottom Left: Concession living quarters Bottom Right: Campsite kitchen

# Our Communities



**Greenheart plays a major role in the development of our local communities**

Photo: Top Left: Greenheart Staff helping with opening of Wasabo Market Top Right: Greenheart Suriname Football Team Bottom Left & Right: Greenheart staff helping local elderly center

# Local Tribes



**Greenheart works side by side with the people who live in our concessions**

Photo: Top: Paul Westbrook (COO West Suriname) and David Wu (Vice President of Corporate Development & Investor Relations) meets with local tribes

## Greenheart's effort on climate change



Photo: Top: Ty Wilkinson (Suriname Region Director) presents donation to the CCDA

**Greenheart  
Sponsors Climate  
Compatible  
Development  
Agency**

**Greenheart  
partners with the  
government in  
climate change  
initiatives**

# Greenheart Housing & Construction N.V.



## Greenheart Housing

A new initiative in Suriname to help build low-cost homes for local communities using Greenheart timber

Photo: Top Left and Bottom Left: *Computer designs of new housing to be built using Greenheart timber* Top right: *Greenheart Housing Model* Bottom right: *Newly constructed Greenheart House*

## Hong Kong Office



Photo: *Greenheart Hong Kong during Chinese New Year celebrations*

**Hong Kong  
headquarters**

**40 full-time staff**

**New office opened  
in February 2011**

[www.greenheartgroup.com](http://www.greenheartgroup.com)

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