

# ANNUAL REPORT 2008

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COMPANY REPORT 2009



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# INTRODUCTION

## COMPANY PROFILE

Green Resources AS is a plantation, carbon offset, forest products and renewable energy company. The company was established in 1995 and is a private Norwegian company with 60 shareholders. It employs more than 3,000 people and has invested NOK 300mn (USD 55mn) in its African operations since its inception. Green Resources operates in Mozambique, Sudan, Tanzania and Uganda.

The company is Africa's leading forestation company and has more than 14,000 ha of forest. It is growing trees to generate carbon credits and bioenergy and to manufacture wood products. Green Resources has probably planted more new trees than any other private company in Africa during the past ten years; a record 4,200 ha of new forest was planted in 2008. In addition, the company holds more than 200,000 ha of land for future planting and conservation. It started the first harvest from its own forest in 2008.

Green Resources' carbon credit projects include forestation, bioenergy and renewable electricity. It is a leader in forestry-derived greenhouse gas emission reductions and received the first verified carbon credits in 2000. All Green Resources' carbon offset revenues will be reinvested in new carbon offset activities or be used for community developments in Africa, making the credits some of the most attractive in the world.

Green Resources' industrial operation, Sao Hill Industries, is East Africa's largest sawmill and one of the largest transmission pole producers in the region; it also has carpentry and joinery plants. It generated more than USD 10mn of revenues in 2008 and has several sales branches throughout Tanzania.

Green Resources' strategy is based on sustainable development of the areas in which it operates. The company believes that forestation is one of the most efficient ways of developing and improving social and economic conditions for people in rural areas. Green Resources aims to be the preferred partner for local communities in these areas. It also wants to be the favoured African employer within its industry.

Green Resources aims to follow the highest international environmental standards by conserving natural forest and other valuable habitats. The oldest forest is certified according to the Forest Stewardship Council's standards, the world's leading standard for environmental and sustainable forest management, and all forest will be certified according to these standards. As part of this policy, the company only harvests plantation forest, plants at least ten new trees for every one tree that it harvests, and only plants on grassland or degraded forestland. It focuses on a wide variety of species, including pine, eucalyptus, teak, measopsis and various indigenous trees.



View from Idete plantings

## MAJOR EVENTS 2008

### 4,200 ha new forest planted

An all-time-high record of planting in 2008, 50% more than 2007, and three times the level of three years ago.

### FSC auditor recommends certification

SGS, an accredited FSC auditor, certified Green Resources' main Tanzanian plantations, Mapanda and Uchindele, under the Forest Stewardship Council's standards, the world's leading certification system for sustainable forest management.

### Strong industrial growth

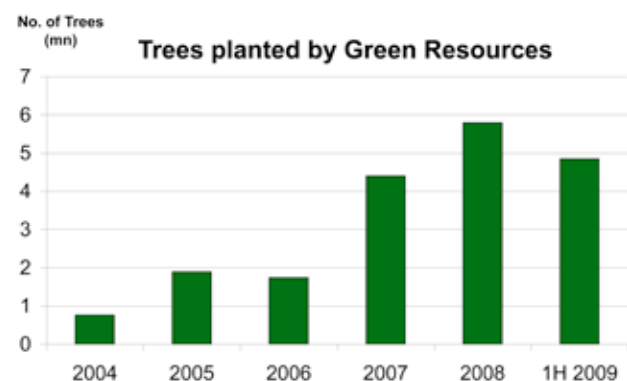
Revenues increased by 64% reaching USD 10mn and the EBITA margin recovered to 23%, back to 2006 levels after a poor 2007. It was the fourth year averaging 50% pa revenue growth.

### Raising USD 32mn of financing

In December 2008, Green Resources raised USD 32mn in new equity and convertible debt, primarily from Phaunos Timber Fund, in addition to an existing shareholder, securing continued strong growth of the company.

### Development grants

Green Resources received close to USD 1mn in development grants from the IFC, Norway and Austria, an all-time record for the company.



## MAJOR EVENTS 1H 2009

### Framework agreement in Mozambique

An agreement to develop a 125,000 ha forest plantation in Northern Mozambique on up to 200,000 ha of land was signed with the Ministry of Agriculture, the second such agreement made in Mozambique.

### USD 25mn financing with IFC and Norfund

Green Resources signed agreements for ten-year loans with the IFC and Norfund for the development of plantations and industrial operations in Tanzania's Southern Highlands. This is the IFC's largest ever loan to a private company in Tanzania.

### World's first VCS validated forestry project

In July, the Mapanda/Uchindile forest project was the first such project in the world outside of the US to receive VCS validation, the leading standard for voluntary carbon projects. The project will generate 3.5mn tCO<sub>2</sub> offsets through 2020.

### Agreement with Norwegian Peace Corps

Concluded an agreement for North-South and South-South co-operation, including eight exchange candidates.

### Contract for sale of carbon credits

Agreed to sell temporary CERs to Norway from the Idete CDM reforestation project, pending project approval.

### Harvesting from our own forests

Extensive harvesting began in our Ugandan and Tanzanian forests, logging almost 20,000 eucalyptus poles.

### Expansion in Tanzania and Sudan

Title awarded for 15,000 ha land in Tanzania's Southern Highlands and for a large reforestation and conservation project in Southern Sudan.

FIVE YEAR SUMMARY OF GREEN RESOURCES						
		2004	2005	2006	2007	2008
Revenues	USD mn	6,1	5,7	6,1	16,8	24,5
of which sales	USD mn	3,0	2,6	4,2	6,0	9,7
Operating profit	USD mn	2,5	1,9	1,1	6,5	10,3
Net profit	USD mn	1,2	-0,5	-0,3	3,7	5,8
Shareholder's funds	USD mn	9	9	15	34	49
Net debt	USD mn	5	7	7	13	24
Equity and convertible issues	USD mn	1	1	5	12	26
Capital investments	USD mn	1	1	1	6	9
New forest planted	ha	446	866	1 072	2 386	4 212
Total forest	ha	2 298	3 164	4 236	6 622	10 834
Trees planted	no. (mn)	0,76	1,89	1,74	4,40	5,79
Tax, other payments	USD	769 173	416 557	1 052 937	1 597 866	1 991 869
Community support	USD	899	212 794	42 288	142 259	302 029
Return on equity	%	na	-5,3	-2,6	15,3	14,0
Shares	no.	14 050 650	14 891 680	17 846 470	22 901 620	26 569 079
Earnings per share	NOK	0,50	-0,20	-0,11	0,95	1,22
Book Value per share	NOK	3,84	3,96	5,32	7,98	12,81
Exchange Rates EoY	USD/NOK	0,165	0,148	0,161	0,185	0,143
Exchange Rates AV	USD/NOK	0,165	0,148	0,161	0,851	0,177



Juha Niemelä (left) and Mads Asprem

Dear Stakeholders,

Green Resources' development continued apace during the last year and the company is well positioned for continued successful growth over the next few years. Our main focus remains the expansion of the planting; we established 4,200 ha new forest in 2008, up from a net figure of 2,386 ha in 2007, and planted 3,500 ha during the first half of 2009, bringing the total forest to 14,360 ha. We also established our first major plantation in Mozambique and started trial planting in Southern Sudan during 2008. A second priority during the last two years has been to optimise the growth rate and quality of the trees. To this end, we have hired more managers and invested in better land preparation, super-absorbents and fertiliser, better infrastructure and a new, more sophisticated nursery system. This development will continue into 2010 and the full effect of the investments will be seen within the next couple of years.

In 2008, the major plantations of Mapanda and Uchindele in Tanzania received certification according to the Forest Stewardship Council (FSC) standard, the world's leading standard for sustainable forest management. Green Resources is committed to getting all our activities FSC certified. At the end of 2008, the first harvest of transmission poles began in Tanzania and, during 2009, our objective is to harvest more than 15,000 poles from our own forest, equivalent to about 60% of all poles sold in 2008. However, Green Resources is also a major buyer of wood from private farmers in Tanzania's Southern Highlands and this will continue, spreading the benefit of our industrial operations to a wide part of the local community.

Green Resources is well placed to be a major participant in the carbon market and the fight against climate change, an issue that is increasingly being taken seriously around the world. We have

already captured and stored 1.1mn tons of CO<sub>2</sub> in our plantations and the existing forest should sequester 6.6mn tons of CO<sub>2</sub> by 2020. Including planned future planting we expect to capture 21mn tons of CO<sub>2</sub> by 2020 and consequently make a significant contribution to fighting climate change. Carbon finance has been an integral part of our business plan since 1996, but it has been a long and difficult process. In 2009, Green Resources became the first company in the world outside of the UD to validate a forestry carbon project, the 3.5mn ton Mapanda/Uchindele project, based on the Voluntary Carbon Standard, the most rigorous and, since 2008, the leading standard for the voluntary carbon market. In addition, a sales contract has been signed for a 3mn ton CDM reforestation project with a European sovereign buyer, with the transaction pending UNFCCC approval of the project. Green Resources is also developing renewable energy and charcoal-related carbon projects.

Green Resources' carbon credits have unique social and environmental benefits. Forestry carbon has unparalleled development effects, mostly benefiting people in rural areas of some of the world's least developed countries. Furthermore, establishing new sources of wood from plantations, replacing charcoal and building material from natural forests, is a prerequisite to halting deforestation. And, we believe uniquely, 100% of the revenues generated from Green Resources' carbon credits will be reinvested in the countries where the credits were generated, with 10% going to community projects.

Our industrial operation has performed well during the last four years, generating about 50% pa revenue growth. Earnings were satisfactory in 2008, following a poor 2007, with an EBITDA margin of 23%. Revenues increased by 17 % YoY during the first half of 2009, with an EBITDA margin of 22%. Margins are expected to expand in the seasonally better second half of the year. Transmission poles continue to be the key revenue driver, and the operations are benefiting from the commissioning of a new world-class, fully automated factory in 2008. A major milestone for the industrial operations during the first half of 2009 was a delivery of 300 tons of charcoal to a local cement factory, the first sale from the new charcoal plant.

Green Resources is a private, profit-oriented company, but our operations have significant developmental environmental and social benefits. We believe that, dollar for dollar, an investment in Green Resources has larger sustainable development benefits than much of the traditional development aid. We have directly created more than 3,200 jobs and including indirect jobs about 10,000. We generated USD 2mn of tax and other public revenues in East Africa in 2008 and we have established a renewable resource base that will become the basis for future energy and industrial operations. We have received almost USD 1mn of various grants since the start of 2008 and we expect this to rise as the focus on result-oriented development aid increases.

During 2008, the main role of senior management was to secure long-term equity funding for the company. The world's financial crises created major problems and it was a difficult year to issue equity for any company. However, at the end of 2008, Green Resources raised USD 32mn of financing, chiefly from Phaunos

Timber Fund, but also from an existing shareholder. The share price reflected the investment environment, but we were pleased to be able to issue shares at the same price as during the previous equity issue.

The main event in 2009 has been the signing of a framework agreement with the Mozambique government to develop a 125,000 ha energy/pulp wood plantation project in Northern Mozambique. We believe this is one of the best locations in the world for a future pulp mill/wood chemical plant. We have also received a title for 179,000 ha land in Southern Sudan, where we will establish a major forest conservation project. In addition, about 20% can be planted with high-quality hardwoods, including teak and eucalyptus, creating the basis for a major regional solid wood processing industry. There has been a steady expansion of the existing plantations in Tanzania and Uganda.

In 2008, Green Resources approved a USD 60mn five-year investment project in the Southern Highlands of Tanzania, of which 20% has been implemented to date. The project includes planting 12,000 ha of new forest, establishing significant forest infrastructures, including a new sawmill, transmission pole plant, glue-laminated panel plant and charcoal briquette factory, as well as a 15MW combined heat power plant at the core of the facility. In May 2009, Green Resources signed a USD 18mn loan agreement with the IFC as part of this programme. This is the IFC's largest-ever financing to Tanzania. A USD 7mn loan on the same terms has been approved by Norfund. The main part of the loan is a ten-year fixed-rate US dollar loan, which currently costs about 7.5%. Green Resources is still seeking grants and senior financing, and certain regulatory approvals in order to complete the project.

In Uganda, Green Resources is completing the construction of a pole treatment plant and a small sawmill, in order to ensure maximum value creation from the wood being harvested from the company's own forest, and to supply transmission pole customers in the Lake Victoria region. In Tanga, Tanzania, the company is developing a wood pellet project, as the first step of a major forest and industrial development plan.



*Nursery sowing machine*

Green Resources generated total group revenues of NOK 138mn (USD 24mn) in 2008, up 41% compared to 2007. Operating profit increased to NOK 58mn (USD 10mn), compared to NOK 38mn in 2007 and an average of NOK 11mn in each of the three previous years. The group recorded a net profit of NOK 33mn (USD 6mn), compared to NOK 22mn in 2007, primarily driven by an increase in biological asset values. Sales revenues, almost entirely from the industrial operations, increased from NOK 35mn in 2007 to NOK 54mn (USD 7.8mn) in 2008, driven by higher prices and volume. The net gain in biological asset values was NOK 84mn (USD 12mn), up from NOK 63mn in 2007 and about three times the average level during each of the previous four years. This gain was driven by the large increase in the planting area, while more conservative assumptions in the BAV model offset some of the increase.

Juha Niemela was elected the new chairman of the company in 2009. Niemela was CEO for UPM-Kymmene, Europe's largest and most successful forest and paper company, from 1996 to 2004, and brings tremendous experience and knowledge. Liana Luke, managing director of Phaunos Timber Fund, a world leading, publicly traded timber fund, also joined the board. Arlito Cuco and Isaac Kapalaga joined the company as executive directors. Jossy Byamah, the managing director of our Ugandan operation since start-up in 1996, retired after 13 years of outstanding service to the company.



I would like to thank our employees, capital providers, suppliers and forward-looking politicians for their crucial contribution to our past successes and ask for continued hard work, creativity and cooperation to enable even greater achievements in the future.

Mads Aspren  
Managing director  
1 August 2009



New pine plantation

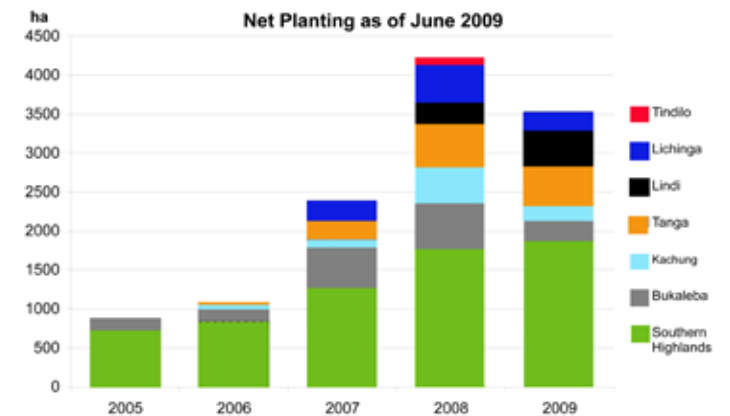
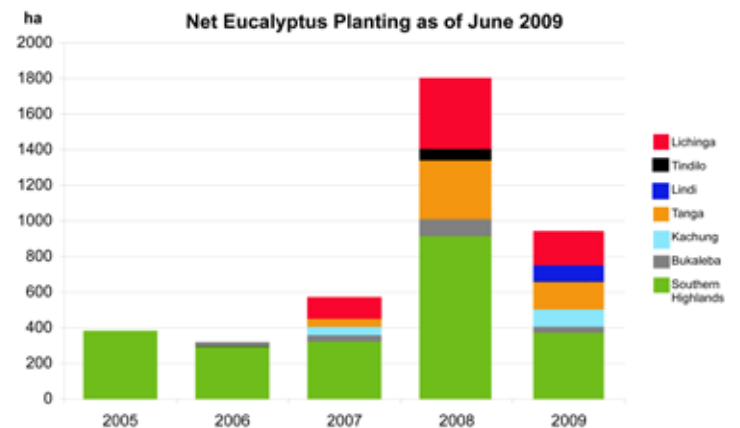
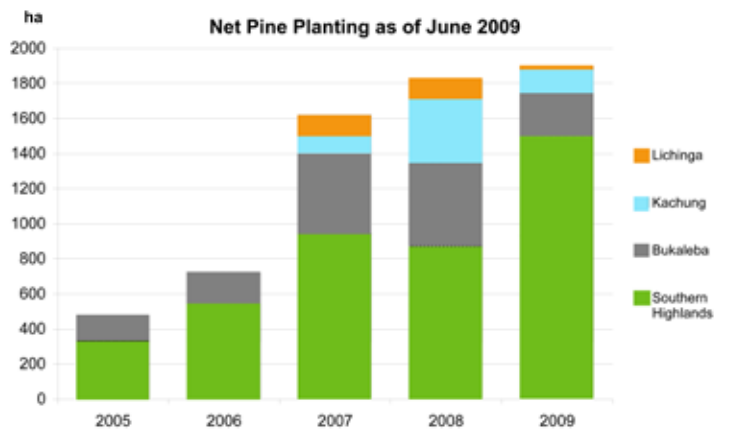
Green Resources had over 14,000 ha of forest plantations by mid-2009. In the first half of the year, 3,500 ha had been planted while 4,212 ha of new forest was verified planted in 2008, 70% more than the previous annual planting record set in 2007. At the end of 2008 there were 10,800 ha of standing forest, consisting of 5,653 ha of pine, 4,344 ha of eucalyptus and over 800 ha of other species. More than 7mn trees were planted in 2008 compared with 4.4mn in 2007.

The main achievement in 2008 was the Forest Stewardship Council (FSC) certification of the company's major plantations in Tanzania, Mapanda and Uchindele. Green Resources is the only Norwegian company that owns FSC certified forest. Decisions were made to invest in a large automated nursery and a range of new equipment and vehicles were purchased. The nursery successfully started up in June 2009.

Green Resources is in the process of developing a large pulp and energy wood project in Northern Mozambique. This is one of the best sites for a future large forest industrial operation, including a pulp mill, in the world. The company has also developed a teak, eucalyptus pole and forest conservation project in Southern Sudan, and has successfully expanded its planting areas in other regions.

CONTINUED EXPANSION IN 2008 AND 2009

Green Resources Ltd (GRL), the plantation company in the Southern Highlands of Tanzania, established 1,800 ha of new forest in 2008. On the northern coastline of Tanzania, Tanga Forest Ltd planted more than 500 ha, while Lindi Forests Ltd established 250 ha on the southern coastline. In Uganda, over 1,000 ha of new forest were planted in the Bukaleba and Kachingu plantations. In Mozambique, the Lichinga plantation in Niassa province planted another 459 ha while another 61 ha of trial planting took place in Namapa. The first trial planting also took place in Sudan at the Tindilo plantation, where 74 ha were planted. In August, 75 ha of newly planted forest were lost to a fire in Tanga and replanted again in October. There was also a small fire in the Bukaleba plantation, and there were additional write-downs of areas due to poor survival rates in previous years.



## THE LEADING AFRICAN TREE PLANTING COMPANY

Green Resources has maintained its position as Africa's leading forestation company, and intends to continue strengthening this position by expanding its existing plantations as well as seeking new ones. The company aims at planting over 6,000 ha in 2009 and is further expanding the planting capacity in 2010. The company's uniqueness is shown by its locally built plantation organisations and the fact that it operates in 12 different locations in Mozambique, Sudan, Tanzania and Uganda. Green Resources is well placed to increase its annual planting over the coming years.

## HIGHER GAINS FROM BIOLOGICAL ASSETS

Gains from the valuation of biological assets were NOK 84mn in 2008, up from NOK 63mn in 2007. As a result of a complete verification of the aggregated planting belonging to GRAS companies, significant areas previously included in the BAV have been written off. This includes 1,012 ha in Green Resources Ltd, 122 ha in Busoga Forest Company and 217 ha in the Norwegian Afforestation Group in Uganda. There are several reasons for this, including previous inaccurate mapping, losses to drought and weed competition, and uprooting of plantings due to expanded buffer zones around conservation areas. See Note 8 under the Accounts section for a detailed description of the biological asset valuation.

## 3,500 HA PLANTED SO FAR IN 2009

During the first five months of 2009 Green Resources planted more than 3,500 ha, adding over 30% to the total planted area. The majority of this planting occurred at the three main plantations in Tanzania's Southern Highlands, where more than 1,800 ha of new forest were established. Planting will begin again in the Southern Highlands in November/December.

The plantations in the coastal regions of Tanzania established nearly 1,000 ha of new plantings during the first half of 2009. Additional planting will take place in Tanga during the short rains of October-November. In Uganda, both planting companies increased their planting compared to last year to more than 450 ha, despite very low and late coming rains. The Ugandan planting during the short rains in

the second half of the year is expected to exceed the planting during the first half of the year. The planting season in the Niassa plantation in Mozambique runs normally from November to March, and the planting reached more than 200 ha at the start of 2009, at the same level as last year.

## FSC CERTIFICATION

Green Resources is committed to complying with FSC standards within all spheres of its operations and project locations. The company's two oldest plantation projects (Uchindile and Mapanda) in the Southern Highlands of Tanzania were certified according to the requirements of FSC in 2008 and successfully underwent their first surveillance by the SGS, the Swiss certification company, in 2009. Additionally, the company's forest projects in Uganda and Mozambique have undergone the pre-assessment for FSC certification and have been recommended to continue with the next certification steps in order to obtain the FSC certificate for these locations.

The FSC is a non-profit organisation, established in 1993 and devoted to encouraging responsible management of the world's forests through its set of FSC principles and criteria (P&C). The leading idea behind its certification scheme is to set high standards for responsible forest management worldwide and promote the use of certified forest products through its distinctive labelling.

Major environmental organisations support

and encourage FSC certification, while main retailers and consumers support well-managed forestry and its benefits by purchasing wood and paper products with the FSC label. FSC certification is a major advantage for all serious operators in the forest sector and will enable the processing industry to command higher export prices, as well as increasing transparency and most likely government revenue collection. Green Resources is actively lobbying for FSC certification of all government forest in East Africa and argues that donors to the forest sector should make FSC certification a condition for continued long-term support to the sector.

FSC certification is carried out by FSC accredited third-party certification bodies, which assess the forest management operations in accordance to the FSC P&Cs. FSC ensures forestry is practised in a way that ensures meeting the social, economic, ecological, cultural and spiritual needs of present and future generations. FSC's ten principles and 56 criteria set the basis for environmental responsibility, social benefits and economic viability and include managerial aspects as well as environmental and social requirements. There are several competing forest certification schemes, but we believe that the FSC rules are the strictest and FSC's social and environmental requirements the highest.

The certification bodies provide two types of FSC certification, where forest



Forest discussion

management (FM) certification guarantees the quality of the forest management and the chain of custody (CoC) certification guarantees the origin of the raw material through the assessment of all successive stages of processing, transformation, manufacturing and distribution.

### HARVESTING OPERATIONS STARTED

The first harvest of eucalyptus poles from Uchindele, Tanzania took place in 2008 based on the 1997 plantings. 1,600 poles were delivered in 2008, and about 10,000 poles will be harvested from the much larger 1998 planting during 2009. In Bukaleba, Uganda, inventory and marking of transmission poles for harvesting in 2009/10 totals 9,800 poles, which will feed into the new treatment plant under construction in Jinja. This will increase the revenues per cubic metre for deliveries to the markets in Kenya and Uganda due to shorter transport distances. The implied price for the logs will give a profit over and above that taken through the fair valuation of the biological asset values.

In Tanzania, more than 300 ha of eucalyptus will mature for harvesting between now and 2012 and an estimated 10,000 poles will be harvested annually for transmission poles with additional volumes for timber and energy wood. Commercial thinning from the pine plantations began in 2008 and annual harvests of 3,000-5,000m<sup>3</sup> are expected. From 2016, there will be a rapid increase in annual harvesting based on the increased planting since 2003.

### FRAMEWORK AGREEMENT FOR 125,000 HA LURIO PLANTATION

A framework agreement to develop a 125,000 ha forest plantation project in Northern Mozambique was signed by the Ministry of Agriculture (on behalf of the government of Mozambique) and Green Resources on 20 March 2009. Green Resources aims to develop the 85,000 ha plantation on 150-200,000 ha of land, or two-thirds of the requirement, while at least another 40,000 ha plantation will be targeted from out-growers. The Lurio is the largest river in Northern Mozambique, representing the border between the Cabo Delgado and Nampula provinces. The project is situated along the Nacala corridor, close to the railroad and the largest harbour in Northern Mozambique.

Under the agreement, Green Resources will develop a feasibility study for the implementation of the Lurio project, based on a pre-feasibility study submitted to the government in June 2008. Within ten months of signing the framework agreement, Green Resources will present a project proposal to the government of Mozambique. The government has agreed to create the necessary conditions required for the implementation of the project, such as agreements with state agencies as well as other public and private entities. Green Resources has dedicated more than 20 professionals to working on the feasibility study, in addition to hiring in a wide range of consultants.

The plantation phase of the project will employ more than 2,000 Mozambicans and during the project's full industrial phase, more than 5,000 Mozambicans will be employed. The first industrial operations will start up in 2016 focusing on charcoal and pellets, the second stage will start around 2019 with a focus on transmission poles, while the third and largest industrial operations will commence operation in 2022 focused on a pulp mill. The investment required to establish the plantations will be close to USD 200mn, while the industrial operations built to process the wood will require an estimated USD 2bn of investment.

The main aim of the Lurio project is to establish a forest with the capacity to supply wood pulp and paper production of 1.25 mn tonnes per year. Green Resources will undertake significant intermediate industrial operations until the wood supply is sufficient to build a world-scale wood pulp mill.

### LARGE FORESTRY POTENTIAL IN MOZAMBIQUE

Green Resources believes Mozambique has some of the best conditions in the world to establish large-scale forestry operations, and believes that Mozambique can develop one of the world's ten largest plantation-based forest industries within 20 years. This could create employment for tens of thousands of people and more than USD 1bn of export revenues. Mozambique has the potential to develop a forestry industry larger than that in South Africa, and Green Resources wants to be at the forefront of this development. The Lurio project is set to become the largest African forest plantation outside of South Africa.

### CARBON AND COMMUNITY PROJECTS

The Lurio project will sequester large amounts of CO<sub>2</sub> in the forests, creating a huge carbon sink, and the project will partly be based on carbon finance. It will also conserve areas of natural forest and develop these for reducing emissions from deforestation and degradation (REDD) carbon projects. The entire project will be based on the world's leading principles for sustainable forest management as determined by the Forest Stewardship Council. At least 5% of the developed land, or 5,000 ha, will be set aside for agriculture, contributing to securing the food supply in the region, biodiversity and stable employment. In addition, Green Resources will undertake significant community development projects, and contribute to the agricultural development of the areas.



Lurio team



## BUILDING THE PLANTING CAPACITY

### *Improved seed and better silviculture*

A number of initiatives have been taken to improve survival rates, growth and yields in the plantations. This includes imports of seeds from the best available sources in South Africa, Brazil, Costa Rica, Fiji, Australia, Kenya and Zimbabwe. A central seed storage facility has been established in Dar, and the objective is to procure a sufficient amount of seed for at least two years ahead, as shortage of seed has become an increasing problem.

Trial plots have been established in many of the plantations to test out different seed sources, use of fertiliser, aqua soil and spacing. In Niassa a trial with different types of eucalyptus and hybrids has been established in collaboration with the NCT Forestry Co-operative of South Africa and Green Resources has recently taken over a similar trial in Nampula, Mozambique. A third very successful trial of eucalyptus hybrids is taking place in Bukaleba, Uganda.

### *Central nursery*

Green Resources is currently operating 15 local nurseries throughout the plantations. It has proven to be a challenge to get even, high-quality seedlings produced at the right time, and the cost is relatively high in terms of labour and seed consumption. As a first step to upgrading the nurseries, the company has decided to build a central nursery at Green Resources Ltd (GRL) in Makungu village, centrally located to serve all the plantations in the region. The new tray filling and sowing machines look more like a bottling plant than a traditional nursery and it is the first of its kind in East Africa. The new technology enables the control of height, root collar diameter and produces a highly consolidated root structure in a shorter time than traditional nurseries, increasing the survival rate in the nursery and plantation.

With the automated irrigation and fertilisation system we can produce eucalyptus seedlings in 12 weeks and patula seedlings within 16 weeks. The new trays are very durable and are expected to last almost ten years before replacement. The new nursery system ensures safe transport of the seedlings to the plantation at a lower cost. The cells are designed to ensure optimum growth of roots, including the direction of the root hairs so no root constriction occurs, again increasing the

survival and strength of the tree in the plantation. In the first phase the nursery has been dimensioned to produce 2mn seedlings for the 2009/10 season and it will be expanded to 5mn seedlings for the 2010/11 season. Green Resources expects to construct similar nurseries in other parts of its plantations and the first investments have taken place in Lichinga, Mozambique and Tanga, Tanzania.

### *Implementing a new forest management information system*

As the size of the plantation under management increases, the need for better management systems has become important. During the first half of 2009, Green Resources purchased Microforest, which is an internet accessible plantation and natural resource management system encompassing modules for compartment based inventory, planning, scheduling, operations and logistics. The system is hosted on a central server and will be accessible via the internet from all of the company's plantations. The database is directly linked to a map server based on ESRI and Oracle software, and it is compatible with Green Resources' accounting and enterprise resource management (ERM) software, Accpac.

The implementation of the system started in June 2009, with training of key personnel from monitoring, mapping and plantation management. The system will enable the company to carry out better cost control, operational planning, and more accurate reporting, as well as documentation for carbon project monitoring and biological asset valuation.

Prior to any planting Green Resources is doing vegetation and land use mapping as well as mapping of compartments for planting. To increase the accuracy, high-resolution satellite images with 0.5-2m resolution are being procured for most of the plantations. These will be integrated in the new forest management information system.

### *Substantial investment in equipment and infrastructure*

The availability, quality, reliability and costs of hiring road construction and maintenance equipment from external contractors have proven variable, and the company is now in the process of establishing an internal base capacity.



Two-year old pine



Fire sign



Pruned pine in Bukaleba



New nursery machine



Construction of housing



Kapalaga (left) and Nyamaizi with two-years old eucalyptus

Lack of transport capacity has proven a constraint for the transport of workers, seedlings, water and equipment in most of our plantations. To substantially improve on this, ten four-wheel drive specially fitted trucks have been purchased. A large number of additional trucks, tractors and vehicles have been purchased since the start of 2008.

### Fire-fighting capacity improvement

Over the past four years, Green Resources' fire preparedness capacity has improved by establishing fire management plans, setting up stand-by crews, making wider fire breaks, fire towers and investing in hand-held fire-fighting tools. Last year a number of tractor-pulled water bowsers were procured. In order to enable more rapid response capacity, the company has recently purchased 12 pick-up mounted 'bakkie fire-fighting units', including tanks for 300-700 litre water, pumps and hoses. Since the start of 2008, 200 units of fire knapsacks have been purchased. Combined with investment in radio communication, transport capacity and better training, this is expected to continue the improvement of the company's fire response ability.

### TYPES OF WOOD

Green Resources mainly grows different species of eucalyptus and pine (patula and caribea), the traditional plantation trees in

Eastern and Southern Africa. Eucalyptus grandis, saligna and tereticornis are mainly grown for transmission poles and pulp/energy wood, while eucalyptus camaldensis and acacia mangium are grown for short rotations of pulp and energy wood in the hot and humid coastal areas.

It is important for Green Resources to diversify the forest base and it has established forests with a number of other species, including successful plantings of maesopsis and smaller plots of khaya anthotheca, grevillea robusta, milicia excelsa and a few other species. The company is developing programmes to significantly add to the proportion of land planted with indigenous species, but poor availability of seeds and lack of experience growing these in plantations are making this a slow process. Teak, an exotic to East Africa, is possibly the most interesting hardwood. In 2008, the planting of teak increased to almost 500 ha at lower altitude near the coast of Tanzania and in the new plantation in Southern Sudan.

In Uganda, the first compartment of about 20 ha was in 2008 established with plant material from clonal hybrid material of eucalyptus grandis camaldensis. The growth so far has been superior compared to the traditional high performing eucalyptus grandis from seedlings. A similar experience has been seen in two trial plots in Mozambique.

### Acacia

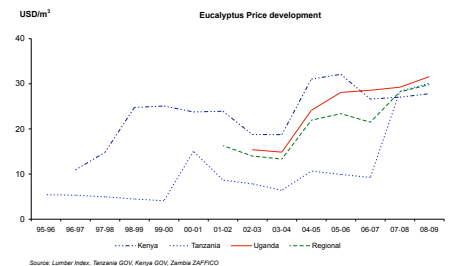
Acacia mangium is a perennial tree native to Australia and Asia. Common names for it include black wattle, hickory wattle and mangium. It is one of the major fast growing species used in plantation forestry due to its rapid growth, tolerance of very poor soils and excellent pulp characteristics. Acacia mangium grows naturally up to 30m tall, often with a straight trunk. It has superior pulping qualities and high density, beneficial for bioenergy, including charcoal, and for pulping. Green Resources established the first trial planting of acacia in 2007, and has plans to rapidly expand the planting with this species.

### African mahogany

Green Resources has made some trial planting of Khaya anthotheca, one of the species sold as African mahogany. It is a

heavily exploited tree species in East and West Africa and is listed on the IUCN Red List of Threatened Species. It can reach 60m in height, and occurs at medium to low altitudes in evergreen forests and riverine fringe forests. In Tanzania, it is commonly found in the foothills of mountain ranges, in well-drained soils, and swamp and riverine areas.

### Eucalyptus



Eucalyptus is the main raw material for papermaking, pulp, charcoal and, increasingly, for furniture manufacturing, transmission poles and building materials. It is anticipated that eucalyptus will play an increasingly important role in the global wood fuel market. The main eucalyptus plantation countries are Brazil, Australia, Chile, Uruguay, South Africa, Spain and Portugal.

Green Resources has planted mainly e. grandis in Uganda and e. saligna and e. grandis in Mozambique and Tanzania. In the coastal regions, the company is planting e. camaldensis and e. tereticornis. Growth projections based on existing plantations in the region indicate a final harvesting volume of almost 400m³/hectare at the age of 12-15 years, depending on the site index. With improved plant material and more intensive silviculture we believe the rotation age can be lowered by two to five years for the most recent plantings.

### Grevillea

Grevillea robusta is a native of eastern coastal Australia, commonly known as Australian silver oak. It grows in riverine, subtropical and dry rainforest environments that receive more than 1,000mm of average annual rainfall. It is a fast growing evergreen tree, reaching 18-35m tall with an average mean height increment of over 2m a year. Because it interferes relatively little with adjacent cash or food crops and produces firewood, poles and sawn timber of acceptable quality, the species is widely grown on small farms especially in the

tropical highlands of Africa where it is used in boundary marking. Green Resources has a successful trial in the Southern Highlands and is looking at increasing planting in the area, as well as in Lichinga, Niassa province in Mozambique and Bukaleba and Kachung in Uganda.

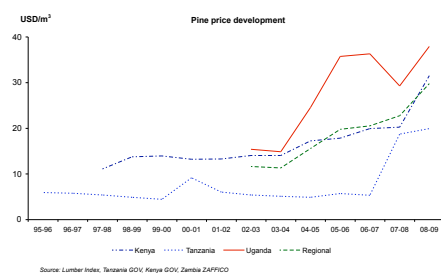
### Iroko

*Milicia excelsa* is a large deciduous tree found in lowland forest and wet savannah. It is widespread throughout tropical Africa. The species is heavily exploited and is listed in the IUCN Red List as a threatened species. Demand for it is very high, as it is a highly valued commercial timber with many uses in the construction industry. Iroko is normally grown in mixed or single planting on 60-100 year rotations and Green Resources is currently undertaking trial planting of it in Tanga and Lindi.

### Maesopsis

*Maesopsis emini* is a fast growing indigenous tree that occurs naturally in a band across West, Central and East Africa. It has considerable value as timber, with light brown wood mainly used for indoor construction. *Maesopsis* has been planted in Uganda as enrichment planting in tropical high forest, but there are also a few pure trial plantings. Green Resources has planted *maesopsis* in its Bukaleba plantation and plans to expand this further.

### Pine



Pine is used for sawn timber, in particular for building materials, but also furniture and packaging material, for wood panels and for paper pulp. Green Resources' pine plantations are aimed at high-quality pruned pine logs for the building and furniture market. 69% of the world's pine plantations are in the US, with most of the remaining plantations found in Brazil, Chile, New Zealand, South Africa, Australia and Uruguay.

Green Resources is mainly planting *pinus patula* in the highland plantations of

Tanzania, but is increasingly diversifying into other pine species to maximise the growth and reduce risks of pests and diseases. In Uganda, where the altitude is lower and temperature and rainfall is higher, planting is concentrating on *pinus caribea*. The pine plantations are grown with an expected rotation age of 20-23 years yielding 350-400m<sup>3</sup>/hectare at the final harvest.

### Teak

*Tectona grandis* is a tree originally from the areas of India, Thailand, Myanmar and Laos, but has been cultivated for plantations in the tropics for centuries. Good growth and high quality are associated with the requirement for deep, flat, and well-drained soils that are rich in calcium, a mean annual temperature of 22-27°C, and high annual precipitation with a marked dry season of three to five months. Teak is famous for its beautiful wood and prices have been steadily increasing for a long period.

### CONTINUED GOOD RETURN ON FOREST INVESTMENTS

Forest has been an attractive investment and is a rapidly growing asset class for long-term investors. During the last decade, international investors have made large investments in Latin America, side by side with industrial companies establishing plantations for pulp mills. The US remains the largest supplier of wood, however, and has the only liquid market for investments in forests (or timberland).

Returns for US timberland, as measured by the NCREIF Timberland Index, have exceeded 15% per annum for the period 1987-2008, compared to returns of 5.4% per annum for global equities (MSCI EAFE) and 8.6% per annum for the US stock market (S&P 500). Despite the collapse of the world debt and equity markets, the US Timberland Index rose 9.5% in 2008, which included an increase of nearly 7.4% in the land appreciation component and the rest being cash yield. The increase in 2008 was driven largely by increasing land values, as most timber prices tended to be lower in all regions; as interest rates fall, land values increase.

US forest investments have experienced half the historical volatility of equity investments (as measured by the standard deviation of returns). US timberland returns are not well correlated with other asset



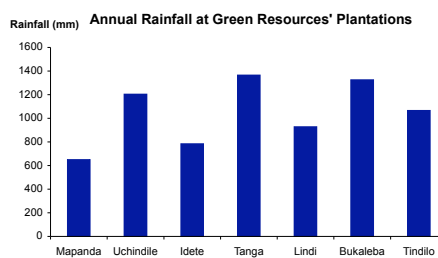
Two-year old pine

classes: 0.29 when correlated with MSCI EAFE since 1987 and 0.36 when correlated with the S&P 500 Index since 1987. However, in recent years, up until 2008, it seems like the correlation between equities and forest investments has increased. Using data going back to 1960 shows that US timberland returns are negatively correlated with equities, according to the Forest Research Group.

US timberland returns are more strongly correlated with inflation than most equity investments. The same is found with a smaller data sample in the UK. Thus, forest is thought of as a good hedge against future inflation and an important investment class for long-term investors like pension funds. Global money supply is increasing rapidly at the moment and this has historically led to inflation. The inflation hedging aspects of forest investments are likely to receive increased attention over the coming years. Work by the Forest Research Group suggests that forestry is a good hedge against unexpected levels of inflation.



GREEN RESOURCES' PLANTATIONS



MOZAMBIQUE

Mozambique is a country of major focus for Green Resources. We have only been

present in Mozambique for two years, but we have expanded rapidly during this period. The aim is to expand our engagement in Mozambique to a similar level as in Tanzania (and probably higher). Our aim is to produce sawlogs and transmission poles for major building products operations in the highlands and to establish a world-scale pulp/energy plantation in the coastal regions. The large Lurio pulp wood project is described in detail above. Our sawlog plantation project is described below.

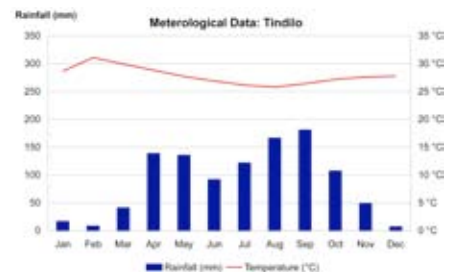
Lichinga

The 906 ha plantation is managed by Malonda Tree Farms, 80% owned by Green Resources, and located in Sanga district, 65km north of Lichinga, the capital of the Niassa province. A railway from Lichinga runs 795km to the deep port of Nacala. The 4,800 ha plantation under development in Sanga is part of 46,000 ha that the Malonda Foundation, a regional development company working in partnership with Green Resources, has contributed to the joint venture. Of the 4,800 ha in Sanga, 2,500 ha are plantable and 2,300 ha are set aside for conservation and other uses.

The objective of Lichinga is to harvest the wood products for sawn timber and utility poles, while at the same time fighting climate change. The project will seek carbon certification under clean development mechanism (CDM) methodology for areas that are eligible, as well as for areas where there is avoided deforestation. In 2008, 459 ha of new forest were established, taking the established plantation up to 697 ha. The trees are mainly pine (66%) and eucalyptus (32%) species, as well as afzelia quanzensis. In the first half of 2009, another 209 ha were planted, with another planting season due later in the year. The land lies at an altitude of 1,100m, with shallow and dry soil conditions. The mean annual rainfall is 1,200mm with a rainy season from December to February and the mean annual temperature is 26°C.

SOUTHERN SUDAN

Tindilo



Green Resources started exploring the potential for a large-scale plantation and forest conservation project in Southern Sudan in 2007. A break-through came in April 2009 with the issuance of approval of our plans to develop 179,000 ha in Tindilo Payam, Tekereka County in the Central

Equatorial State about 160km north-west of Juba. For implementation of the project, the company Tree Farms Sudan has been set up and a small trial plantation of eucalyptus and teak has been established. The potential is large for plantation development and avoided deforestation and the various management options are being evaluated. Green Resources is the only employer in the Payam and its presence has already started attracting social infrastructure to the village. The area lies between 333m and 525m above sea level, with average annual rainfall in the area estimated at around 1,000mm a year and an average temperature of 27°C.

## TANZANIA

### *Southern Highlands*

Green Resources has three main plantations in the Southern Highlands of Tanzania all managed by Green Resources Ltd (GRL) with 7,900 ha of forest. The land allocated to Green Resources in the Southern Highlands covers more than 100,000 ha in various stages of the land acquisition process, including 34,000 ha of titled land. In addition to the Idete, Uchindele and Mapanda plantations, trial planting has been initiated in Kitete and Masagati. The potential planting will be completed in the initial plantations, but local and district communities are awarding additional land to Green Resources such that the activity can continue and the level of employment can be maintained. The objective of the Southern Highlands plantations is to produce high-quality sawlogs and transmission poles, while the residuals are being used for energy production, partly to supply the company's own industrial operations at Sao Hill Industries.

### *Idete*

Idete Forest is located in the Mufindi district, Iringa region. It is 20km from Kiyowela railway station and 110km to the main tarmac road at Mafinga, which goes to Dar es Salaam. Out of the 14,176 ha titled area, 9,010 ha are plantable, with 3,498 ha set aside for conservation and 1,668 ha for other uses. The objective of Idete is to grow trees for carbon storage and to harvest forestry products for sawn timber, utility poles and renewable energy. There is a potential for a future pulp mill or a pellet factory in the Southern Highlands/ Kilombero valley and the pulp wood from



*Fernando Chitio of IIAM and Arlito Cuco inspecting a joint trial plot*

Idete and Uchindele would be well suited to providing feedstock for such a mill, or to satisfy expanded demand from Mufindi Paper Mills.

Pine for sawn timber is grown on 21-year rotations, while eucalyptus for utility poles is grown on 13-year rotations. In 2008, 806 ha of net new forest were established, taking the total established plantation to 1,204 ha. Of this, 59% are eucalyptus species including eucalyptus grandis, eucalyptus saligna and eucalyptus camadulensis and 40% are pinus patula and pinus elliotii. So far in 2009, a further 926 ha have been planted. The land is situated at an altitude between 1,100m and 1,550m with mean annual rainfall approximately 1,050mm with the rainy season from November to May. The mean annual temperature is 16°C. The forest is seeking CDM certification and is in the process of responding to corrective action requests (CARs) to the project design document (PDD), with full certification expected before the end of 2009. The carbon credits (tCERS) generated from the project have been sold, pending approval by the UNFCCC, putting in place a basis for aggressive expansion of the project. Pre-evaluation for FSC has taken place and progress continues towards full certification.

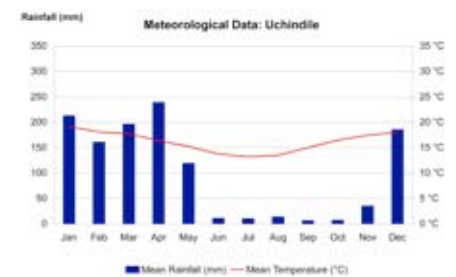
### *Mapanda*

Mapanda Forest covers 6,258 ha and is located in the Mufindi district, Iringa region. It is 130km to the main tarmac road at Mafinga and 750km from Dar es Salaam. Out of the total area, 3,536 ha is plantable, with 753 ha set aside for conservation and 1,948 ha for other uses. In 2008, 409 ha of new forest were established, bringing the net established plantation area to

1,908 ha. The main species are pinus patula (72%) and eucalyptus grandis and saligna (27%). In 2009, 568 ha of pine were planted.

The aim of Mapanda is to grow trees for carbon sequestration as well as to harvest wood for sawn timber, transmission poles and renewable energy. Alongside Uchindile, FSC certification for the project was attained on 8 August 2008 and voluntary carbon standard (VCS) certification was achieved on 17 July 2009. The land lies at an altitude of 1,400m-1,760m with the mean temperature 14°C. Average annual rainfall is 1,050mm with the rainy season from December to April.

### *Uchindile*



The 3,160 ha Uchindile Forest is located in the Kilombero district of the Morogoro region in Tanzania. About 184 ha of eucalyptus were planted during 1996 and 1999, which are being harvested at the moment, creating the first major income for the plantation. It is 70km from the main tarmac road at Mafinga, which is the main road running south-west from Dar es Salaam. It is 7km from Uchindile railway station which runs 500km to Dar es Salaam. Uchindele spans 12,121 ha, of which 7,252 ha of the land are plantable, and 1,700 ha are set aside for conservation, with 3,161 ha for other uses.

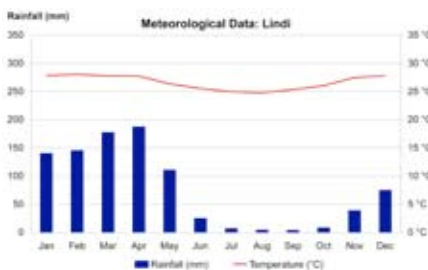
About 5,000 ha of the titled land was, by mistake, located within the Sao Hill Forest Project, and the Ministry of Natural Resources has indicated that it will issue a long-term planting concession covering this land.

In 2008, 500 ha of new forest were established, taking the plantation to 2,830 ha, of which 44% is pine and 55% is eucalyptus. In the first half of 2009 another 336 ha was planted. The objective of Uchindile is to grow trees for carbon sequestration and to harvest forest products for sawn timber, transmission poles and renewable energy. The sawn timber from pine is grown on 20-year rotations and the eucalyptus is grown on 13-year rotations for utility poles. We believe it will be possible to reduce the length of rotation for eucalyptus. FSC certification was attained on 8 August 2008 and VCS certification was achieved on 17 July 2009. The trees in Uchindele are mainly *pinus patula* and *eucalyptus saligna*.

*The coastal areas*

Green Resources has established two plantations located along the coast of Tanzania. The environment allows for different species to be grown including teak and other higher-value hardwoods, as well as acacia and other energy/pulp woods.

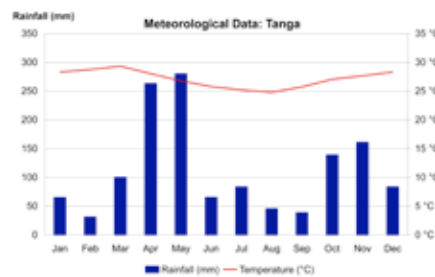
*Lindi*



The 600 ha Lindi Forest is managed by Lindi Forests Ltd (LFL) and located in the Lindi region, on the southern coast of Tanzania. It is 30km to the main tarmac road from Dar es Salaam to Mtwara and it is 60km from Lindi town. Of the total 13,000 ha, about 5,000 ha are plantable, 7,900 ha are to be set aside for conservation, due to the large areas of natural forest, and 100 ha are for other uses. The objective of Lindi is to establish a high value teak plantation for furniture as well providing wood for pulp production and renewable energy.

The first planting occurred in 2008, with 251 ha of net new forest established, of which 95% was teak. *Eucalyptus camaldulensis*, *eucalyptus tereticornis* and other species such as *darlbergia retusa*, *gmelina arborea*, *dovilis cafra*, *dovilis retusa*, *s. humilis*, and *pinus caribea* were also established. During the first planting season in 2009, 456 ha were planted but the erratic rains may result in a low survival rate. The land lies at an altitude of 0-220m with annual rainfall of 700mm to 1,100mm and two rainy seasons. The mean annual temperature is 28°C.

*Tanga*



The 1,340 ha Tanga Forest plantation is managed by Tanga Forests Ltd (TFL) and is currently spread over 9,500 ha in Pangani district, Tanga region of north-east Tanzania. The headquarters is in Pangani, 50km south of Tanga City and its port and railway and 42km east of the main tarmac road running from Tanga-Dar es Salaam. Out of this area, an estimated 6,000 ha is plantable, with 2,500 ha set aside for conservation and 1,000 ha for research and other uses.

There is large potential for establishing forest in Tanga, but the land acquisition process is slow. Tanga could become a forestry centre for the Indian Ocean area. Green Resources is in the process of obtaining additional land in the neighbouring districts of Handeni, Klindi and Makinga and the total allocated area to date is be around 40,000 ha. The aim of the forest is to sequester carbon to partly finance planting, and to harvest wood for pulp production, renewable energy and to grow high-quality hardwoods wherever possible for the furniture industry. It will also help combat climate change.

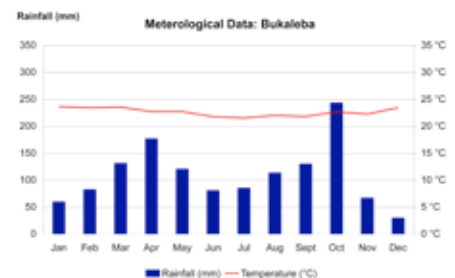
In 2008, 536 ha of new forest were established, including the first planting in

the Handeni region, taking the total established area to 827 ha. In the first planting season of 2009, another 514 ha have been planted. 403 ha (49%) of the plantation are eucalyptus species including *eucalyptus tereticornis*, *eucalyptus camadulensis* and *eucalyptus grandis*. 198 ha (24%) are teak (*tectona grandis*) with another 226 ha of various other hardwood species. The land lies at an altitude of 0-200m above sea level with a mean annual temperature of 22°C. The average annual rainfall is 1,350mm with two rainy seasons from mid March-May and mid November-December.

*UGANDA*

Uganda is the source of the Nile and the cradle of Green Resources. The company has two plantations in Uganda being managed under two different companies. Large expansions of the forestry business are not possible in Uganda due to strong land pressure. However, the country could become a major producer of solid wood products, becoming the main supplier of wood-based building materials to the Great Lakes region.

*Bukaleba*



The 2,545 ha Bukaleba Forest, managed by Busoga Forestry Company (BFC), is located on Lake Victoria in Mayuge district, 40km south-east of Jinja, 120km east of Kampala, the capital of Uganda, and 120km from the Kenyan border. The main Kampala-Mombassa road and railway are close. The total area is 9,215 ha, of which 5,780 ha are plantable. In 2008, 595 ha of new trees were planted taking the total standing plantation to 2,259 ha. 287 ha have been added so far in 2009. The plantation mainly consists of *pinus caribea* (72%) and *eucalyptus grandis* (23%), with 2009 pine being grown for sawlogs on 20-year rotations and eucalyptus being grown for utility poles on 10-12 year rotations.

Small-scale pole harvesting started in

2007, and large-scale harvesting for the company's own treatment plant in Jinja will start in 2009. In 2004, BFC joined a grant programme funded by the EU and the Sawlog Production Grant Scheme (SPGS – see separate text), which included extensive training and grants covering 50% of the planting costs. BFC successfully completed planting and maintenance of 1,000 within this programme. The average altitude of the land is 1,100m with very fertile soil conditions. The mean average temperature in the project area is 23°C and the average annual rainfall is 1,250mm with two rainy seasons from March-May and September-November.

### Kachung

The 660 ha Kachung Forest is managed by the Norwegian Afforestation Group (U), which was acquired in 2007 by Green Resources, and is located in Dokolo District, 30km south of Lira, in Northern Uganda. The plantation area covers a total of 2,670 ha, of which 2,080 ha are plantable with 517 ha set aside for conservation and 73 ha for infrastructure. In 2008, 467 ha of new forest were established, taking the total plantation size to 596 ha, mainly consisting of *pinus caribea* (79%) and *eucalyptus grandis* (21%). A further 171 ha were planted in the first planting season of 2009.

The aim of the project is to grow trees for sawn timber and utility pole production as well as sequester carbon under the CDM afforestation methodology. Pine trees for sawlogs are grown on 20-year rotations



*Two-year old eucalyptus in Bukaleba*



*Teak bed in Lindi*



*New field station in Lindi*



*One-year old pine in Bukaleba*



*Teak plantation in Lindi*

and 160 ha have benefited from SPGS grants. Eucalyptus for utility poles is grown on ten-year rotations. Pre-evaluation for FSC certification is in progress and development of a PDD for CDM validation is under way. The land lies at an average

altitude of 1,000m and the mean temperature is 28°C. The average annual rainfall is 1,250mm with a rainy season from March to May and a second one from August to October.

**The Sawlog Production Grant Scheme (SPGS)** in Uganda is an EU-funded programme that is promoting private forest plantations in Uganda. During its first phase, from 2003-08, it subsidised the establishment of 10,000 ha of new commercial forest throughout Uganda.

During this period, we believe Uganda became Africa's number one tree plantation country along with Tanzania, with the large difference that Uganda has much broader participation in the commercial forestry sector. SPGS has also provided extensive training and technical support, as well as supporting the Ugandan Timbergrower's Association, where Jossy Byamah, BFC's managing director until 2009, was the first chairman.

Most development aid goes through the public sector or non-governmental organisation, with only a small part going through the private sector. SPGS is an example of how direct grants to the private sector create tremendous development effects. The SPGS grants are probably the best-spent development aid within the forestry sector in Africa.

SPGS provides UGX 300,000 (about USD 350) of grant per ha, payable in three instalments following inspections during the first one and a half years after the planting. Busoga Forest Company has planted 1,110 ha under the SPGS scheme, while Kachung has planted 160 ha under the scheme. A further grant was received for thinning and pruning of 76 ha of forest.

In May 2009, SPGS announced that the programme will continue with a Phase II lasting through 2013, based on USD 21mn funding from the European Union and the Norwegian government. This should secure continued strong growth in commercial planting in Uganda. Still, plantation forest will only supply part of the required wood demanded by the Ugandan building and energy industry, and deforestation will continue if efforts are not made to plant additional forests. Carbon finance can play an important role in this respect. Green Resources expects to benefit from both SPGS and carbon finance in Uganda over the coming years.



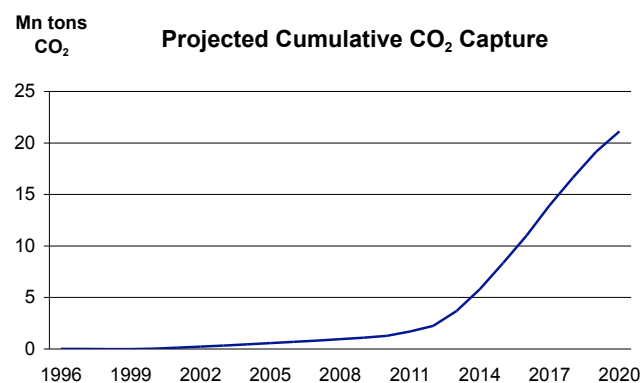
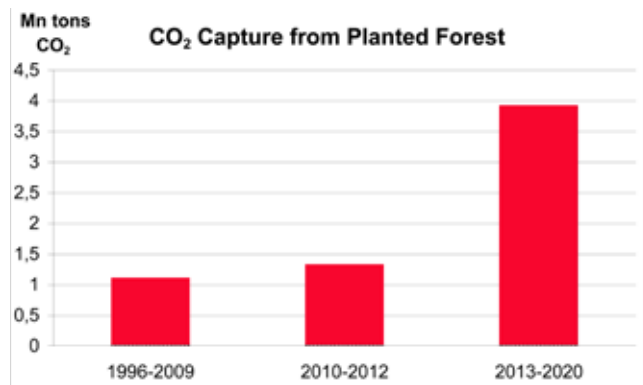
Natural forest and conservation area

2009 has seen a break-through in Green Resources' carbon business. Since the start of the year, we have achieved the world's first certification of a reforestation project outside of the US based on the Voluntary Carbon Standard (VCS), the world's leading voluntary carbon standard, and agreed to sell carbon credits to a European government from a pending clean development mechanism (CDM) reforestation project. Carbon has been an integral part of our business assumptions. Thus, these successes, after more than a decade of work, are vital to the future of the company.

Green Resources is an African leader in combating climate change and has been a pioneer in the development of projects that either sequester or reduce the emissions of greenhouse gases, receiving the first international third-party certification of a carbon project in 2000 by SGS, the Swiss certification company.

Green Resources produces carbon credits through forestation, avoided deforestation, biofuel and renewable energy. The company aims to develop large-scale projects that have an impact on climate change. We remain unhappy about the large cost of developing carbon projects and the highly bureaucratic carbon institutions and industry. However, we also remain confident that the world will take climate change seriously, and we have positioned ourselves to become a large, low-cost supplier of carbon credits.

Green Resources currently has carbon offset projects in Tanzania and Uganda and is developing projects in Mozambique and Sudan. The company's projects have the potential to generate over 2,300,000 tons of carbon offsets by the end of 2012 and more than 20,000,000 tons by the end of 2020. Our projects not only address the issue of climate change, but also contribute significantly to the sustainable development, socio-economic improvement and environmental conservation of rural areas of Africa.



Green Resources has a dedicated team of professionals in each country where the company operates, working on the identification, development and sale of carbon credits in Africa. As the CDM and voluntary procedures were clarified and carbon markets grew, additional staff were hired and trained for the carbon certification team.

THE FIRST VCS VALIDATION

On 17 July 2009, Green Resources' Mapanda/Uchindile Forest Project was validated under the VCS as the first afforestation/



reforestation project in the world registered under VCS. The project follows the agriculture, forestry and other land use (AFOLU) guidelines for afforestation and reforestation projects and the validation was carried out by TÜV Süd, an accredited certifier (called a Designated Operational Entity (DOE)). The VCS has become the benchmark and is regarded as the most demanding standard for the voluntary carbon market.

The projects will reforest 10,814 ha of degraded land located in the Southern Highlands of Tanzania and put 7,565 ha into conservation to protect local biodiversity. The project will generate permanent Voluntary Emission Reductions (VERs) over a 99-year crediting period guaranteed by a reserve buffer. From 2002 to 2020, the project will generate 3,538,663.3 tCO<sub>2</sub> for sale, of which an estimated (soon to be verified) volume of 600,000 tCO<sub>2</sub> was produced by the end of 2008. Additionally, the projects were certified under the Forest Stewardship Council (FSC) standard in 2008, the world's leading standard for sustainable forest management.

The projects have been made possible by the prospective carbon financing revenues, which form a critical supplement to the revenues that will be derived from timber harvesting, making the projects commercially viable. The projects offer significant employment in a very poor rural region where few other job opportunities exist. 50 permanent staff and more than 1,000 temporary workers are employed in Mapanda and Uchindile. All revenues will be reinvested in Tanzania and 10% of the carbon revenues will be spent on new community projects.

The Uchindile and Mapanda Forest Projects applied an approved clean development mechanism methodology for afforestation/ reforestation, and have carried out supplementary analysis in line with the VCS requirements to determine the size of the risk buffer. The project hopes to achieve verification of the carbon credits generated from tree growth from 2002 to 2008 later this year.

**HISTORIC ACHIEVEMENTS AT HIGH COSTS**  
Green Resources started focusing on carbon credits in 1996, before the Kyoto Protocol was adopted in 1997. Green

## GREEN RESOURCES PRODUCES HIGH-QUALITY AFRICAN CARBON CREDITS

### Core values of the business:

- Conversion of grasslands and degraded lands into long-term carbon sinks across Africa
- Production of energy from renewable resources
- Aim to produce certified carbon credits, which bring environmental and social co-benefits that are sustainable over the long term
- Promotion of sustainable development of rural local communities where Green Resources works
- Development of carbon credit projects through building strong and capable local African-based teams
- Commitment to reinvest 100% of carbon credit revenues back into East African economies, with at least 10% of revenues contributed to community-based projects.

Resources was one of four companies worldwide to achieve certification for voluntary greenhouse gas (GHG or carbon) credit projects by SGS in 2000, the Swiss certification company, for significant plantations established in 1998 and 1999.

After years of uncertainty and wasteful negotiations, the rules and modalities for afforestation and reforestation projects under the clean development mechanism were agreed by the United Nations framework conference for climate change (UNFCCC) at the end of 2003, and Green Resources restarted its planting programme from 2004. The new modalities, however, created a limitation such that projects that started during the first three years following the adoption of the Kyoto Protocol, ie, before 2000, are not able to qualify under the CDM. Thus, the credits from Green Resources' projects that started during this period, Uchindile, Mapanda and Bukaleba, are planned, by definition of their start dates, to be sold in the voluntary market.

Green Resources has incurred large costs developing carbon projects during the last 13 years. With so many discussions and resources spent on forestry and its role in the carbon market, it is remarkable how few results there are to show for it in terms of on-the-ground project activities globally. We remain convinced, however, that serious action will be taken to abate climate change and that forestry and renewable energy in Africa will become a part of these activities.

**FORESTATION IMPORTANT FOR CARBON**  
*Fighting climate change with forestry*  
There are several ways of combating climate change:

- i) reducing emissions of greenhouse gases from existing sources
- ii) switching to renewable energy
- iii) capturing (sequestering) of carbon dioxide through the creation of carbon sinks (stores)

Forests capture carbon and are the lowest-cost type of carbon capture. Significant research is committed to other forms of carbon capture, in particular, emissions from coal power plants. Forests are, in effect, very good carbon sinks, and forestation reduces, while deforestation increases, the amount of greenhouse gases in the atmosphere.

Trees sequester carbon at a rate of 10-20 tons of carbon per hectare of forest per year. The exact sequestration rate follows the accumulation of biomass and depends on location and species, and can be established using existing growth models and field verification. Fast growing young forests sequester more carbon than old ones, and favourable growing conditions, such as tropical climate and high rainfall also speed up carbon sequestration by up to five times compared to colder climates. Therefore, forestation provides a highly efficient way of removing greenhouse gases from the atmosphere, with growth models and field measurements periodically verified by third-party auditors.

There is a negative carbon balance during approximately the first three years of a project, created by the emissions from the activities involved in establishing nurseries, soil preparation, the planting of seedlings and vehicle use. These factors are later overtaken by the positive carbon sequestration of the growth of biomass in forests. When the forest is mature and the

carbon store complete, the forest will be managed on a sustainable basis, with the harvest matching annual growth in biomass and carbon sequestration.

### Other benefits of forestry ...

Forestation not only removes carbon dioxide from the atmosphere by creating carbon sinks in trees, but the establishing of new plantation forests is also a prerequisite for any serious attempt to halt deforestation. Plantation forests are required to provide alternative sources of firewood, charcoal and building material to the local communities. Along with shifting agriculture, these are the main causes of the removal of natural forest. Green Resources is also setting aside all natural forest in all its areas of operations, regenerating the natural forest and contributing to avoided deforestation.

### ... But few forest CDM projects

Despite the high potential for forests to play an important role in the climate change solution, since the ratification of the UNFCCC's CDM system, only limited forestry activities have taken place: currently only six CDM projects were forestry based as of 30 June 2009, out of the total 1,698 projects that have achieved registration. In addition, the forestry projects are small in volume: five ranging from 2,665 tons CO<sub>2</sub>e to 57,792 tons CO<sub>2</sub>e and only one large project with 179,000 tons CO<sub>2</sub>e. Much larger projects are required if afforestation/reforestation is going to have a significant effect on climate change mitigation.

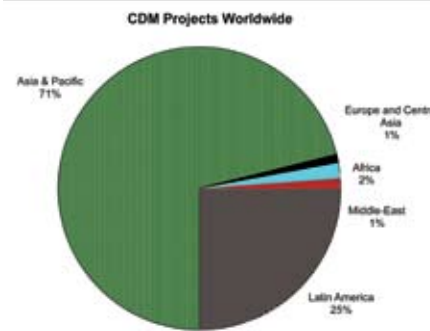
The main reasons for the low success rate of reforestation projects are the long procedures and complex methodologies, the temporary nature of the carbon credits that are created according to the CDM system temporary Certified Emission Reductions (tCERs), and the fact that the biggest market platform of the compliance market, the EU emissions trading system (ETS), does not allow for forestry credits to be included fully in the system. European governments are the only buyers of forestry credits within the EU system, and these are excluded from the EU ETS. The new voluntary methodologies, including VCS, avoid the issue of temporary credits by using buffers based on the risk of non-permanence of the carbon credits. From the point of project implementation, it is also problematic that reforestation

projects take much longer to realise and that the project developer must work much more closely with the local communities than with other carbon projects. These complications are not compensated for in the pricing of the credits, although the social benefits of the long-lasting forestry projects are substantial.

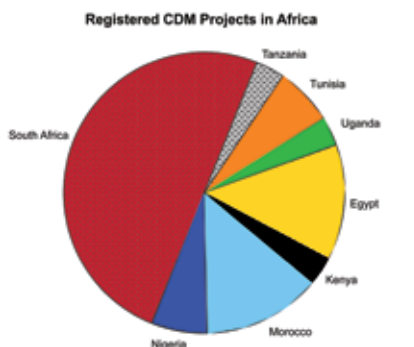
### AFRICA LAGGING

Africa's role in CDM activity is insignificant, at approximately 2% of total projects and this number for most of Africa is made worse by the fact that South Africa accounts for half of these projects. Only six of Africa's 30 plus projects are from the Sub-Sahara ex South Africa. The regional distribution of CDM projects shows that there is a significant skew in CDM regulations favouring the most industrialised, non Annex I countries: Asia represents almost 71% of all CDM projects, with Latin America at 25%. The World Bank's carbon funds have identified the lack of African CDM projects as a major problem and are prioritising investments in Africa.

The small number of African CDM projects suggests that the current system does not work. There is an extensive debate



on-going about whether the CDM process can be amended to include the poorest, least developed countries and whether the CDM is performing its role as intended at all. At the same time, there is an obvious and simple solution: forestry.



### Forestation a necessity for African GHG activities

Forestry is the only major methodology that can provide large benefits for Africa. Forestry carbon credits have the potential to produce highly attractive social and developmental benefits in addition to carbon sequestration. It is also the only CDM activity that can provide major benefits for rural areas and poor people. Energy projects are very positive for economic development, but a large portion of the project costs are frequently consumed by imported machinery and consultant services.

There are also many interesting renewable energy projects in Africa, but the current price for carbon offsets is too low and the cost of project development too high for carbon finance to become a driver of renewable investments in Africa. In the rest of the world, most renewable energy investments are dependent on direct or indirect government subsidies that are not present in Africa.

### MARKET GROWTH AND THE US ENTRY

Even without a carbon compliance market in the US, the value of the carbon market had doubled in 2008 to US\$ 126bn, trading 4.8bn tons of CO<sub>2</sub>e, up 77% on 2007 trading according to the World Bank. However, the downturn in the global economy during the last two years has had repercussions in the carbon market, and combined with the uncertainty surrounding the future of the Kyoto Protocol post 2012, it has resulted in a year of volatility in the carbon markets.

The call for increased action to stop climate change has grown louder and new proposals have been put forward to respond to the issue. Most importantly, this was demonstrated through the approval by the US Congress of the American Clean Energy and Security Act (ACESA) on 26 June 2009, the first time the US has passed legislation to create a federal emissions cap-and-trade programme. The bill is now pending approval by the US Senate.

WORLD CARBON MARKETS				
tCO <sub>2</sub> e million	2005	2006	2007	2008
EU ETS	321	1 104	2 060	3 093
Primary CDM	341	450	552	389
Secondary CDM	10	25	240	1 072
New South Wales	6	20	25	31
Other Compliance	1	10	23	152
Joint Implementation	11	16	41	20
Voluntary and Retail	20	33	43	54
<b>Total</b>	<b>710</b>	<b>1 658</b>	<b>2 984</b>	<b>4 811</b>

Source: World Bank

ACESA sets progressively tightening legally binding caps on GHG emissions of large US emitters including electric power stations, manufacturing facilities, and oil refineries. These sources will be required to reduce their GHG emissions to 17% below 2005 levels by 2020, and 83% below 2005 levels by 2050. The bill establishes a system of tradable emission allowances in which emitters are required to hold one allowance for each ton of GHG emitted; allowances are tradable and bankable; and the number of allowances issued annually will be reduced steeply from 2012 to 2050. The steepness of the bill's progressively tightening caps mean it is comparable to the "20-20-20" European Union package, despite starting from a later base year (2005 – the EU's base year is 1990). However, the programme will last longer, from 2012 through 2050, while the EU's proposal runs from 2013 to 2020.

WORLD CARBON MARKETS				
in USD million	2005	2006	2007	2008
EU ETS	7 908	24 436	49 065	91 910
CDM	2 417	5 804	7 433	6 519
Secondary CDM	221	445	5 451	26 277
New South Wales	59	225	224	183
Other Compliance	4	38	72	766
Joint Implementation	68	141	499	294
Voluntary and Retail	187	146	263	397
<b>Total</b>	<b>10 864</b>	<b>31 235</b>	<b>63 007</b>	<b>126 346</b>

Source: World Bank

WORLD CARBON MARKETS				
US\$/tCO <sub>2</sub> e	2005	2006	2007	2008
EU ETS	25	22	24	30
CDM	7	13	13	17
Secondary CDM	22	18	23	25
New South Wales	10	11	9	6
Other Compliance	4	4	3	5
Joint Implementation	6	9	12	15
Voluntary and Retail	9	4	6	7
<b>Total</b>	<b>12</b>	<b>12</b>	<b>13</b>	<b>15</b>

Source: World Bank

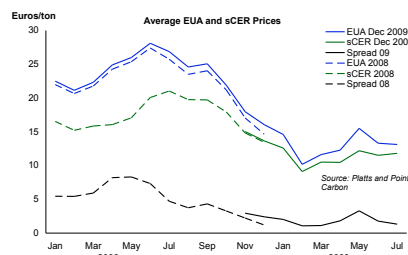
### The compliance market

The EU ETS, the European compliance market, is still the largest segment of the total market accounting for nearly 65% of the total market, trading over 3bn tons of CO<sub>2</sub>e worth nearly US\$ 92bn. EU allowances (EUAs), represent a risk-free, fully tradable, guaranteed right to emit one ton of CO<sub>2</sub> within the EU ETS. Certified emission reductions (CERs) from CDM-certified projects can be bought as substitutes for EUAs in the EU ETS as well as by individual governments to meet their compliance requirements. The risk profile, and therefore price, of CDM projects depends on what stage of issuance the project is in, but will constitute a higher risk than EUAs until they are issued and will

therefore be traded at a lower price until that time. Forestry is for the time being not included in the EU ETS, but forestation credits can be purchased directly by EU governments to meet their compliance requirements.

### Lower supply of CDM credits

The total CDM market was worth USD 32.8bn in 2008, trading 1.5bn tons, up from 0.8bn tons. The CDM market consists of primary and secondary CERs, with primary CERs (pCERs) being yet-to-be-issued credits with a corresponding risk of implementation and secondary CERs (sCERs) being guaranteed delivered credits. The market for primary CERs actually shrank in 2008 down to transacted volumes of 389 MtCO<sub>2</sub>e as a reflection of reduced supply and the difficulties of developing new projects. Partly as a result of the lower supply, but also because of the strong commodity markets in the first half of 2008, the average price of primary CERs was up 16% for 2008 compared to 2007. The secondary CER market continued to grow exponentially to over a billion tons, as secondary CERs were increasingly traded between financial institutions. This was driven by the emergence of an options market in the second half of 2008 with hedging and arbitrage all increasing the number of transactions taking place.



### Renewable and energy efficiency leading CDM projects

In previous years the CDM market was dominated by the supply of HFC-23 (refrigeration gases) and N<sub>2</sub>O (ammonia, fertiliser) from China and India considered the "low-hanging fruit" of carbon projects. These low-cost projects from large industrial processes (HFCs' marginal cost of EUR1/ton) are now mostly exhausted, and are less attractive because they could easily have been legislated against in the first place. Renewable energy and energy efficiency are now the fastest growing project types. There was not a single

CARBON PRICE FORECAST		
(EUROS/TON)	2009	2012
Barcap	11,75	24
Citi	12	25
Daiwa	8	12
Deutsche Bank Emissions	25-30	N/A
IDEAcarbon	N/A	N/A
NCF	N/A	N/A
Point Carbon	12	26
Sagacarbon	10	26
SocGen/orbeo	13	20
UBS	N/A	35

Source: ThomsonReuters

forestry project certified in 2008, but six forestry projects have been validated during the first half of 2009.

CDM BY PROJECT TYPES			
	2006	2007	2008
<b>Agro-forestry</b>	1	0,1	0,1
LFG	5	5	3
Waste management	2	4	3
CMM	7	5	2
<b>Methane</b>	14	14	8
HFC	34	8	3
N2O	13	9	1
<b>Industrial Gases</b>	47	17	4
<b>Other</b>	13	4,9	5,9
Hydro	6	12	21
Wind	5	7	17
Biomass	3	5	6
Other Renewables	2	0	1
<b>Renewable Energy</b>	16	24	45
<b>EE+Fuel switching</b>	9	40	37
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: World Bank

### The voluntary market

The voluntary market is dwarfed by the compliance market. The market participants are mainly corporate buyers who voluntarily want to improve corporate governance or create a carbon neutral footprint for the company. Total trading volume doubled in 2008 to 123mn tons, according to Ecosystems Marketplace and New Carbon Finance. The US dominates the voluntary market, followed by Europe. Of the total volume, only 12mn tons were retired, representing the real voluntary offsetting as opposed to pre-compliance buying. Afforestation/reforestation projects accounted for 4mn tons, or close to 4% of the total volume, while reducing emissions from deforestation and degradation (REDD) accounted for 0.7%.

Within the voluntary market, several different standards have emerged and Green Resources uses the VCS (voluntary carbon standard) for certification of its carbon offsets, and aims to use the CCBA (Climate, Community and Biodiversity Alliance) for certification of the additional social and environmental benefits provided by its projects. The project type also has



*Pine plantation*

an influence on VER prices, and forestry projects hold their prices better than other project types due to their increased social benefits.

**VOLUNTARY CARBON STANDARD (VCS)**  
The VCS programme provides a global standard and programme for the approval of credible voluntary offsets, and is probably the most rigorous and demanding of the dozen or so voluntary standards in existence. There has been increased criticism of the credibility of a number of voluntary carbon projects in recent years, and VCS has addressed these concerns. VCS 2007 was released on 19 November 2007, and the first voluntary carbon units (VCUs) were issued in 2008.

VCS was already a clear market leader in 2008, accounting for 48% of the voluntary carbon project certifications, with the Gold Standard, Climate Action Reserve and the American Climate Registry applied to 12-9% of the projects, respectively. VCS offsets must be real (have happened), additional (beyond business-as-usual activities), measurable, permanent (not temporarily displacing emissions), independently verified and unique (not used more than once to offset emissions).

Credits are issued through a registry, each with a unique identifier, and the VCS registry is one of the most used registries.

It was not until November 2008 that the guidance on land use and forestry activities were concluded and included as an eligible activity under the VCS. It was against this methodology that Green Resources' Mapanda/Uchindele project has been certified. The provisions of the VCS are considerably more inclusive for forestry and land-use activities than the CDM. Currently, the following four categories of agriculture, forestry and other land use (AFOLU) project activities are eligible under the VCS programme:

- Afforestation, reforestation and revegetation (ARR)
- Agricultural land management (ALM)
- Improved forest management (IFM)
- Reducing emissions from deforestation and degradation (REDD)

The VCS programme provides the standards and framework for independent validation and verification of GHG emission reductions and removals based on ISO 14064-2:2006 and ISO 14064-3:2006. The scope of the VCS programme covers all those activities related to the generation

of GHG emission reductions and removals, including, but not limited to, all sectors under the clean development mechanism using approved methodologies. The scope does not cover company carbon footprints or carbon neutral claims. Work to develop the voluntary carbon standard was initiated by The Climate Group, the International Emissions Trading Association and the World Economic Forum in late 2005. The World Business Council for Sustainable Development joined the initiative as a founding partner in 2007.

**IN MEMORY**

Lyimo Bartholomew, Green Resources' carbon manager for many years, passed away at the start of 2009. Lyimo was at the forefront of the practical development of carbon projects in Africa during the last decade. He played a leading role in developing the Green Resources' carbon projects that recently received validation, and was an inspiration for the African carbon industry at many international events. He was a hard worker and a dear colleague. Our thoughts are with his family and young children.

*Land-use change, forestry and carbon*

Land use, land-use change and forestry (LULUCF) activities are a major driver of climate change and a key focus for activities related to poverty alleviation, adaptation to climate change, and protection of biodiversity and water resources. Currently, deforestation and other land-use activities account for 18% of net annual global greenhouse gas (GHG) emissions; however, through biotic offset projects – reforestation, afforestation, sustainable forestry management and avoided deforestation – it is possible to increase and/or protect carbon sequestration in forests. Currently, under the Kyoto Protocol, forestry in developing countries is only partially included in the clean development mechanism (CDM); under the current rules only reforestation/afforestation (AR) projects can generate CERs under restrictive rules, with avoided deforestation excluded.

When assessing forestry carbon potential in the developing world, it is critical to understand the basic need for fuel wood and timber, and that without providing financial incentives to create alternative sources for these goods, the laws of supply and demand will mean native forest will be lost. Projected world demand for industrial round wood and sawn wood can only partially be met by existing plantation forests. The share of wood material coming from sustainably grown forest is lower in Africa than anywhere else in the world. Thus, there is a need to expand plantations and incentivise the protection of native forests if continued destruction of native forest is to be avoided. This is especially the case in East Africa where wood demand for charcoal/fuel wood, building materials and poles cannot only be met from sustainable plantations. According to the FAO's global forest resource assessment in 2005, under current rates of exploitation tropical forests will be largely exhausted by 2050 and will have ceased to be intact eco-systems.

*Reduced emissions from avoided deforestation and degradation (REDD)*

The UNFCCC's annual meeting, the Conference of Parties in Bali in 2007 (COP 13) saw firm commitments to include REDD in the post-2012 carbon finance regime. It was decided to set aside two years for negotiations culminating in an agreement on the post-2012 regime at COP 15 in Copenhagen in December 2009. It was recognised that reducing deforestation and encouraging reforestation is essential to enabling the world's poorest and most vulnerable people to adapt to climate change, even if this will critically depend on the nature of the new system put in place. It would be all too easy to create another UNFCCC system that benefits office workers and romantics, but have little impact on the world's climate or provide benefits to the world's poor people.

COP 13 in Bali agreed to start demonstration activities that will support REDD as a climate mitigation measure. This gave the green light to "early action" ahead of what we expect to be expanded carbon mechanisms coming into force in 2012. This a significant step forward for Africa where deforestation is the main cause of GHG emissions. However, disappointingly few demonstration activities have been initiated. Norway announced a USD 3bn forestry programme at Bali, but very little has actually happened on the ground as a result of this programme.



*Loading transmission poles*

2008 was a good year for Sao Hill Industries (SHI), after a disappointing 2007. Revenues were up 63% to NOK 55mn (TZS 11,939mn, USD 9.6mn), mostly driven by higher prices, but also higher volumes of transmission poles. Transmission poles generated most revenues, followed by sawn timber. Value-added revenues once again doubled and the production of doors and pallets continued to improve. The combined industrial operations, SHI and Sao Hill Transport (SHT), generated an operating profit of NOK 9mn (TZS 990mn, USD 1.5mn), compared to operating losses in 2007. The 2007 result was hit by a tripling of wood prices in Tanzania, and a subsequent partial reduction in costs, which led to an inventory write-down.

Green Resources invested NOK 16mn in its industrial operations in 2008, down from NOK 20mn in 2007. This was spent on a new state-of-the-art transmission pole treatment plant, new transport and handling equipment and operational equipment. Green Resources converted NOK 26mn of loans to SHI into shares in 2008.

SHI delivered 21,000 poles in 2008, chiefly to two major customers, Tanzania Electricity Supply Company (TanESCO) and Kenya Power and Lighting Company (KPLC). The company increased the purchases of raw eucalyptus poles from private forest owners in the Southern Highlands, and SHI has made eucalyptus an important cash crop for many farmers in the area. SHI has improved and refined its quality control system, and is working closely with customers to ensure that the right quality poles are supplied. Historically, poor quality poles have at times been delivered to East African utilities with a negative implication for the life span of the erected utility poles.

### *Expanding transmission pole business*

In 2008, SHI installed and commissioned two modern, fully automated transmission pole treatment plants, which use water-borne preservatives. The total investment cost for the two treatment plants was NOK 9mn (USD 1.5mn or TZS 2bn). The current installed capacity is about 120,000 poles per year. The

objective of this investment is to increase the quality of the poles, to reduce operating costs and to meet the growing demand for transmission poles for power distribution in East Africa.

### *Timber market growing, but difficult pricing*

SHI has sold all produced standard-sized timber in the local market, despite selling at a premium price. However, production was disappointing in 2008, and short of the budget. In addition, pricing conditions in the Tanzanian market have been challenging. Following the tripling of wood costs in 2007, the Tanzanian timber market was flooded by cheaper sawn wood from Malawi where stumpage prices are lower than in Tanzania. Furthermore, export is made very difficult due to the complications in the export process and congestion in the port of Dar es Salaam.



*New pole treatment plant*



*New gluelam factory*

## *Manufactured products*

Sao Hill has built three new businesses during the last two years: pallets, doors and charcoal (which is described in the next chapter). Significant costs have been incurred establishing these businesses, but Green Resources believes they can make an important contribution to the long-term profitability of the industrial operations.

Sao Hill Industries has become Tanzania's leading pallet producer, with the deliveries during the first half of 2009 already at twice the total level for 2008. From a slow start in 2007, 5,000 pallets were delivered during the first half of 2008, increasing to 10,000 pallets during the second half of 2008 and to 29,000 during the first half of 2009. The customers include bottling companies, breweries, glass manufacturing and the agricultural processing industries. Sao Hill pallets are made from sustainably grown pine, often replacing the hardwood pallets typically used in Tanzania.

The growth of doors production has been slower, but there has been a steady improvement in the quality and the market acceptance of doors.

SHI has invested in a large new glue-lam sheet factory, which will produce 4x8 foot glue lam sheets, block board and door components. Most of the equipment is in place and the factory will start up before the end of 2009.

## MAJOR EXPANSION AT SAO HILL

### *USD 60mn Southern Highland, Tanzania investment*

Green Resources has embarked on a USD 60mn investment programme (2008-12) for expansion of the forest plantation and industries in Tanzania's Southern Highlands. The investment will confirm Green Resources as Africa's largest reforestation company, East Africa's fastest growing forest products company, and a leading carbon project developer. The company follows the highest international standards for establishing forests and carbon finance projects, and the main plantations in the Southern Highlands are already certified according to the standards of the Forest Stewardship Council, the world's leading standard for sustainable forest management.

Green Resources has already invested USD



*Offloading timber*

8mn in the project since its start in 2008. In May and June 2009, it signed USD 25mn of financing from the International Finance Corporation, the private sector subsidiary of the World Bank, and from Norfund, the Norwegian development finance institution. Further equity funding together with a senior loan will complete the financing of the project.

The investment will transform the forest processing industry in Tanzania. 12,000 ha of new forest will be established for carbon sequestration and to secure increased raw material supply for future industrial processing, increasing the company's plantations in the Southern Highlands to 20,000 ha. Green Resources will install a new-generation, high-yield sawmill (a HewSaw), based on the latest technology worldwide, tripling the sawmilling capacity of Sao Hill Industries. The quality of Tanzanian sawlogs is good, and the new mill will convert the raw material into a high-quality product for the global markets. Dry kilns will be installed to convert half of the production into dried timber. Green Resources will also expand East Africa's largest transmission pole treatment facility, sharply increasing the capacity to meet the growing domestic and regional demand. The project also includes the establishment of East Africa's largest charcoal briquetting factory, producing packed charcoal from sustainably managed forests.

A core project for the long-term growth of Sao Hill Industries, and the Southern Highlands forest industries in general, is the installation of a 15MW combined heat power (CHP) plant. It will provide stable electricity to the factory and the district, and steam for drying the timber, which is a requirement for producing value-added forest products. The CHP will create the basis for further development within doors, joinery components, panel boards and wood pellets.

The project will create more than 1,000 new jobs over the next two years, and indirectly more than 2,000 new jobs. It will utilise waste wood from Sao Hill Industries, local sawmills and government forests, as well as providing high-quality kiln dried timber to local carpenters enabling them to upgrade their products. In addition, it will provide tens of millions of US dollars in export revenues and millions of US dollars in government revenues.

### *Long-term harvesting contract*

Sao Hill Industry's five-year contract for harvesting 150,000m<sup>3</sup> per year or a quarter of the annual allowable cut (AAC) in the Sao Hill Forest Project (SHFP) expired at the end of 2009. In order to safeguard continued operations, and as a prerequisite by the banks for Green Resources' USD 60mn investment in Sao Hill, the Ministry of Natural Resources has accepted the extension of the logging contract by 12 years from 2010 to a volume

of 275,000m<sup>3</sup> per year. Based on a new inventory of SHFP, and in line with the original harvesting plans, the annual allowable cut in SHFP was increased from 600,000m<sup>3</sup> per year to 1,000,000m<sup>3</sup> per year from 2009-10. Thus, SHI continues to have the right to harvest about a quarter of the AAC.

operating in two shifts and producing about 125,000m<sup>3</sup> timber per year, would only take 2.5% of the Middle East market.

Timber prices seemed in general to have bottomed in Q1 2009. In the Middle East, Scandinavian timber obtained slightly better prices in Q2, according to the Wood

16x100mm, all sizes that can be taken out of top-logs, fit very well with HewSaw and complement the larger sizes demanded by the Tanzanian market. Sao Hill Industries has historically produced significant volumes of these sizes, and also 2x4'. However, there is also a market for large sizes 2x10' and 2x12' and 4x4' that Sao Hill Industries has not previously supplied.



*Harvesting at Uchindile*

### *Large Middle East timber market*

The total Middle East (Levant) market for sawn timber is at least 5mn m<sup>3</sup>/year, based on a recent study of the timber market in the Gulf Co-operation Council (GCC: Saudi Arabia, UAE, Kuwait, Qatar, Oman and Bahrain) by the Wood Markets Report (June 2009) and our own estimates. The most interesting market for Sao Hill are the GCC countries, along with Iraq and Iran, and the Red Sea destinations, most importantly Egypt, Jordan and Israel.

Sao Hill Industries has only exported marginal volumes of sawn timber since 2000. During the first years of that decade, prices were too low and Tanzanian wood prices too high. Since then, Tanzanian demand has been strong and almost all timber produced at Sao Hill has been sold domestically. However, Sao Hill has low transport costs to the Middle East markets. In addition, they represent an important future outlet for Tanzanian timber, in particular because of the large size. The entire production of Sao Hill Industries' new sawmill, including the new HewSaw,

Markets Report, but prices for Chilean radiate pine, which is most easily comparable to the Sao Hill wood, dropped one step further. The price of Chilean timber in the Middle East is down 30% from a year ago, while Scandinavian/Baltic timber is down about 25% YoY.

Looking at the market in more detail, the GCC countries alone consumed more than 3mn m<sup>3</sup> in sawn timber 2008, according to the Wood Markets Report. There will be a significant fall in demand in 2009 (and in supply), but the market is likely to remain at twice the level it was at the start of the decade, when a major upswing in demand started, or about 2.5mn m<sup>3</sup>. Saudi Arabia accounts for 1.2mn m<sup>3</sup> of demand, and has seen a stable, upward trend in demand over time, even during the recession at the start of the decade. Along with Qatar, it requires the highest-quality timber, and will be a target for the volumes produced from Sao Hill's new HewSaw.

The most common sizes in the Middle East are 70x70mm, 22x95mm, 38x96mm and





*The Governor (left) of Nampula presenting a gift to Mutuma Marangu at his visit to Sao Hill*

Renewable energy is a major, and currently the fastest growing, market for wood. It comes in many forms, from traditional fuel wood, charcoal and electricity, to new growth markets like pellets and biodiesel. The use of wood for electricity production is likely to continue to grow fast, while we forecast exciting developments within chemical pulp and wood based chemicals, where the traditional industrial pulp process probably will be altered or changed such that a wide variety of additional renewable chemical and energy products can be manufactured.

Green Resources will expand within the energy sector where this adds value to the forest and there are profitable expansion opportunities in Africa. Green Resources has made an exciting start to industrial charcoal production in Africa. This is a project still under development, with very positive climate change implications. The main financing of a 15MW heat power plant for Sao Hill, Tanzania is in place, but several issues remain outstanding. (See the earlier section on 'Major expansion at Sao Hill'.) Green Resources is also developing two pellet projects.

#### 300 TONS CHARCOAL DELIVERED

During 2008, four Katugo charcoal kilns were built at Sao Hill and trial production of charcoal was started based on off-cuts and eucalyptus waste from the transmission pole production. An additional eight kilns were constructed during the first half of 2009. The Katugo kilns are giving 30% yield, or approximately twice the yield of traditional charcoal burning.

At the start of 2009, an agreement for a trial delivery of 300 tons of charcoal was made with Mbeya Cement, a subsidiary of Lafarge. Mbeya Cement is replacing imported mineral coal with charcoal produced from sustainably grown wood, creating significant

environmental as well as economic benefits. 312 tons of charcoal were successfully delivered on time, despite significant challenges in developing the appropriate transport system. Since operations started a year ago, Green Resources has lost about NOK 1mn (more than USD 100,000) on the charcoal business, but expects to make satisfactory profits when the carbon financing is put in place and the operations are fine-tuned.

#### *New charcoal briquetting plant*

Sao Hill has purchased a charcoal briquetting pilot plant that will be installed in the second half of 2009, producing 3,000 tons per year of standard 'BBQ charcoal'. We believe this will be East Africa's largest charcoal briquetting plant, and the first to utilise plantation forest. The target markets are i) institutional customers that value charcoal supplied from sustainably grown forest, ii) the fast growing consumer market where cleanliness and ease of handling compared to traditional charcoal are appreciated, and iii) packed charcoal, where South African producers are currently responsible for all supplies to East Africa.

#### *Charcoal key to deforestation*

There are significant climate change gains from applying better technology than that traditionally used, as well as replacing mineral coal and charcoal produced from natural forest with charcoal produced from plantation forest. The African charcoal market is about 28mn tons, according to the FAO, accounting for slightly more than half the global market for charcoal. The market is estimated to grow at 2.3% per year, doubling in 30 years. The African charcoal production consumes more than 300mn m<sup>3</sup> of wood per year and, without a sharp new increase in the supply of wood from plantation forests, the deforestation will continue.

Agricultural expansion, shifting agriculture and charcoal burning are the main reason for deforestation.

In Africa, charcoal burning is probably the main reason for deforestation. Charcoal is the main fuel for the majority of the population and deforestation will not come to an end until alternative sources of fuel are produced. Green Resources is developing carbon projects based on charcoal production.

### *Developing pellet projects*

Green Resources is developing two pellet projects: in Tanga, Tanzania and Nampula, Mozambique. Pellets are growing rapidly as

a raw material for the European renewable electricity industry, and Tanzania and Mozambique are some of the best locations for pellet production in the world.

Pellets are currently the highest value-added processing, which prepares the wood as a feedstock for the international energy industry. A pellet mill in Africa will require a combined heat power plant providing electricity and steam for the pellet mill and potentially other industrial processes, a wood chipping facility as used for most industrial wood processing, a large tumble dryer, similar to that used for panel board production, and the pellet presses themselves.

Pellets are logistically simple to deal with, and require modest investments in port and handling facilities. Importantly, pellets can be co-produced with transmission poles and solid wood products, creating products for the local and the international markets, while ensuring full utilisation of the raw material. Most of the production facilities for pellet production can be used for a pulp mill, but world-scale pellet production requires only 20% of the raw material of a world-scale pulp mill. Thus, pellet production is a good first step towards the construction of a large pulp or wood chemical mill.



*New charcoal kilns under construction*

Green Resources employed 3,200 people at the end of 2008, of which 700 were permanent employees and more than 850 were women. Women accounted for 20% of our senior and junior managers. During the past 12 years, Green Resources has built a strong and efficient organisation that has the ability to plant large areas of new forest, deal with complicated certification processes and establish new plantation projects. This is a major strength and the core quality of the company. Green Resources is actively seeking to increase the number of women among its staff and practises a positive discrimination policy in the hiring policy.

### *Strengthening management*

In 2008, Green Resources continued to strengthen its management team, and most importantly hired Arlito Cuco as managing director for Mozambique, who was formerly director of forestry in Mozambique. Isaac Kapalaga has been appointed new managing director for the Ugandan and Southern Sudan operations, previously being deputy manager for the Ugandan National Forest Authority and working for US Aid. Aadu Polli has been appointed new sawmill manager at Sao Hill. He has extensive experience of managing sawmills in Estonia and Lithuania, previously working for Sylvester and Stora Enso. Marja Tuderman, previously UPM-Kymmene, has been hired to develop the bio-energy projects.

### *Sokoine internship, Olmotanyi graduates*

Our Tanzanian plantation companies have made an agreement with Sokoine University of Agriculture, Morogoro, Tanzania to take ten students annually as interns. This will expose some of the best students in forestry, nature conservation, agriculture and environmental management to carbon and plantation forestry. Furthermore, the companies have reached an agreement with the Forestry Institute Olmotanyi, Tanzania, to recruit students from the college, and 20 students have been recruited in 2009. Green Resources is believed to be the largest employer of graduating foresters and nature conservation management in Eastern Africa.

### *Fredskorpset: Major exchange programme*



Green Resources was approved as a partner institution with the Fredskorpset Norway on May 2009. This involves the funding of an exchange programme including eight young employees during a period of 12 months with a total grant of NOK 2.3mn. The exchange programme will allow Green Resources to employ two Norwegian graduates to be deployed at offices in Tanzania and Mozambique, two employees from Tanzania and Mozambique to work in the Oslo office, and four employees to be exchanged between Tanzania, Mozambique and Uganda.

Prior to the exchange, the candidates are given a three-week preparatory course in Norway where they focus on cultural understanding, information work about Norway and communication, among other things. After the deployment period, it is a condition that the candidates will engage in information work within the workplace they came from, to enable colleagues to gain from their experience as well. During their deployment at various offices and plantations they will be given normal work duties under supervision by the respective manager.



*Security guards at Bukaleba*

The aim of the exchange programme is to enable young employees in the partner companies to get international experience and to strengthen the mutual business culture, understanding and communication skills. Green Resources considers this a unique opportunity for a selected group of employees, and trust it will be seen as another step in becoming a preferred employer in the forestry business. The agreement with Fredskorpset is for one year, but if successful it is the intention of the parties to continue with new exchange programmes for a period of three to five years.

Separately, Green Resources has become member of the Norwegian organisation called Skoglauget – a network of companies and institutions within the forestry sector in Norway that joined forces in 2008 to improve on recruitment, competence building and the public image for the sector. Skoglauget has initiated a trainee programme called Forest Future, and Green Resources is one of eight members that have recruited a candidate through the trainee programme.

### *One fatal accident*

During 2008, Green Resources had one fatality in 2008 due to a traffic accident at a new plantation and another accident resulting in permanent injury (lost finger) at the sawmill. Fourteen accidents required medical assistance. The number of serious accidents fell compared to previous years, and the company continues to expand its health and safety activities.

### EQUITY FINANCING

The Green Resources' Group shareholders' equity almost doubled from NOK 183mn in 2007 to NOK 340mn (USD 49mn) at the end of 2008, primarily driven by NOK 91mn of new equity, as well as NOK 32mn of retained earnings. The equity ratio was 67%. In December 2008, there was also a NOK 67mn convertible loan raised and an agreement for a further NOK 72mn in equity to be injected before the end of 2009.

#### *Net cash position*

The group had NOK 81mn of borrowings at the end of 2008, up from NOK 26mn in 2007, of which NOK 67mn was a convertible bond, which the company has the option to convert into equity before the end of 2009. Green Resources held NOK 87mn of cash and deposits, implying a net cash position of NOK 6mn at the end of 2008, compared to NOK 11mn net debt at the end of 2007. Accounting for the outstanding convertible bond as equity, the net cash position was NOK 73mn at the end of 2008. The cash flow statement shows that the group's profit before taxation has been adjusted by NOK 9mn to reflect exchange adjustments and NOK 84mn for non-cash revenues in order to arrive at the net cash used by operating activities (-NOK 38mn in 2008).

#### *Shares and share capital*

An extraordinary general meeting on 4 December 2008 approved the raising of NOK 232mn (USD 33mn) of new funding. The company issued 2,978,198 new shares in December 2008 at a price of NOK 30 per share, raising NOK 75mn (USD 11mn) of new equity from Phaunos Timber Fund and NOK 14.3mn through the conversion of debt to equity by an existing shareholder. At the same time, a convertible bond of NOK 67.51mn was issued to Phaunos with the right to convert the loan into 2.046mn new shares at NOK 33 per share, and Green Resources has the right to convert the loan into the same number of shares after 30 November 2009. Phaunos also made an irrevocable commitment to subscribe to another 2.5mn shares at NOK 30 per share on 30 November 2009, or NOK 75mn. Thus, Green Resources is in a position to increase its equity by NOK 142.5mn.

### OUR CAPITAL PROVIDERS

From 1995 to 2006, the company was financed by private individuals who invested more than NOK 130mn of equity into the company. The company founder remains the largest shareholder, with another three individual investors each holding approximately 10% of the shares each. Another 50 private shareholders have invested in Green Resources' shares.

#### *Phaunos Timber Fund*

Phaunos became a shareholder of Green Resources in 2008. It is quoted on London Stock Exchange, and is the world's leading stock exchange listed timber fund. It was established in 2006 and had a value of USD 540mn at the end of 2008. Phaunos has forest investments in Latin America, Eastern Europe and Asia, and Green Resources benefits from Phaunos' experience in these locations. Phaunos owns 12% of Green Resources or about 25% on a fully diluted basis, including an agreed equity injection on 30 November 2009. FourWinds Capital Management, Boston, US, has been appointed investment manager of Phaunos.

#### *Storebrand*

Storebrand became a shareholder in Green Resources in 2006, and was the major participant of the company's share issue in 2007, the largest share issue in Green Resources up until that date. Storebrand has invested NOK 65mn in Green Resources and holds 8.5% of the company. The Storebrand Group is a leading player in the Nordic markets for pensions, life and health insurance, banking and asset management. It is Norway's leading insurance company and the largest Nordic life insurance company.

#### *Norfund*



Norfund managed a loan provided to Green Resources by Norad of NOK 8mn in 1998 and a NOK 4mn loan raised in 2003 to purchase the Sao Hill sawmill. The outstanding loans were repaid during the first half of 2009. Norfund has provided a new USD 7mn loan over ten years as part of the Southern Highlands investment programme. Norfund is the Norwegian government-owned development finance institution.

#### *International Finance Corporation*



The International Finance Corporation (IFC) is the lead lender to the Southern Highlands investment programme, having worked closely with Green Resources over the last three years to develop the project. The IFC is the private-sector arm of the World Bank Group, the world's leading development finance institution. IFC has committed USD 18mn in two ten-year loans to Green Resources, the largest loan ever provided to a private company in Tanzania.

## MISSION, VISION AND VALUES

### *Company mission*

The mission of Green Resources is to establish Africa's leading afforestation, carbon offset and wood products company for the benefit of its stakeholders.

### *Company vision*

Our vision is to establish large, sustainably managed forest and agro-forestry plantations that will create the basis for the long-term growth of the company and store large amounts of CO<sub>2</sub>. We will use wood from existing and new plantations to produce high-value-added products based on the needs of our customers. Our objective is to become the favoured employer in the local community, attracting the best employees. We will follow the highest corporate standards, Forest Stewardship Council (FSC) sustainable forest certification, and aim to become an attractive alternative for investors otherwise reluctant to invest in emerging markets and a favoured partner for development organisations.

### *Company values*

Our values are to:

- establish and maintain fast growing and high-quality forests as effectively as possible
- provide first-class products and services to our customers
- adhere to high environmental and social standards
- appreciate employee performance
- contribute to rural development for normal people
- generate good returns on investment

## COMPANY OBJECTIVES

Green Resources' goal is to be Africa's best, and the world's lowest-cost, forest and carbon credit company. We aim to create an advanced plantation and forest conservation company and to develop a first-class, rapidly growing forest products and energy business in Africa. The company converts low-yielding grass and degraded forestland to grow forest and other high-yielding crops, generating the most carbon credits suitable for the different areas under its management and ownership. The company aims to process these resources in the most efficient way in Africa, alone or in partnership with industry leaders.

Green Resources aims to develop a leading African carbon offset business. The company will absorb and store the maximum amount of CO<sub>2</sub> through forestation projects and by converting plantation crops into biofuel and renewable energy.

Green Resources aims to be a leading forest products and building-materials company in Africa and to be a large exporter of forest products to the Arab Gulf, Indian Ocean and the Red Sea regions. The company's core products include sawn timber, transmission and building poles, joinery products and other wood-based building materials, as well as energy from renewable resources.

Green Resources will conserve and expand natural forest and other valuable vegetation within its areas of operation and will obtain FSC certification for all its forests. The company will reach out to local communities to establish farm and village forest schemes, maintaining a strong focus on sustainable environmental and social development, and adhering to high standards of corporate social responsibility. Green Resources wants to be the preferred employer and attract the best employees in its industry. The company aims to be the preferred partner for the local communities in which it operates and for international business partners and financial institutions.

## FINANCIAL TARGETS

Green Resources is a profit-oriented private company. The company aims to maximise the return to shareholders via share price appreciation and, eventually, through the payment of dividends. Ultimately, the company will seek public listing of its shares.



*Employees in the Southern Highlands*

The company believes investments in the areas where it operates should yield at least 20-25% return on equity, compared to a return target of 8-12% or lower for traditional forest investment companies and carbon funds in the main global markets.

Green Resources believes the interests of stakeholders, including customers, employees, local communities, the environment, host countries, creditors and the shareholders are best served by creating a financially strong and profitable company.

Green Resources believes that a business based on sustainability and social responsibility, using renewable, green resources, will yield the highest long-term returns.

## CORE ENVIRONMENTAL AND SOCIAL VALUES

1. We are a young, dynamic, carbon offset, plantation, forest products and renewable energy company that aims for profitable growth and value added for shareholders.
2. We are committed to becoming the largest and best carbon offset, plantation, forest product and renewable energy company in East Africa.
3. Our aim is to be the preferred employer in our industry, as well as the preferred partner for local communities and our customers.
4. We respect and protect the environment and foster the social improvement and well being of our people and the rural communities we work with.
5. We want to bring development to some of the poorest areas in the world's least developed countries.
6. We invest in people and our staff, because that is the basis for our success: employees who perform well, show commitment, loyalty and integrity will be fostered and rewarded.
7. We have zero tolerance towards discrimination, poor working conditions, work-related accidents and corruption within the company.
8. We are committed to protecting the natural environment and creating a socially responsible organisation and, therefore, we are committed to sustainable forest management principles, including those of the Forest Stewardship Council.
9. We want our operations to contribute to mitigating climate change and assist industrialised countries to meet their emission reduction commitments under the United Nation's Framework Convention on Climate Change (UNFCCC).
10. We want to contribute to local, regional and national sustainable development objectives, in accordance with national legislation and relevant international treaties and other requirements to which the organisation subscribes (eg, CCBA, ISO 14001).

## EMPLOYEES AND ENGAGED STAKEHOLDERS WILL:

- Promote the development and success of the company, customers and local communities.
  - Create a cooperative working environment that provides equal opportunities and fairness for all employees and stakeholders.
  - Use the required safety gear, prevent fires, follow the highest environmental standards, save fuel and promote cooperation with the local communities.
  - Use company equipment for company use only, unless otherwise permitted.
  - Follow the employee handbook.
  - Ask questions, take notes, solve problems and take action.
  - Immediately act on issues that arise; report problems and breaches of regulations, regardless of position and responsibility, to a manager.
- Employees and stakeholders can send confidential information, comments or complaints to:**  
**[comments@greenresources.no](mailto:comments@greenresources.no)**



*Byamah retired after 13 outstanding years as MD in Uganda*

## AFRICA'S LARGEST FORESTATION COMPANY

Green Resources has 14,000 ha of forest and has planted more new forest than any other private company in Africa during the past ten years. Green Resources quadrupled the planting of new forest from 2005 to 2008. Green Resources is dedicated to building a large African forest industry.

## ENVIRONMENTAL AND SOCIAL RESPONSIBILITY

Green Resources aims to conform to high environmental, ethical, financial and social standards, and has certified its oldest forest according to the Forest Stewardship Council's standards. It aims to be the preferred partner for local communities, the national government and international development and finance organisations.

## STRONG ORGANISATION

Green Resources has 14 years' experience in African forestry and the carbon credit business. The company has built up a strong organisation of local managers and expats with a proven record of success in tree planting, carbon credits and industrial operations. Green Resources is the only major forestry company in East Africa with predominantly local plantation managers.

## HIGH-QUALITY CARBON CREDITS

Green Resources has a unique position as a low-cost supplier of carbon credits from its forestation and bioenergy operations. The carbon activity has a strong social and environmental profile, with most of the investments benefiting rural farmers and new forest resources partly replacing non-sustainable logging from natural forests, and all revenues being reinvested in the local economies. The carbon credit revenues are expected to recover an important part of the planting costs.

## BEST LOCATION FOR FORESTRY

East Africa, in particular Mozambique and Tanzania, is probably the best place in the world to establish new forest plantations. Rainfall is good, and land and qualified employees are available. East Africa is closer to the major growth markets of China and India than most of its competitors in Latin America and Australasia, and reaches the Middle East by a short back-haul shipping route.

## LOW-COST PLANTING

Green Resources takes a direct hands-on approach to business and has small overheads. Its planting costs are among the lowest in the world, and are a quarter of the costs in Australia, the country with the largest new plantations aimed at the Asian markets. The cost of pruning and thinning, which produces the highest value 'clear' logs, is the lowest in the world, creating the basis for a future value-added business.

## LARGE AVAILABLE LAND AREAS

Green Resources has more than 100,000 ha of land available for planting, with additional areas offered by villages. It has a good record of land acquisition, typically holding land on 99-year or 50+50-year leases. The company's strong organisation and good infrastructure is capable of managing the large amounts of land suitable for forestation. By using 2% of their land for forestry, Mozambique and Tanzania could each build a forest industry that is larger than South Africa's and Green Resources aims to be at the centre of this development.



*Women planting*

## STRONG INDUSTRIAL GROWTH

The revenues from the company's industrial operations have grown by 50% per annum since 2005, reaching USD 10mn in 2008 with good profitability. Green Resources has embarked on a USD 60mn expansion of the operations in Tanzania and expects to quadruple revenues again over the next five years.

## LOCAL INDUSTRY LEADER WITH SECURE LOG SUPPLY

Green Resources' Tanzanian sawmilling operations located in the Southern Highlands are the largest in East Africa. The company has a secure log supply from East Africa's largest productive forest, which is located next to the mill. Green Resources is one of East Africa's largest treated pole producers and has a small but fast growing joinery factory.

## FAST GROWING LOCAL ECONOMIES

Green Resources operates in three of Africa's fastest growing economies and most stable countries over the past ten years: Mozambique, Tanzania and Uganda.

## STRONG SHAREHOLDERS

Green Resources has a broad and deep shareholder base, with strong industry, finance and local knowledge. The shareholders have shown long-term dedication to the company and can provide the required equity to finance company growth.



*Bed of seedlings*

## PLANTATIONS

Green Resources' objective is to be Africa's best plantation company and a driving force in developing the continent's large potential for tree plantations. The company believes the world will see an increasing shortage of wood fibre at a time when higher energy and oil prices and an increased desire for renewable products will accelerate the demand for wood fibres. The global shift from northern slow growing natural forest to fast growing southern plantation forestry will continue. Deforestation and illegal logging is increasingly viewed as unacceptable, increasing the demand for wood grown in plantations.

The company will convert low-yielding grassland and degraded forest to grow the highest-yielding crops suitable for the land areas under the company's management. The focus is on forestry, including exotic and indigenous species, but also other crops that make appropriate and profitable use of the available land. The lack of long-term investors in Africa has resulted in modest competition for land suitable for long-rotation crops and this should enable Green Resources to reap good returns. Green Resources will diversify the species planted and the geographic locations in order to reduce the risk. At the same time, the company will conserve and expand the natural forest and other valuable vegetation within its areas of operation and will obtain FSC certification for all its forests. It will reach out to the local communities to establish Farm and Village Forest Schemes, maintaining a strong focus on sustainable development, environmental protection and social development.

### *Types of plantations*

Green Resources' objective is to establish different types of forest plantations aimed at a number of different markets:

- Energy and pulpwood plantations for the regional and global markets feeding charcoal and pellet production, panel board and pulp and paper mills, as well as new-style wood refineries producing a mix of biofuel, chemicals and fibre.
- Softwood sawlog plantations for sawn timber and processed building products for local use and export to the Middle East and the Indian Ocean region, as well as high-value clear wood for the global markets.
- Eucalyptus saw- and peeler logs and transmission pole plantations for the African and Indian Ocean markets.
- High-value hardwood (teak or indigenous trees) sawlog plantations for the global market.
- The waste wood from these plantations will also be used for the production of electricity and steam for internal consumption and external sale.

### *Diversification*

Green Resources is selecting forestation regimes based on the potential profitability of the projects, within the environmental and social framework that is a key part of the company's strategy. In order to diversify the risk of the investments, Green Resources employs the following investment policy:

- Select a number of different species and provenances
- Operate in a variety of climatic zones
- Target different end markets with the same species
- Operate in a number of countries

### *Large East African potential in forestry*

East Africa has some of the best conditions in the world for plantation forestry. Long term, both Mozambique and Tanzania should develop a forest sector similar or larger in size to that of South Africa, New Zealand or Uruguay, and possibly challenging Chile and Australia. This will only require the use of 2% of Mozambique's land area of 80.2mn ha (801,590 km<sup>2</sup>) and Tanzania's 94.5mn ha of land. Mozambique and Tanzania can position themselves among the world's largest exporters of forest products after Brazil and Indonesia, the two largest southern hemisphere wood products companies, and enable the countries to make a large contribution towards the global fight against climate change. Uganda can build a prosperous forest industry based on domestic sales and exports to the Great Lakes' markets. In South Africa, 1.1% of the land is used for forestry, covering 1.37mn ha of a total of 122mn ha. The annual value of the forestry sector in South Africa is about USD500mn, while the ex-mill value of the forest products is more than USD2bn. Green Resources expects to be a driving force behind the development of the forest industry in East Africa to reach similar and/or higher levels.

### *A place for agricultural crops*

Where the growing conditions are suitable, Green Resources will allocate part of the plantation to grow a range of agricultural crops. There are several reasons for growing agricultural crops along with forest plantations:

- to provide food security for the local communities and increase local food production
- to add biodiversity to the plantation
- to contribute to fire and disease protection
- to create continuous employment opportunities for the local community
- to maximise the financial return on the overall investment



## MAXIMISING VALUE CREATION IN THE PLANTATIONS

The value of long-rotation plantations, in the form of carbon sequestration and final harvest value, is driven by a number of factors. Green Resources is working hard to improve operations in order to optimise performance relating to these factors and therefore maximise the value of the company to its shareholders, employees and other stakeholders.

### *Biological growth*

Biological growth traditionally accounts for the bulk of the value creation. Growth rates vary widely, depending on rainfall, temperature, soil conditions and a number of other factors. Green Resources operates in areas with favourable growing conditions.

### *Establishment cost*

For plantation forestry, the cost of establishing new plantations is vital for the return on the investment and is often underestimated by the main industry operators. The costs differ sharply across the world, driven most importantly by efficient operations, cost of equipment, labour costs, organisational overheads and land acquisition costs. Green Resources aims to be a global low-cost operator in all parts of the value chain.

### *Timber/end-market prices*

Rising end-market prices have, over time, added to the value of forests. Following a flat decade, timber prices started rising again in 2003/04. Green Resources aims to sell wood fibres into a variety of uses based on the prices of the various markets, as well as developing products for non-traditional markets in order to maximise the value of the company.

### *Higher-value end use*

The value of trees differs based on size, age, class or end use. Clear sawlogs are, for example, much more valuable than pulpwood. The progression of timber into higher-value uses opens an exponential increase in the value of the trees as they grow older. It is an integral part of Green Resources' strategy to ensure downstream value creation, which has normally not taken place in Africa.

## CARBON CREDITS

It is one of Green Resources' main aims to fight climate change through highly

efficient afforestation projects that capture and store carbon, and to conserve natural forest and end deforestation. Carbon finance is a key part of the funding of the company's plantations, which are located in areas where there are no commercial-scale forestry operations. At the same time, the carbon strategy provides major benefits to some of the poorest people in the world. The company is also engaged in renewable energy projects and aims to be Africa's leading provider of carbon credits.

### *Social carbon credits*

Green Resources will reinvest 100% of the carbon income in further tree planting into the African villages where the carbon revenues were originally generated, thereby continuing to provide significant employment and development. It also aims to capture the largest possible share of the carbon value chain for its African operations by developing and selling projects of a high standard, rather than relying on intermediaries that have traditionally extracted up to half of the carbon value.

### *Avoiding deforestation*

Africa is a modest emitter of traditional greenhouse gases. However, deforestation in Africa and other areas of the world is responsible for about 20% of the global greenhouse gas emissions. The need for firewood and charcoal is a major driver of deforestation, along with timber logging and agricultural clearing. Green Resources conserves natural forest, while the forestation activities ensure that building materials and firewood can be supplied from sustainably managed forests. Deforestation will only stop if there are alternative sources of wood from plantation forests.

### *Efficient carbon credits and sustainable forests*

For every 1m<sup>3</sup> of growth in the forest, 1-1.5 tons of carbon dioxide is consumed (or removed from the atmosphere) and stored in the wood. It is Green Resources' intention to maintain its forests as carbon sinks (stores) forever. The forest will be managed on a sustainable basis, with the annual harvest matching annual growth when the trees reach maturity. The wood is used for bioenergy, building materials, paper pulp, chemicals or other end products. The forests will generate renewable products that often replace



*Teak at Tanga*

non-renewable carbon emitting products, like fossil fuels or metals and plastics in building materials and packaging.

## INDUSTRIAL OPERATIONS

Green Resources' industrial subsidiary, Sao Hill Industries (SHI), is one of the top three forest products companies in East Africa. The local market provides a stable income base for forest products and sawlogs. Green Resources aims to be the leading forest products, building materials and transmission pole company in East Africa. The company also aims to develop into a significant exporter of forest products to the Persian Gulf, Indian Ocean and Red Sea regions, and an exporter of wood components to the global markets. East Africa has a unique location close to some of the world's largest and fastest growing markets for wood products. It is located closer to China than most of the world's large forest regions.

### *Rationale for industrial operations*

Green Resources is primarily a forestation and carbon offset company, but it does also aim to have a major involvement in industrial processing because it wants to:

- Provide the best possible market for, and increase the value of, the company's own plantations.



*Southern Highland pine plantation*

- Ensure that the company can successfully process the wood it produces within the region.
- Create development and employment in the countries where it operates.
- Generate superior returns by applying improved processing technologies, compared to what is commonly used in the region.
- Capitalise on the rapidly developing regional building materials markets, some of the fastest growing in the world.

### *Building materials*

The core products include sawn timber, joinery products and other wood-based building materials for the rapidly growing East African markets. Green Resources also aims to be a leading regional exporter of building materials, being ideally located for supplying the Persian Gulf, Red Sea and Indian Ocean markets, and believes it can be a low-cost manufacturer of wood components to the world market.

Green Resources will convert its entire production of sawn timber from 'green' timber into high-quality kiln-dried timber, using steam produced from its own waste materials. This will lead to better prices in the export markets, while also providing the local market with improved quality timber and the local processing industry with excellent raw materials required for expansion of the local furniture industry. Green Resources will remanufacture some of the timber into products where the company will have a competitive advantage, for example, pallets, doors and glue-laminated sheets and products.

### *Transmission and building poles*

Green Resources' objective is to become Africa's largest transmission pole producer, manufacturing high-quality poles that adhere to the highest international

specifications. The company has replaced imports from Europe and South Africa with poles produced within the East African region. The company also aims to become the leading producer of building and fencing poles.

### *Increasing wood utilisation*

Most sawmillers in East Africa have a recovery rate of harvested wood from one-quarter to one-third, with the remaining raw material being wasted, burnt or left to rot. SHI also has a low recovery rate and is determined to increase the wood utilisation rate by about a third to an international level of 100% by processing the available wood waste into small-sized timber, energy and panels. The wood residue is already paid for and logged, and about half of it is transported to the mill. This represents a unique, low-cost source of raw material ready to be used by SHI.

### ENERGY

To Green Resources, energy means bioenergy in two main forms: solid fuel and combined heat power (CHP) plants. The company has also a small hydro-energy project, which may be developed in the future. Energy is still a small business for Green Resources, but several projects are under development, and the first revenues were recorded during the first half of 2009.

CHPs produce steam and electricity for internal and external uses based on waste wood, typically using the lowest-quality waste from the industrial wood processing and from forest waste. A heat and power plant makes up the heart of many forest industrial operations, and Green Resources is developing a solid wood products concept, which is based on a 15MW CHP, the first to be built at Sao Hill, Tanzania.

Solid fuel takes the form of firewood, chips and pellets, as well as charcoal. Pellets are the highest value-added solid biofuel, and are well suited for East Africa because of the lower logistics costs and the superior handling qualities. Green Resources is developing two pellet projects, one in Mozambique and one in Tanzania. Pellet production fits well with a future pulp mill or 'wood refinery' because most of the equipment can be used in a future pulp mill, while the non-related investments will be written off by the time of a pulp mill start-up.

Industrial charcoal production plays a major role in the metal industry in Latin America and for certain high value metal applications around the world. Green Resources is developing a charcoal business that primarily supplies the consumer market, in competition with charcoal produced from natural forest.

Green Resources wants to be self-supplied in energy from renewable resources, whilst at the same time supplying electricity to the local community and the regional market, as well as solid bioenergy to the regional and international markets.

Green Resources is initially expanding the renewable energy business by increasing the supply to the local market. It has established what is believed to be Tanzania's largest charcoal operation based on renewable resources. In the long term, Green Resources expects to be a major supplier to a new local and growing global biofuel industry.



*The Malonda TreeFarms partners with a 14 months old eucalyptus in Niassa, Mozambique*



Completing Uchindile secondary school

Green Resources supports socio-economic development and poverty alleviation in the rural areas it operates in by creating employment, building schools and health centres and undertaking infrastructure and other community development projects. Green Resources also has separate carbon credit agreements with the local communities where it operates, guaranteeing that 10% of the gross revenues are invested in community projects and that all of the proceeds are invested in the local economy. Most of these projects are village based and all take place in close cooperation with the local community. Many of the company's employees spend a considerable amount of time on the community projects, to ensure that they are properly completed and that funds are spent effectively. In 2008, Green Resources spent a total of USD302,000 on various community development projects.

COMMUNITY PROGRAMMES

*Education*

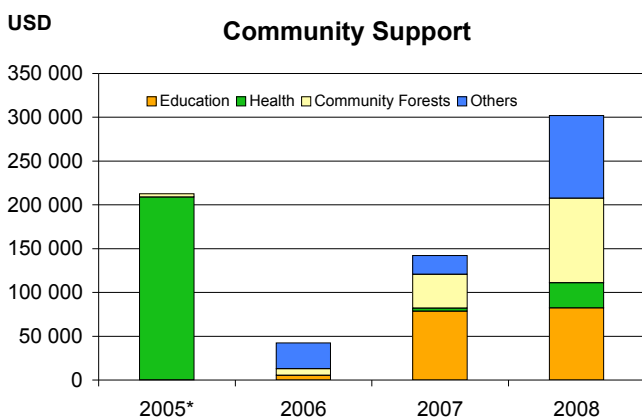
In 2008, Green Resources continued and increased its contribution to developing the education facilities in the areas where it operates. Most significantly in 2008, the construction of the TreeFarms secondary school in Mlimba, Kilombero, was completed, named so in recognition of the fact it was wholly financed by Green Resources. During the last year, Green Resources has also helped with the construction and expansion of other primary and five secondary schools in two districts, Mufindi and Kilombero, while our Tanga company has assisted in building a teachers' staff house and renovating a classroom at Langoni primary school.

*Healthcare*

During 2008, TFL facilitated the construction of a village and healthcare office in Langoni, Tanga, Tanzania. TFL has also agreed to construct a dispensary in Mtango. In Bukaleba, Uganda, medical equipment including thermometers, blood pressure readers and stethoscopes were distributed to four local health centres and the district hospital. It was also agreed to start construction of a dispensary and a community hall, which is now under way. An HIV/AIDS awareness programme for workers and their families was agreed on and is being implemented.

*Water supply*

Green Resources continues to assist villagers to obtain access to clean and reliable water sources. In Bukaleba, the company established two bore holes for use by surrounding communities, and in Katchung, Uganda, one safe water supply was established.





Receiving medical equipment in Bukaleba

*Building roads and bridges*

In the Southern Highlands of Tanzania, the company has built and maintains over 100km of village and district roads. Forest roads within the plantations, which are often used by villagers, are also regularly maintained. In Tanga, a 10km road between Langoni and Gendagenda was graded and maintained. At Bukaleba, both roads in the forest and surrounding areas have been maintained and BFC has also contributed to new road construction.

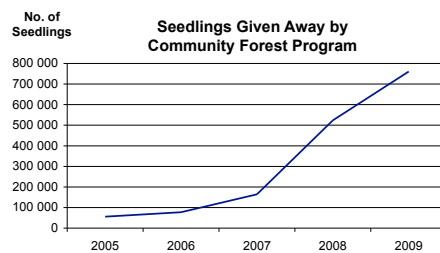
*Mbao Savings Society*

The Mbao Savings and Credit Cooperative Society (SACCOS), set up for the employees of Sao Hill Industries, was expanded during 2008, through new capital injection by Green Resources. SACCOS is a savings bank and the backbone of Tanzanian micro-finance. Typically, it provides financing for its members to purchase plots, farm implements, seeds and fertiliser, for home industries and trading operations, and as a lender of last resort.

**COMMUNITY FOREST PROGRAM**

Green Resources trains workers and villagers to establish their own plantations using best forest-management practices.

Green Resources alone gave away 517,000 seedlings to village farmers and schools in 2008, and is supporting local tree-planting groups. It has already provided 760,000 seedlings in 2009. Such a programme not only gives villages the opportunity to grow an extra cash crop by supplying local industries with wood but also reduces the pressure on the



deforestation of natural wood for charcoal and fuel wood. The extra trees will also further help climate change mitigation.



*Natural forest and conservation area*

## CAPTURED 1.1 MN TONS OF CO<sub>2</sub>

Green Resources is a leading company in the fight against climate change and has just had its first carbon credits validated under the VCS. Green Resources' forests act as significant carbon sinks that sequester large volumes of CO<sub>2</sub>, with 1.1mn tons of CO<sub>2</sub>e of accumulated carbon stored in its forest. Green Resources existing forest will capture 6.6mn tons of CO<sub>2</sub>e by 2020, making a major contribution to the fight against climate change. With the implementation of the future planting plan, a total of 21mn tons of CO<sub>2</sub>e will be captured in the company's forest.

## AVOIDED DEFORESTATION

By establishing plantation forests that supply building materials, firewood and charcoal, the pressure on logging in natural forest is reduced, therefore helping to slow the process of deforestation. Plantation forests that increase the local supply of wood are a prerequisite for protecting natural forests in most parts of Africa, because this increases the supplies of energy and building products, key consumables for typical communities. Much of the existing avoided deforestation / REDD debate is misguided because it focuses too much on conservation, too little on the need for wood and the interest of the people that demands building material and fuel wood.

## PLANTING TEN TIMES MORE TREES THAN HARVESTING

Green Resources has planted ten times as many trees as it has harvested and is committed to planting at least ten more trees for every one it harvests over the next decade. While logging for charcoal and clearing for agriculture are the main forces behind deforestation in Africa, logging for industrial processing for building materials, furniture and other uses is also playing a major role. Green Resources is committed to increasing the future supply of industrial wood from sustainable, managed plantations and intends to achieve Forest Stewardship Council (FSC) certification in all its plantations.

## SUPPORTING TREE PLANTING BY LOCAL FARMERS

Green Resources has given away 1.7mn seedlings to farmers and local community organisations, supporting a large expansion of the private forest ownership, primarily in Tanzania. Equally important, Sao Hill Industries (SHI) has purchased logs from more than 50 plantation forests established by small farmers, schools, missionaries, private companies and government organisations in the Iringa, Mufindi and Njombe districts of Tanzania's Southern

Highlands. This number will increase every year. The investments in the transmission pole business have enabled SHI to produce high-quality products that are competing successfully internationally, to expand production and to source large quantities of local pole material. Wood has become a cash crop and the increased demand for wood encourages the local community to expand its own forest plantations and a wide group of people within the community benefit from Green Resources' growing industrial operations at SHI. In Uganda, the new pole treatment facility, which will be completed in late 2009, will also source wood from local suppliers. This is a policy Green Resources will follow in all its operations across Africa.

## CONSERVING NATURAL HABITATS

Areas of indigenous trees and riverine vegetation are being mapped and protected throughout Green Resources' plantations. All river valleys are protected and no tree planting is allowed to take place within 30m of the riverbank. Ecologists are identifying the major species found along rivers in all areas, including wetlands and natural forests. Permanent sample plots are established, mapped and monitored yearly for changes in, for example, vegetation composition, growth, diseases and pests. In the Southern Highlands of Tanzania, Green Resources has set aside more than 5,000 ha of grassland as a natural habitat, partly for the blue swallow, a threatened bird.

## RESTORING NATURAL FORESTS

Green Resources also looks to preserve and enhance any areas of natural forest within its plantations. Restoring existing natural forests increases the biodiversity of Green Resources' plantations. This also increases the biomass of the forests and makes an important extra contribution to absorbing carbon dioxide from the atmosphere.

## PLANTING NATIVE TREES

Plantation forestry has until recently almost exclusively focused on acacia, eucalyptus, pine and a little teak. This includes government planting and planting financed by the international donor community. These species will continue to play an important role in African forestry. However, Africa is full of high-quality and interesting hardwoods. Indigenous species can generate highly valuable timber for the furniture and building markets. Green Resources is actively pursuing opportunities to establish plantation forests based on native species.

## CONSERVATION AREAS; BLUE SWALLOWS

Green Resources has established important grassland conservation areas in Tanzania's Southern Highlands. Two independent ecological surveys of Uchindile and Mapanda forest projects revealed that several bird species were encountered, including the blue swallow (*Hirundo atrocaerulea*). The blue swallow, locally known in the Southern Highlands as 'Kinyanyamba bluu' is a threatened intra-African migrant bird species and endemic to sub-Saharan Africa. It has a range of ten African countries south of the Sahara, from South Africa to Eastern Congo and Uganda in the North. The breeding population is currently believed to be 1,500 pairs and the number is considered to be in decline. It is defined as a threatened species by IUCN/Birdlife International.

Green Resources has established a 1,698 ha bird and grassland conservation area in Uchindile and 428 ha in Mapanda. This is a larger area than has been the recommendation in South African experience as the required area to conserve the blue swallows within large-scale plantation forest. In total, Green Resources has set aside more than 5,000 ha land for the conservation of natural habitats in the Southern Highlands of Tanzania.

The blue swallow has only half a dozen major breeding grounds, including south-western Tanzania. Generally, the birds arrive at their breeding grounds in September to October, and depart in April. From within their breeding range the blue

swallows migrate in the non-breeding season to southern Uganda, western Kenya, north-eastern DRC and north-western Tanzania.

The primary habitat in the breeding ground is a combination of highland grassland areas interspersed with drainage lines in gullies and valleys; and other wetland systems such as pans and small dams. The birds select suitable grasslands, not for their foraging properties, but for their importance for nest building. They also select suitable wetlands amongst the grassland patches for foraging. The blue swallow prefers high altitude ( $\geq 1700$  m asl), high rainfall ( $> 1000$  mm pa) and undulating, open, primary mist-belt grasslands.

Two pairs of blue swallow were seen in areas in Uchindile closely associated with wetland. In Mapanda the survey team did not find blue swallows on the project site, except in a village outside the project area during detailed survey. The ecological survey of the Idete Forest Project also observed blue swallows at Kilongamaka wetland, but found that the birds use this as a transitory habitat proceeding on their journey from Lupembe to Mufindi in November/December and vice versa in April/May.

## GREEN RESOURCES' OWN CARBON FOOTPRINT

This is a report written by Reid Miner, National Council for Air and Stream Improvement (NCASI)

Green Resources used the forest industry carbon assessment tool (FICAT) to develop a carbon footprint of the company's 2008 operations in Tanzania and to characterise the impact of the planned renewable energy projects.

FICAT is a model for assessing the cradle-to-grave carbon and greenhouse gas impact of activities in the forest products value chain. FICAT was developed for the International Finance Corporation (IFC) of the World Bank Group by NCASI, a non-profit environmental research organisation focused on the forest products industry.

The analysis of the operations of Green Resources included (a) the Uchindile forest project, (b) the Mapanda forest project, (c) the Idete forest project, (d) the Lindi forest project, (e) the Tanga forest project, (f) Sao Hill Industries, (g) Sao Hill Transport, and (h) Sao Hill Energy (planned CHP and hydropower projects).

### Summary of main findings

The results of the FICAT analysis reveal a number of important features of the carbon footprint of Green Resources' Tanzania operations in 2008.

- Direct emissions (Scope 1 emissions) and emissions associated with the mill's electricity purchases (Scope 2 emissions) are a very small part of the footprint.
- The plantations in place in 2008 are removing large amounts of CO<sub>2</sub> from the atmosphere. During the period they are maturing, the removals from the atmosphere are estimated to average 146,000 tons CO<sub>2</sub> e/year, an amount ten times greater than the total value-chain emissions for the operations in 2008.
- Planned renewable energy projects will cause the emissions from the operations to increase, but these increases will be offset many times over by the avoided emissions associated with the projects.
- Emissions associated with the use of fire in government forests (as a tool to prevent uncontrolled fires) are a significant part of the company's estimated footprint. To estimate these emissions, it was assumed that they are the same as those in forests where fire is used more generally as

a management tool. Given the importance of these emissions to the company's footprint, it might be useful to attempt to check the validity of this assumption.

### Options for improving the footprint

- Green Resources may have the ability to improve its footprint by focusing on the following elements, which are, to varying degrees, within its control:
- Improving mill efficiencies with respect to electricity consumption, which accounts for almost one-quarter of the value-chain emissions in 2008.
  - Exploring options for reducing methane emissions from charcoal production.
  - Eliminating empty backhauls in the transport system. Although this would not change Green Resources' direct emissions (because the company owns the transport vehicles), it would accomplish an avoided emission related to the trucks that would have been transporting the material had the Green Resources' trucks returned empty.
  - Understanding the upstream emissions associated with the glue-laminated lumber produced by the company so that the company can identify any opportunities for using fewer greenhouse-gas-intensive glues, adhesives and resins.
  - Completing the renewable energy projects that are currently planned, as these will accomplish significant avoided emissions.
  - Continuing with plans to expand the plantations, which will accomplish large net removals of atmospheric CO<sub>2</sub>.

CO2e tonnes Factors	Net transfers to atmosphere		
	Direct	Indirect	Total
Land-based carbon	-146 012		-146 012
Forest carbon in products		-8 969	-8 969
<b>Total net flux of forest carbon to atmosphere</b>	<b>-146 012</b>	<b>-8 969</b>	<b>-154 981</b>
Manufacturing-related emissions	513	0	513
Emissions associated with forestry operations	12	1 782	1 794
Upstream emissions from fuels and non-fiber inputs		881	881
Emissions associated with purchased electricity and steam		988	988
Transportation-related emissions	883		883
Emissions during product use		4	4
End-of-life emissions		9 308	9 308
Total emissions	1 408	12 963	14 371
<b>Avoided emissions</b>		<b>-109</b>	<b>-109</b>
<b>Total carbon effect</b>	<b>-144 604</b>	<b>3 885</b>	<b>-140 719</b>

Source: NCASI

## RESULTS OF THE ASSESSMENT

The detailed results of this assessment are described below, by element.

### *Land-based carbon*

As of 2008, the company had planted 7,464 ha, primarily eucalyptus and pine, in Tanzania. These plantations are all on land that was previously non-degraded grassland. Accordingly, the plantations have accomplished a significant increase in land-based carbon and a corresponding removal of CO<sub>2</sub> from the atmosphere. Green Resources used the FICAT defaults to estimate this carbon impact. (Note: In a separate analysis, the FICAT defaults were used to produce estimates that were compared to the results of an analysis performed by the company on plantations involved in a CDM project. Using a project period in FICAT equal to that in the CDM project yielded results that were within 20% of the company's estimates.) The FICAT results indicate that the amount of carbon on the land, including soil carbon, was two to three times higher as a result of establishing the plantations, going from about 80 tons of carbon per hectare when the area was in grassland to 160-260 tons carbon per hectare. To annualise this increase in carbon stocks, the company used the rotation age for each plantation area. Therefore, the annualised uptake represents the average uptake per year during the time required for the plantations to become established (ie, before first harvest). This approach provided annualised uptake estimates that could be compared to company estimates. The results from FICAT indicate that during the time these plantations are maturing, they will be removing, on average, 146,000 tons CO<sub>2</sub> eq from the atmosphere per year. In 2008, most of the wood used to manufacture products was obtained from forest owned and managed by the government. This land is replanted and is under sustainable management. Therefore, it was assumed that the carbon stocks on these lands are stable, with a net zero impact on atmospheric CO<sub>2</sub>.

### *Carbon in products*

In 2008, the Sao Hill operations of Green Resources produced a range of products. Most of the production was in treated and untreated sawn wood and treated utility poles. Smaller amounts of laminated lumber products were manufactured, as was a small amount of charcoal. All of the products are used in Tanzania. The company used best professional judgment to select half-lives for time in use and to characterise the fate of products at end-of-life. In all cases, except for treated wood and poles, it was assumed that none of the used products would be landfilled, being instead reused or burned for energy. Used treated wood and poles were assumed to be landfilled. The company's manufacturing waste will be burned for energy, although it is currently being stored while a combined heat and power (CHP) plant is being built. FICAT estimates that the products manufactured by the Sao Hill operations in 2008 will store 1,352 tons CO<sub>2</sub> eq in products in use for 100 years. Carbon storage in products in landfills is estimated to be 7,617 tons CO<sub>2</sub> eq/year. Total additions to carbon storage, therefore, are estimated to be 8,969 tons CO<sub>2</sub> eq/year.

### *Manufacturing emissions*

The direct emissions from the Sao Hill operations consist of diesel fuel used in on-site machinery and in company-owned vehicles and emissions from charcoal production. The emissions associated with diesel fuel combustion are estimated to be 398 tons CO<sub>2</sub> eq/year. The emissions from charcoal production, estimated using an emission factor from a 2007 CDM project design document not involving Green Resources, were estimated to be 115 tons CO<sub>2</sub> eq/year. The total manufacturing-related emissions, therefore, amount to 513 tons CO<sub>2</sub> eq/year. There are no other manufacturing operations in the value chain involving these products.

### *Emissions from forestry operations*

Almost all of the wood used in 2008 came from government-owned forests where fire is used as a tool to prevent uncontrolled fires. The

emissions from this practice were estimated by using the emission factor for wood obtained from forests where fire is used more generally as a management tool. The accuracy of this approximation is not known. In the plantations, the only management activity that results in greenhouse gas emissions is thinning and harvesting. Using FICAT's default emission factor for these activities, it is estimated that the emissions associated with the wood used by the Sao Hill operations equalled 1,794 tons CO<sub>2</sub> eq/year in 2008. Less than 1% of these are from the company's plantations (Scope 1 emissions).

### *Upstream emissions associated with fossil fuels and non-fibre inputs*

The upstream emissions associated with the fossil fuels used at the Sao Hill operations are estimated to be about 69 tons CO<sub>2</sub> eq/year. A number of chemicals and other non-fibre inputs are required to produce Sao Hill products. Based on FICAT defaults (with one exception), the upstream emissions generated in making these chemicals were estimated to be 792 tons CO<sub>2</sub> eq/year. Together, the upstream emissions associated with these non-fibre inputs were 861 tons CO<sub>2</sub> eq/year.

### *Emissions associated with purchased electricity and steam*

The Sao Hill operations purchase electricity from the grid. The emissions associated with this electricity (Scope 2 emissions) are approximately 988 tons CO<sub>2</sub> eq/year. There are no other operations in the value chain for these products that require electricity.

### *Transportation-related emissions*

The transport of wood and products is in trucks owned by the company. At present, the return trips are empty. FICAT estimated that wood transport results in emissions of 83 tons CO<sub>2</sub> eq/year while transport of products to customers in Tanzania resulted in emissions of approximately 800 tons CO<sub>2</sub> eq/year. Total transport-related emissions, therefore, were approximately 883 tons CO<sub>2</sub> eq/year.

### *Emissions from product use*

The only emissions during product use are for the charcoal, which releases small amounts of methane and nitrous oxide when burned. These emissions were estimated by FICAT to be 4 tons CO<sub>2</sub> eq/year.

### *Emissions from end-of-life*

Except for treated wood and products, it is unlikely that used products or mill waste will be disposed of in a landfill. Therefore, except for these products, there are no landfill-related methane emissions. For treated products, the methane emissions are estimated to be 9,308 tons CO<sub>2</sub> eq/year. The burning of the remaining products at end-of-life will release small amounts of methane and nitrous oxide but at present FICAT does not estimate these emissions. However, using factors contained in FICAT, it was estimated that these emissions amount to less than 100 tons CO<sub>2</sub> eq/year, so they are not included in the analysis.

### *Avoided emissions*

At present, the only avoided emission in the footprint is associated with the use of charcoal in place of fossil fuel. If it is assumed that charcoal is a substitute for coal, avoided emissions of 109 tons CO<sub>2</sub> eq/year are estimated. It is important to note that the company is planning several renewable energy products with important avoided emissions associated with them. The planned 15MW CHP plant will use forest residue that is currently being burned in the forest, generating methane. More importantly, the plant will export biomass-based electricity, and by displacing more carbon-intensive electricity from the grid, is anticipated to avoid over 50,000 tons CO<sub>2</sub> eq/year. A planned 3MW hydropower project will avoid over 10,000 tons CO<sub>2</sub> eq/year.

## EMPLOYMENT

Green Resources has directly created 3,200 new jobs in East Africa, and if the indirect effect is included, we estimate more than 10,000 new jobs have been created by the company. Green Resources is frequently the only private employer in the villages where it operates and the company provides the only source of cash income for many of the subsistence farmers it employs. There has been significant development in the villages where Green Resources operates, with roofs covered by corrugated iron sheets, bicycles and radios being the most visible effects. Increased school attendance and a general improvement in education are important long-term effects.

### *A major taxpayer*

Green Resources generated NOK 12.4mn (USD 2mn) of public revenues in 2008, in the form of tax, VAT, royalties, log cess (a local government fee) and local charges for the purchase of forests in the Sao Hill Forest Project. This was an increase of 25% in local currency terms, from NOK 9.3mn (USD 1.6mn) in 2006. 84% of the taxes and government payments were made in Tanzania, while 10% were made to Mozambique and 4% went to Uganda.

### *Eco-gardens*

Mayai Garden is the name of two eco-gardens that Green Resources has established in Tanzania's Southern Highlands. The objective is to establish horticultural and forest gardens that become a showcase for how nutritious new crops and plants can be introduced into the local agriculture. Two dozen people have been engaged in this project during the last year. The project is particularly focused on how agriculture and forestry can be integrated into one operation. A second key objective is the introduction of new crops that can provide a nutritious supplement to the regular diet.

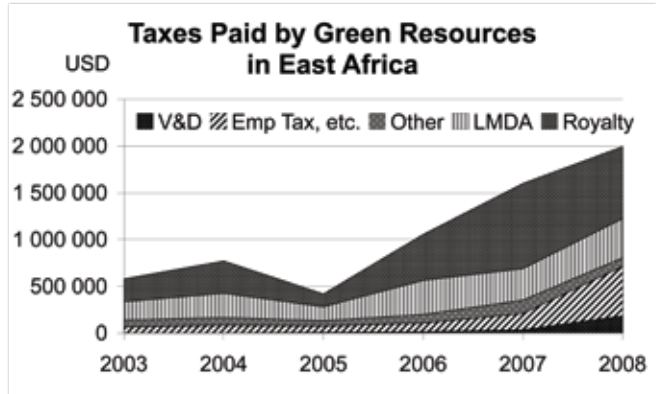
### *Generating exports*

Green Resources' exports from Tanzania fell sharply in 2008 to USD 0.6mn, down from USD 3.2mn in 2007, due to stronger domestic demand. The export of transmission poles to Kenya fell compared to 2006 and 2007. Growth in the local market and higher costs are discouraging large exports of sawn timber and related products at the moment. The poor implementation of new legislation aimed at curtailing illegal log exports continue to keep costs for exporting sawn timber at a high level.

### *Southern Highlands' growth*

The forestry industry is a driving force for the high economic growth in the Mufindi district and many other parts of Tanzania's Southern Highlands, a rural area that has become one of the most prosperous in East Africa after years of economic growth believed to exceed 10% per annum. Forest planted 20 to 40 years ago is now the basis for a flourishing sustainable industry based on a renewable resource. The forest plantations are playing an important part in the development of the region and the country. We believe a similar development will take place in Northern Mozambique and in Tanga, Tanzania.

When Green Resources arrived in the Southern Highlands in the mid-1990s, very little planting had been done in the preceding ten years anywhere in East Africa and the company restarted the afforestation of the region. Green Resources' forests will play an



important part in closing the gap between the supply and demand of wood for building materials, furniture, firewood and charcoal in East Africa over the next 20 years.

### *Buying wood from farmers*

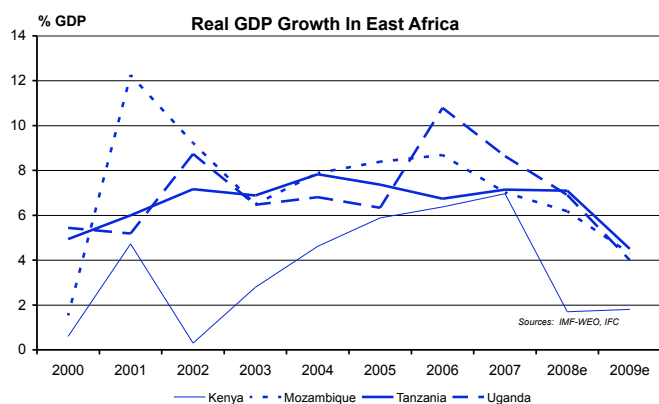
Missionaries, schools, government organisations and small private farmers have ensured that there are hundreds of smaller or larger wood lots scattered across the Southern Highlands. Green Resources is buying timber from more than 50 suppliers, ensuring that the benefits of its production and export of high-quality products are flowing back into the local economy. Wood has become the most important cash crop in the Southern Highlands and private farmers and organisations are extending their wood lots.



## STRONG ECONOMIC GROWTH

East Africa is showing continued good economic performance, but the World Bank forecast a drop in growth rates of about one-third for 2009, with GDP growth in Tanzania forecast to fall to 4.5% and in Uganda to 4%. Sao Hill benefits from a strong construction sector. The local banks were mostly funded by deposits and have not been significantly affected by the international banking crises, even if lending has become tighter during 2009. Due to the lack of a long-term loan market, the construction industry is mostly equity financed and has been less hit by the credit crises than expected. The tourism business, a major export earner, has seen a significant downturn, as have selected commodity markets like cotton and cashew. Investments in the mining sector, a main driver of economic growth in Tanzania, but also Uganda and Mozambique during the last ten years, have come to a halt.

In 2008, GDP growth was 7.1% (7.3%) in Tanzania, 7.3% (7.9%) in Mozambique, 1.7% (7.0%) in Kenya and 6.9% (8.6%) in Uganda, which is marginally down on 2007 for most countries. The exception is Kenya, which was hurt by the election riots at the start of 2008, and this also had implications for Uganda. It should be noted that the 2007 figures were revised upwards by on average 0.5 percentage points compared to those published in our last report. Since 2000, GDP growth has averaged 8% in Mozambique and 6-7% in Tanzania, 6% in Uganda and 4% in Kenya, making them among the most successful African economies, and East Africa the fastest growing region of Africa.



Mozambique has been one of the world's most rapidly growing economies over the past decade, with much of the impetus coming from reconstruction efforts and extensive foreign investment in projects based on natural resources. Key sectors contributing much to the performance of the economy include industry, the service sector, agriculture and fishing.

Prudent macroeconomic policies and the growth in the mining sector, as well as the construction and telecom industries, account the most for the success in GDP growth in Tanzania. The electricity (mostly hydro power) supply situation has been better during the last two years due to good rainfall. However, drought in the key food producing regions during 2008 is now creating uncertainty about food supplies. The economic growth in urban areas of East Africa is significantly higher than the overall growth. Mafinga, the town located close to Sao Hill, is believed to have experienced 10-15% pa economic growth during the last few years.

The Ugandan economy has continued to grow rapidly in recent years. Telecommunications has been the fastest growing sector as a result of the growth in mobile phone subscribers, while the agriculture and horticulture sectors have also done well. The horticulture sector is now experiencing a downturn.

### Good FDI and ODA

Total foreign direct investments (FDI) attracted to East Africa was USD 889mn in 2006. Tanzania attracted the largest share, USD 377mn in that year, mostly driven by the mining sector. Uganda is the second largest destination for FDI followed by Mozambique attracting USD 307mn and USD 154mn respectively. Kenya attracted USD 51mn.

Official development assistance (ODA) has been increasingly flowing into the East Africa region. In absolute terms, ODA into the region has increased by 50% over the last decade from an average of USD 750mn in 1996 to an average of USD 1,483mn in 2006. In 2006, the East Africa region where the company operates attracted ODA amounting to USD 5,930mn compared to USD 3,035mn attracted ten years earlier. In 2006, Mozambique received the highest percentage of ODA (as a ratio of GDP) at 24%, followed by Uganda and Tanzania, which received 17% and 14%, respectively. Kenya received 4% during the same year.

### Falling exchange rates

After some appreciation in 2007, all East African currencies depreciated against most international currencies in 2008. However, the weak Norwegian krone lead to translation gains for Green Resources' financial accounts.

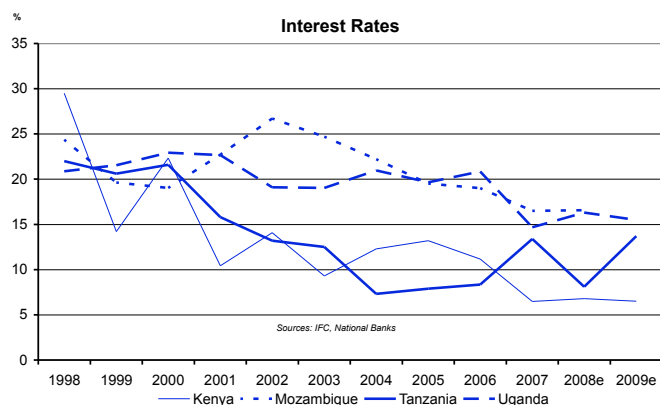
The Tanzanian shilling has steadily depreciated over the last decade, typically at a rate of 5-10% pa against the US dollar, but experienced relative stability since 2005. The Ugandan shilling experienced periods of appreciation as well as depreciation between 2001 and 2005, but since 2006 the currency has been appreciating against the US dollar. The Mozambique metical was stable for five years following 2001, but depreciated by 20% by the end of 2006. But, since 2006 the metical has maintained strong appreciation against the US dollar. The Kenyan shilling has appreciated steadily since 2001, but has depreciated during the last two years.

### Inflation under control?

Inflation moved down to single digits at the end of the 1990s and bottomed out at 4-6% in Tanzania and Uganda from 2004-07. Since then, inflation has edged upwards in both countries. Inflation increased sharply in 2008 following a mixture of more expansionary fiscal policies, higher food prices and imported inflation, in particular from oil, but also due to the depreciating currencies. Inflation peaked at 26% in Kenya, 12% in Uganda, 10% in Tanzania and 8% in Mozambique.

### Interest rates

Annual interest rates have shown a general downward trend in East Africa for a long period. Money market rates fell to 8% in Tanzania in 2008, down from 13% in 2007, but remained high at 16% in Uganda. Tanzanian interest rates have moved back up in 2009 and continue at a high level in Uganda.



## TAXES AND DUTIES

In Tanzania and Uganda, corporate and marginal personal tax is 30%, but the rate for stock exchange listed companies is 25% in Tanzania. Losses can be brought forward indefinitely. In Mozambique, corporate tax rates are 32% and the top rate for income tax is 30%. In the northern parts of Mozambique, where Green Resources' operations are located, there is a preferential 22% corporate tax rate, and a number of tax incentives exist. In most countries, including Tanzania, there is 10% withholding tax on dividends and interest payments and 15% withholding tax on foreign consulting services. In Tanzania, there is no income tax below TZS 80,000 per month. The tax rates are 18.5%, 20% and 25% depending on income, up to TZS 540,000 per month when the top marginal tax rate of 30% kicks in.

In Tanzania, employers and employees each contribute the equivalent of 10% of their gross salary to the National Social Security Fund and the employer contributes 6% of salaries as a skills and development levy paid to the Vocational Educational Training Authority. In Uganda, the combined pension and social tax is 15%. The returns on the pension funds are low.

In Tanzania, the VAT rate was reduced from 20% to 18% from the 2009/10 fiscal year starting 1 July, at the same time as the base for collecting the VAT was broadened. This is directly beneficial for Sao Hill, as many of its competitors are still not registered to pay VAT. In Uganda, VAT is 18%. There was also a reduction in the Tanzanian cess, a local government tax on agricultural revenues, from a maximum 5% to 3% from 1 July 2010.

## POLITICAL STABILITY

There have been no major political changes in the countries where Green Resources operates during the last year. Over the next two years, there will be national elections in Mozambique (2009), Tanzania (2010) and Uganda (2011).

### *Mozambique: a young democracy*

The last presidential and general elections were held in 2004, in which FRELIMO's candidate Armando Guebuza won with 64% of the vote, with RENAMO receiving 32%. FRELIMO won 160 seats in Parliament while a coalition of RENAMO and several small parties won the remaining 90 seats. Guebuza is seeking re-election at the election in October 2009. RENAMO, the main opposition, seems to have lost ground, while a new opposition group has been formed around the mayor of Beira, the second largest city. After 17 years of civil war after independence in 1975, a peace agreement was signed in 1992, with the first

multi-party elections in 1994 and the first multi-party presidential election in 1999.

### *Tanzania: Africa's most stable country*

The last election was held in December 2005 with Jakaya Kikwete elected as new president with 80% of the votes. CCM won 206 of 275 seats in Parliament and Tanzania has the weakest opposition in East Africa. The next election will take place at the end of 2010. Tanzania saw government turmoil in 2008, with a new prime minister, but the situation has since stabilised. Tanzania has possibly been the most peaceful African country since independence in 1961, with CCM governing the country uninterrupted. The first multi-party election was held in 1995, with elections every five years. Tanzania's president typically sits for ten years, and it is expected that Kikwete will seek re-election in 2010.

### *Uganda: multi-party system*

In Uganda, the National Resistance Movement (NRM) and President Museveni have governed the country since 1986, under a 'no-party' system. A referendum held in July 2005 opened for multi-party elections in 2006. Museveni obtained 59% of the votes, ahead of FDC's Besigye who got 37% of the votes. In the Parliamentary election, NRM won 191 out of 215 seats. The next election is in 2011.

### *Sudan: election delayed*

The Comprehensive Peace Agreement (CPA) signed in January 2005 stated that Southern Sudan was a semi-autonomous republic with its own president Salva Kiir, and its own government, the Government of Southern Sudan (GoSS, located in Juba). Salva Kiir is also the first vice president of Sudan, located in Khartoum. The CPA established a Government of Unity (GoU) based in Khartoum. The main parties of the agreement were the National Congress Party (NCP), to which the President of Sudan, el Bashir belongs, and the Southern People's Liberation Movement (SPLM), where Salva Kiir is a member.

The planned election for president and Parliament for Sudan was postponed earlier this year from July 2009 to April 2010. If and how this will affect the agreed referendum on independence for Southern Sudan in 2011, as written in the CPA, is unclear.

Southern Sudan consists of ten states. There are mainly three areas in Southern Sudan where security remains uncertain: Abyei in West Kordofan State (oil area), Upper Nile State (to the north) and Jonglei State (bordering Ethiopia). The Abyei Border Commission, which has a mandate to draw the border between North and South Sudan based on old colonial maps, is expected to present its findings in 2009. Both parties have expressed their intention of respecting the outcome. Central Equatoria State including Juba, the capital and Tindilo, where Green Resources operates, has become more stable and peaceful.

COUNTRY DATA 2009				
Country	Population (mn)	GDP/Head (US\$)	Area (km <sup>2</sup> )	Density (ppl/km <sup>2</sup> )
Kenya	35.9	830	582,650	61.6
Mozambique	21.2	483	801,590	26.4
South Africa	49.2	4,943	945,087	52.1
Sudan	39.2	1,333	236,040	166.0
Tanzania	40.5	539	752,614	53.9
Uganda	33.2	483	2,505,810	13.2
Zambia	12.7	1,008	1,219,912	10.4

Source: IMF WEO



Children at Green Resources' school

## DIRECTORS' REPORT 2008

Green Resources AS is a plantation company with forest plantations and wood-processing operations in Tanzania, Uganda, Mozambique and Sudan. It is a Norwegian company that has invested more than NOK 300mn (USD 50mn) in East Africa since 1995 and established Africa's largest reforestation company. It has more than 60 international shareholders with headquarters in Oslo, and main offices in Dar es Salaam, Jinja and Maputo.

2008 was a good year for Green Resources. A record 4,200 ha of new forest was planted, up from a net figure of 2,386 ha in 2007. Harvesting started at our oldest Tanzanian plantations, and the company achieved FSC certification for these forests. Green Resources established its first major plantation in Mozambique, in addition to establishing trial plantations in Sudan. The organisation was expanded with a number of high-calibre recruits in all countries of operations. The result from Sao Hill Industries (SHI), Green Resources' industrial operation, was satisfactory.

Green Resources generated total group revenues of NOK 138mn (USD 24mn) in 2008, up 41% compared to 2007. Operating profit increased to NOK 58mn

(USD 10mn), compared to NOK 38 mn in 2007 and an average of NOK 11mn in each of the three previous years. The group recorded a net profit of NOK 33mn (USD 6mn), compared to NOK 22mn in 2007.

### *Income statement*

Sales revenues increased from NOK 35mn in 2007 to NOK 54mn in 2008, driven by higher prices and volume. The net gain in biological asset values was NOK 84mn, up from NOK 63mn in 2007 and about three times that of the average level during each of the previous four years. This gain was driven by the large increase in the planting area, while more conservative assumptions in the BAV model offset some of the increase in the biological asset value.

Cost of sales increased due to higher volumes. Transport costs increased due to higher fuel costs and longer transport distances. Administrative costs were NOK 36mn in 2008, up from NOK 26mn in 2007, reflecting a number of corporate-wide initiatives, including legal and other costs in connection with fundraising, both debt and equity. However, the company will work hard to reduce administrative costs in 2009. Financial costs were NOK 4mn in 2008, up from NOK 2mn in 2007, as net debt was maintained at a higher level. The tax charge was NOK 21mn, an increase of 50%

compared to 2007, but not payable due to earlier losses carried forward.

### *Equity financing*

Group shareholders' equity almost doubled from NOK 183mn in 2007 to NOK 340mn (USD 49mn) at the end of 2008, primarily driven by NOK 91mn of new equity, as well as NOK 33mn of retained earnings. Other equity was NOK 33mn at the end of 2008 and the equity ratio was 67%.

The group had NOK 81mn of borrowings at the end of 2008, up from NOK 26mn in 2007, of which NOK 67mn was a convertible bond, which the company has the option to convert into equity before the end of 2009. Green Resources held NOK 87mn of cash and deposits, implying a net cash position of NOK 6mn at the end of 2008, compared to NOK 9mn net debt at the end of 2007. Accounting for the outstanding convertible bond as equity, the net cash position was NOK 73mn at the end of 2008. The cash flow statement shows that the group's profit before taxation has been adjusted by NOK 9mn to reflect exchange adjustments and NOK 84mn for non-cash revenues in order to arrive at the net cash used by operating activities (-NOK 38mn in 2008).



*Mozambique's Minister of Agriculture, the Norwegian Ambassador and Tom Vidar Rygh*

## *Shares and share capital*

An extraordinary general meeting on 4 December 2008 approved the raising of NOK 232mn (USD 33mn) of new funding. The company issued 2,978,198 new shares in December 2008 at a price of NOK 30 per share, raising NOK 75mn (USD 11mn) of new equity from Phaunos Timber Fund, a London Stock Exchange listed company, and NOK 14.3mn through the conversion of debt to equity by an existing shareholder. Following the equity issue, the company has 28mn shares. At the same time, a convertible bond of NOK 67.51mn was issued to Phaunos with the right to convert the loan into 2.046mn new shares at NOK 33 per share, and Green Resources has the right to convert the loan into the same number of shares after 30 November 2009. Phaunos also made an irrevocable commitment to subscribe to another 2.5mn shares at NOK 30 per share on 30 November 2009.

## *Investments*

The investments were increasingly focused around the plantations in 2008. Plantation investments reached NOK 53mn (USD 9mn) in 2008, doubling from NOK 27mn in 2007. The plantation in Tanzania's Southern Highlands (Green Resources Ltd) continued to receive most investment, NOK 25mn, and the share of the total rose to 48%, compared to 40% in 2007, primarily driven by infrastructure investments. The planting in Uganda reached record levels and the new projects in Mozambique and on the Tanzanian coast gained momentum. The increased investment in land preparation and fire protection has started to yield results. More pruning and thinning were done in 2008 than ever before, increasing the quality of the standing forest.

Investments in new plants and equipment were NOK 20mn (USD 3mn) during 2008, in line with 2007 (NOK 25mn). The investments were focused on transport and handling equipment for the plantations

and for Sao Hill Industries, and have resulted in significantly higher production capacity. The plantations doubled the number of tractors and received new types of equipment for land preparation and fire prevention, enabling the company to improve the quality of the plantation and reduce the risk of the operations.

## GREEN RESOURCES AS

The Norwegian holding company, Green Resources AS, performs a number of group functions. Revenues were NOK 1.2mn in 2008. Operating costs were NOK 10.7mn, up from NOK 7.1mn in 2007 and net financial costs were NOK 6.5mn, leading to a net loss of NOK 16.1mn, compared to NOK 6.7mn in 2007. Green Resources charged interest on its main inter-company loans in 2008, contrary to 2007 and 2006.

## BUSINESS REVIEW

### *Plantations*

Green Resources established 4,200 ha new of forest in 2008, up from 2,400 ha in 2007. An additional 250 ha of jatropha and coconut were also planted. The Uchindele and Mapanda Forests, Tanzania, were FSC certified, the world's leading certification standard for sustainably managed forests. The company invested NOK 53mn in forest operations in 2008, up from NOK 27mn in 2007 and NOK 11mn in 2006. Tanzania received NOK 33mn of forest investments, Uganda NOK 10mn and Mozambique NOK 8mn.

Green Resources planted 2,050 ha pine, 1,650 ha eucalyptus, 350 ha of teak and 150 ha of other species in 2008. There has been particularly strong growth in the planting of higher-value species like teak and indigenous species, including grevillea, terminalia and maesopsis, which saw an increase of 200% compared to 2007.

The planting went particularly well in Uganda, with a record 1,050 ha new forest established, following a particularly successful planting during the short second rain. The coastal plantations in Tanzania saw 800 ha of planting. Mozambique at 600 ha, and Tanzania's Southern Highlands at 1,700 ha were short of expectations. The first 50 ha of trial plantation was established in Sudan.

The gains from changes in the fair value of assets were NOK 84mn, primarily driven by the increase in annual planting, but the figure was reduced by downward



*Nursery workers in Niassa*

adjustments of the previous year's planting. The biological asset valuation is determined by a discounted cash flow analysis of estimated future revenues and costs of the existing plantations. In Tanzania, the BAV per hectare of plantation increased 9% to USD 4,116/ha, mostly due to separate valuations being undertaken for the first time for higher-value teak plantations. The BAV per hectare in Uganda increased 3% to USD 4,315/ha, while the new valuation for Mozambique was USD 4,136/ha.

Green Resources had 10,800 ha of plantations at the end of 2008, of which 10,100 ha have been included in the biological asset valuation. As at the end of Q1 2009, the company has 13,000 ha of forest. We believe the company maintained its position as Africa's largest forestation company in 2008. During 2008, the company's inventory and mapping department performed a careful assessment of the existing plantations. It reassessed the planted areas accounting for low survival rates due to pests, drought and weed competition and previous inaccurate mapping. It also had to take account of the larger buffer zones required to comply with FSC certification and environmental impact assessment (EIA) requirements. The planted area at the end of 2007 was revised down by 1,100 ha.

### *Carbon offsets*

Our carbon offset team continued the difficult work of obtaining project validation and verification in 2008. The basis has been laid for a major breakthrough in 2009. Green Resources' carbon credits have a strong social profile and its afforestation projects are improving the living conditions for people in some of the world's poorest countries. The costs associated with the business were expensed within the company's other operations in 2008.

## Industrial operations

2008 was a good year for Sao Hill Industries, after a disappointing 2007. Revenues were up 63% to NOK 55mn (TZS 11,939mn, USD 9.6mn), mostly driven by higher prices, but also higher volumes of transmission poles. Transmission poles generated most revenues, followed by sawn timber. Value-added revenues once more doubled and the production of doors and pallets continued to improve. The industrial operations, SHI and Sao Hill Transport (SHT), generated an operating profit of NOK 9mn (TZS 990mn, USD 1.6mn), compared to operating losses in 2007.

Green Resources invested NOK 16mn in its industrial operations in 2008, down from NOK 20mn in 2007. This was spent on a new state-of-the-art transmission pole treatment plant, new transport and handling equipment and operational equipment. Green Resources converted NOK 26mn of loans to Sao Hill Industries into shares in 2008.

## New operations

In 2008, Green Resources focused on consolidating and expanding operations in existing plantations. During 2007, Green Resources established a subsidiary in Sudan employing ten people and developed a project for a new forest plantation in southern Sudan, and 50 ha of trial plantations were established in 2008.

## EMPLOYEES

Green Resources employed 3,200 people at the end of 2008, of which 700 were permanent employees and more than 850 were women. Women accounted for 20% of our senior and junior managers. During the past 12 years, Green Resources has built a strong and efficient organisation that has the ability to plant large areas of new forest, deal with complicated certification processes and establish new plantation projects. This is a major strength

and the core quality of the company. Green Resources is actively seeking to increase the number of women among its staff and practise a positive discrimination policy in the hiring policy.

In 2008, Green Resources continued to strengthen its management team, and most importantly hired Arlito Cuco as managing director for Mozambique and Isaac Kapalaga as managing director in Uganda.

During 2008, Green Resources had one fatal accident due to a traffic accident at a new plantation and another accident resulting in permanent injury (lost finger) at the sawmill. Fourteen accidents required medical assistance. The number of serious accidents fell compared to previous years, and the company continues to expand its health and safety activities.

SOCIAL AND ENVIRONMENTAL ACTIVITIES community development projects in the villages where it operates. Most of the spending was on educational projects, followed by community forestry, with most of the balance being spent on water supplies and health. The community forest activities are centred on the provision of seedlings for local farmers.

Green Resources is also a significant tax payer, paying a total of NOK 11mn (USD 1.77mn) in duties, royalties, taxes, VAT, etc in 2008, up from NOK 9mn (USD 1.6mn) in 2007. Green Resources' exports from Tanzania fell from NOK 21mn in 2007 to NOK 4mn (USD 0.6mn) in 2008 caused by the resurgence in demand for transmission poles in the domestic market.

Green Resources is aiming to improve the environment by sequestering carbon dioxide and protecting natural forest and habitats. There were no material environmental accidents in 2008.

## FINANCIAL RISK

The company is not hedging or insuring any financial risk. Despite the fact that the assets are booked in local currencies, the real effect of currency fluctuations is limited because the value of assets is driven by international market prices. The company is exposed to changes in market conditions and these might have a direct effect on the company's P&L. The company's liquidity was satisfactory in 2007, but shareholders have provided loans to the company when required.

## OUTLOOK FOR 2009

The tree planting has had a good start in 2009. The full year objective is to plant 6,000 ha of new forest, almost 50% more than in 2008. For the industrial operations (SHI), the first three months of 2009 started significantly better than the same period in 2008, and we expect better year-on-year figures for the rest of the year. It is expected that the 2009 group results will exceed the 2008 result.

The company signed a framework agreement with the government of Mozambique in March 2009 to establish a world-scale forest plantation in Northern Mozambique. Significant progress has been made on land acquisitions around existing plantations in Tanzania and Sudan.

The board of directors believes the enclosed accounts are a correct representation of the financial situation in the company, and are presented assuming continued operation of the company. The board recommends that the loss for Green Resources AS, the holding company, of NOK 16,098,929 is covered from other equity. Following this transaction, Green Resources AS had NOK 227mn of equity at the end of 2008. The group generated NOK 33mn of profit and has NOK 340mn of equity.

15 April 2009



Tom Vidar Rygh  
Chairman



Juha Niemela  
Deputy Chairman



Mads Asprem  
Deputy Chairman



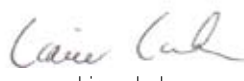
Odd Ivar Løvhaugen



Marius Bohler



Elvin Mutuma Marangu



Liane Luke

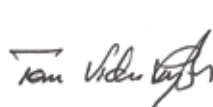


Kristoffer Olsen

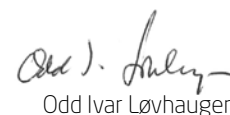
CONSOLIDATED PROFIT AND LOSS ACCOUNT	Notes	NOK millions			USD millions		
		2008	2007	2006	2008	2007	2006
Sales		54	35	27	8	6	4
Gains arising from changes in fair value less estimated point-of-sale costs of biological asset		84	63	12	12	12	2
Total sales		138	98	39	20	18	6
Cost of Sales	3,4	-38	-32	-20	-5	-6	-3
Gross profit		100	66	19	14	12	3
Other operating income		2	2	1	-	-	-
Distribution costs		-	-	-	-	-	-
Administrative and operating expenses	4	-36	-26	-11	-5	-5	-2
Depreciation	7	-7	-4	-2	-1	-1	-
Operating profit	3	58	38	7	8	7	1
Finance costs	5	-4	-2	-8	-1	-	-1
Profit before tax		53	36	-1	8	7	-
Tax (charge) / credit	6	-21	-14	-1	-3	-3	-
Net profit		33	22	-2	5	4	-
Attributable to:							
Equity shareholders of the parent		33	22	-2	5	4	-
Minority interest		-	-	-	-	-	-
		33	22	-2	5	4	-

CONSOLIDATED BALANCE SHEET	Notes	NOK millions			USD millions		
		2008	2007	2006	2008	2007	2006
<b>Non-current assets</b>							
Property, plant and equipment	7	62	43	23	9	8	4
Biological assets	8	301	156	89	43	29	14
Other investments		10	2	-	1	-	-
Loans to group companies		-	-	2	-	-	-
		374	201	114	53	37	18
<b>Current assets</b>							
Inventories	9	17	14	10	2	3	2
Receivables and prepayments	10	30	22	7	4	4	1
Cash and cash equivalents		87	17	10	12	3	2
		134	53	27	19	10	4
<b>Total assets</b>							
		508	254	141	73	47	23
<b>Capital employed</b>							
Share capital	11	141	125	68	20	23	11
Share premium		84	9	14	12	2	2
Advance towards share capital		-	-	10	-	-	2
Translation reserve		25	-2	1	4	-	-
Revaluation reserve		10	10	10	1	2	2
Other equity		32	26	-	5	5	-
Retained earnings		48	15	-8	7	3	-1
<b>Shareholders' funds</b>		340	183	95	49	34	15
<b>Non current liabilities</b>							
Borrowings	12	69	7	6	10	1	1
Deferred tax	13	55	25	13	8	5	2
		124	32	19	18	6	3
<b>Current liabilities</b>							
Trade and other payables	14	43	38	25	6	7	4
Bank overdraft	16	1	1	2	-	-	-
		44	39	27	6	7	4
<b>Total liabilities</b>		167	71	46	24	13	7
<b>Total equity and liabilities</b>							
		508	254	141	73	47	23

Oslo, 15 April 2009


Tom Vidar Rygh  
Chairman

Juha Niemela  
Deputy Chairman

Mads Aspren  
CEO


Odd Ivar Løvhaugen


Ambroise Bryant  
Chukwueloka Orjiako


Elvin Mutuma Marangu



Liane Luke



Kristoffer Olsen

CONSOLIDATED CASH FLOW STATEMENT	Notes	NOK millions			USD millions		
		2008	2007	2006	2008	2007	2006
<b>Profit before taxation</b>		53	36	-1	9	6	-
<b>Adjustment for non-cash income items</b>							
Depreciation	7	7	4	2	1	1	-
Exchange differences on property, plant and equipment	7	-	-	-	-	-	-
Gain on fixed asset disposal		-	-	-	-	-	-
Movement on translation reserve		-	-	-	-	-	-
Gains arising on changes in fair value of biological assets	8	-84	-63	-12	-15	-11	-2
Exchange difference on biological assets	8	-	-	-	-	-	1
Currency translation adjustments		-9	3	6	-2	-	1
<b>Net cash after adjustments</b>		-32	-21	-5	-6	-3	-1
<b>Movement in working capital items</b>							
Change in inventories		-3	-4	-6	-1	-1	-1
Change in receivables and prepayments		-8	-15	-5	-1	-2	-1
Change in payables and accrued expenses		5	13	2	1	2	-
<b>Net cash used by operating activities</b>		-38	-27	-14	-7	-4	-2
<b>Investment activities</b>							
Purchase of property, plant and equipment	7	-20	-25	-5	-4	-4	-1
Proceed from disposal		3	-	1	1	-	-
Purchase of biological assets		-20	-9	-2	-3	-2	-
Other investments	8	-9	-2	-	-2	-	-
Loan to subsidiaries		-	2	-2	-	-	-
<b>Net cash outflow from investing activities</b>		-45	-34	-8	-8	-5	-1
<b>Financing activities</b>							
Loans proceed		62	1	-5	11	-	-1
Issue of shares		91	68	31	16	12	5
<b>Cash inflow from financing activities</b>		153	69	26	24	11	4
Increase in cash and cash equivalents		69	8	4	12	1	1
<b>Cash and cash equivalents at beginning of year</b>		16	8	4	3	1	1
Translation adjustment cash							
<b>Cash and cash equivalents at end of year</b>	16	86	16	8	15	3	1



CHANGES IN EQUITY	Share Capital	Share Premium	Advance towards share capital	Translation Reserve	Revaluation Reserve	Distributable equity	Retained Earnings	Total
NOK millions								
<b>Year ended 31 December 2008</b>								
At start of year	125	9	-	-2	10	26	15	183
Issue of shares	16	75	-	-	-	-	-	91
Commission fees	-	-	-	-	-	-	-	-
Advance towards share capital	-	-	-	-	-	-	-	-
Translation gain for the year	-	-	-	27	-	-	-	27
Net profit/ loss for the year	-	-	-	-	-	-	33	33
Revaluation gain	-	-	-	-	-	-	-	-
Other equity	-	-	-	-	-	6	-	6
<b>At end of year</b>	<b>141</b>	<b>84</b>	<b>-</b>	<b>25</b>	<b>10</b>	<b>32</b>	<b>48</b>	<b>340</b>
<b>Year ended 31 December 2007</b>								
At start of year	68	14	10	1	10	-	-8	95
Issue of shares	57	25	-10	-	-	-	-	72
Commission fees	-	-4	-	-	-	-	-	-4
Advance towards share capital	-	-	-	-	-	-	-	-
Translation loss for the year	-	-	-	-3	-	-	-	-3
Net profit/ loss for the year	-	-	-	-	-	-	23	23
Revaluation gain	-	-	-	-	-	-	-	-
Transferred to distributable equity	-	-26	-	-	-	26	-	-
<b>At end of year</b>	<b>125</b>	<b>9</b>	<b>-</b>	<b>-2</b>	<b>10</b>	<b>26</b>	<b>15</b>	<b>183</b>
<b>Year ended 31 December 2006</b>								
At start of year	49	3	9	4	-	-	-6	59
Issue of shares	19	11	-9	-	-	-	-	21
Advance towards share capital	-	-	10	-	-	-	-	10
Translation loss for the year	-	-	-	-3	-	-	-	-3
Net profit/ loss for the year	-	-	-	-	-	-	-2	-2
Revaluation gain	-	-	-	-	10	-	-	10
<b>At end of year</b>	<b>68</b>	<b>14</b>	<b>10</b>	<b>1</b>	<b>10</b>	<b>-</b>	<b>-8</b>	<b>95</b>

## NOTE 1 ACCOUNTING POLICY

### (A) BASIS OF PREPARATION

The Financial Statements are prepared in compliance with International Financial Reporting Standards (IFRS). The Financial Statements are presented in the functional currency, Norwegian Kroner (NOK), rounded to the nearest million and prepared under the historical cost convention, as modified by the revaluation of certain property, plant and equipment. The preparation of Financial Statements in conformity with IFRS requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Financial Statements and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on the Directors' best knowledge of current events and actions, actual results, ultimately, may differ from those estimates.

#### (i) Adoption of new and revised standards

In 2007 new and revised standards and interpretations became effective for the first time and was adopted by the Group where relevant to its operations. The relevant standards included IFRS 7 – Financial instruments: Disclosure, and the complementary amendments to IAS 1 – Presentation of financial statements – Capital disclosures. Both standards are applied retrospectively. IFRS 7 supersedes the disclosure requirements of IAS 32.

#### (ii) Future changes in IFRS

The Group is currently assessing the potential impacts of the new standards that will be effective from 1 January 2009 and beyond, which include: IFRS 8, Operating Segments, and revisions to IAS 1, Presentation of Financial Statements, and IAS 27, Consolidated and Separate Financial Statements.

### (B) TRANSLATION OF FOREIGN CURRENCIES

#### (i) Functional and Presentation Currency

Items included in the Financial Statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated Financial Statements are presented in Norwegian Kroner, which is the Group's functional and presentation currency.

#### (ii) Transactions and Balances

Foreign currency transactions are translated into Norwegian Kroner using the exchange rate prevailing at the dates of the transactions. Monetary assets and liabilities at the Balance Sheet date, which are expressed in foreign currencies, are translated into the functional currency at rates ruling at that date. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at the year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit and loss account.

#### (iii) Group Companies

The results and financial position of all the group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each Balance Sheet are translated at the closing rate at the date of that Balance Sheet;
- income and expenses for each income statement are translated at average exchange rates; and
- all resulting exchange differences are recognized as a separate component of equity.

Currency translation rates versus Norwegian kroner (NOK) used in the consolidated statements are as follows:

The currency of the Group is Norwegian kroner (NOK). The subsidiaries' accounting records are maintained in the legal currency of the country in which they operate (Tanzania Shilling (TZS), Uganda Shilling (UGX), Mozambique Meticals (MZM), British Pounds (GBP) and United States Dollars (USD)). The currency translation rates for the consolidated financial statements are the following:

Exchange rates, year end			
in NOK	2008	2007	2006
1 TZS	0.0055	0.0048	0.0050
1 UGX	0.0036	0.0032	0.0036
1 MZM	0.2793	0.2278	0.2467
1 GBP	10.2200	10.8100	12.1960
1 USD	7.0000	5.4100	6.2600

Exchange rates, average			
in NOK	2008	2007	2006
1 TZS	0.0046	0.0047	0.0051
1 UGX	0.0032	0.0034	0.0035
1 MZM	0.2294	0.2309	0.2482
1 GBP	10.3500	11.7100	12.2312
1 USD	5.6400	5.8500	6.4180

### (C) BIOLOGICAL ASSETS

Biological assets are measured on initial recognition and at each Balance Sheet date at fair value less estimated point-of-sale costs. Any gains arising on initial recognition of biological assets and from subsequent changes in fair value less estimated point-of-sale costs are recognised in the Profit and Loss Account in the year in which they arise.

The fair value of the trees is determined based on the net present values of expected future cash flows, discounted at current market-determined pre-tax rates.

All costs of planting, upkeep and maintenance of biological assets are recognised in the Profit and Loss Accounts.

### (D) PROPERTY, PLANT AND EQUIPMENT

All categories of property, plant and equipment are initially recorded at cost. Buildings and freehold land are subsequently shown at market value, based on triennial valuations by external independent valuers, less subsequent depreciation for buildings. All other property, plant and equipment are stated at historical cost, less depreciation.

Depreciation is calculated on the straight line basis to write-down the cost of each asset or the revalued amount, to its residual value over its estimated useful life as follows:

Depreciation policy	
Buildings	25 years
Machinery	15 years
Motor vehicles	4 years
Computer equipment	3 years
Office furniture and equipment	3-8 years

Property, plant and equipment are periodically reviewed for impairment. Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately, to its recoverable amount. Gains and losses on disposal of property, plant and equipment are determined by reference to their carrying amounts and are taken into account in determining operating profit.

### (E) REVENUE RECOGNITION

Revenue represents the fair value of the consideration receivable for sales of goods and services, and is stated net of value added tax (VAT), rebates and discounts. Revenue is recognised as follows:

(i) Sales of goods are recognised in the period in which the Company delivers products to the customer, the customer has accepted the products and collectability of the related receivables is reasonably assured.

(ii) Interest income is recognised on a time proportion basis, using the effective interest method. Dividends are recognised as income in the period in which the right to receive payment is established.

### (F) RECEIVABLES

Receivables are carried at original invoice amount, less provision made for

impairment of these receivables. A provision for impairment of trade receivables is established when there is objective evidence that the Company will not be able to collect all amounts due, according to the original terms of receivables. The amount of the provision is the difference between the carrying amount and the present value of expected cash flows, discounted at the effective interest rate. The amount of the provision is recognised in the Profit and Loss Account.

#### (G) INCOME TAX

Income tax expense is the aggregate of the charge to the Profit and Loss Account in respect of current income tax and deferred income tax.

Current income tax is the amount of income tax payable on the taxable profit for the year determined in accordance with the tax regimes that the individual entities in the Group operate. Deferred income tax is provided in full, using the liability method, on all temporary differences arising between the tax bases of assets and liabilities and their carrying values for financial reporting purposes. However, if the deferred income tax arises from the initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss, it is not accounted for. Deferred income tax is determined using tax rates and laws that have been enacted or substantively enacted at the Balance Sheet date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profits will be available, against which, the temporary differences can be utilised.

#### (H) INVENTORIES

Inventories are stated at the lower of cost and net realisable value. Cost is determined by the first-in, first-out (FIFO) method. Net realisable value is the estimate of the selling price in the ordinary course of business, less the cost of completion and selling expenses.

#### (I) CASH AND CASH EQUIVALENTS

For the purpose of the Cashflow Statement, cash and cash equivalents comprise cash in hand, deposits held at call with banks, net of bank overdrafts. In the Balance Sheet, bank overdrafts are included in borrowings in current liabilities.

#### (J) PENSION OBLIGATIONS

The Group has defined contribution plans. A defined contribution plan is a pension plan under which the company pays a fixed contribution into a separate entity. The group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due.

#### (K) GOVERNMENTS GRANTS

The Group has received government grants, in the form of cash, for dedicated renewable energy pilot projects. The grants are recognised once the grants are received. There are no unfulfilled conditions attached to the grant agreements.

#### (L) BORROWINGS

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently stated at amortised cost, using the effective interest method; any differences between proceeds (net of transaction costs) and the redemption value is recognised in the Profit and Loss Account over the period of the borrowings.

#### (M) LEASING

The Group leases certain plant and equipment from its sister company Sao Hill Transport Ltd. The lease agreements are classified as operating leases, and Inter-group payments made under these agreements are charged to the income statement on a straight-line basis over the period of the lease.

#### (N) CONSOLIDATION

Subsidiaries are all entities over which the Group has the power to govern the financial and operating policies, generally accompanying a shareholding of more than one half of the voting rights. The existence and effect of

potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. Inter-company transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated, unless the transaction provides evidence of an impairment of the asset transferred.

#### (O) CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

Estimates and judgments are continually evaluated and are based on historical experience and other factors, including experience of future events that are believed to be reasonable under the circumstances.

#### Biological Assets

Critical assumptions are made by the Directors in determining the fair values of biological assets. The key assumptions are set out in Note 8.

### NOTE 2 RISK FACTORS

#### (A) STRATEGIC RISKS

##### *Political Risks*

Africa is known to be one of the most unstable continents of the world. East Africa is the peaceful part of Africa, with no significant political turmoil for more than two decades. In Tanzania, where most of Green Resources' assets are located, there has been a stable Government since independence in 1961.

##### *Domestic Competition*

In Tanzania, two competitors started up new sawmills in 2003 and 2004, and one of these companies was acquired by East Africa's largest forest products company in 2006. Initially, the new sawmills led to improved infrastructure in the form of better quality suppliers and more customers focusing on Tanzania's Southern Highlands. Eventually it might lead to increased competition for raw material and product price competition in the local market.

#### (B) OPERATIONAL RISK

##### *Ability to Recruit and Retain Employees*

About half of the top managers during the last three years are new and there has been a rapid expansion of the organisation. This has enabled the company to accelerate growth, but there are also risks associated with large number of new managers. Green Resources is taking measures to reduce the turn-over by making the Company a preferred employer for both the professional staff and the workers it is employing.

##### *Control Procedures*

Green Resources operates in far flung locations where there at times are limited possibilities for financial control. This has at times led to excessive costs, and there has been a problem with theft of diesel, exaggerated use of labour and excessive costs of other input factors. The Company is constantly working to put in place procedures that minimise the risk of financial loss. Because of the diverse locations where the company operates, it might take time to implement new operational procedures, including health and safety regulations.

##### *Health and Safety Risks*

The company is operating in remote areas where implementing the occupational health and safety and safe driving procedures might be difficult. It is relying on local employees, from some of the poorest regions of the world, who might not have sufficient basic training. It is a high priority for the company to minimise accidents through preventive measures, but this is a difficult and time consuming undertaking.

##### *Forest Fire*

Green Resources has experienced forest fires in the past, most importantly a fire that led to a significant loss of forest in 2004. Since then, the company has taken important steps to limit forest fires: doubling the width of the fire breaks, tripling the number of fire towers, putting in place a new communication system, etc.

Regardless of the preventive measures, there remain risks for future forest fires. While forest fires are a threat to forest plantations all around the world, they most often hit smaller private forest lots and more rarely large commercial forest operations.

## *Insects and Fungal Attacks*

In common with all agricultural operations, there are threats of insect and fungal attacks on forest plantations. In Uganda, blue gum chalcid has been observed, representing a threat to the eucalyptus plantations. In general, weak and poorly planted and maintained trees are typically most exposed to attacks. Green Resources is doing its utmost to improve the quality of its plantations, and provide the necessary remedies when problems are identified.

## *Wood Supply Costs and Land Prices*

Sao Hill Industries, Green Resources' Tanzanian industrial operations, is buying most of its raw material from Sao Hill Forest Project, a Government plantation where wood prices are set by the Government for one year at a time. The prices were increased 200% in 2007 to a level similar to neighbouring countries and prices eventually compensated for the higher cost but the increase created significant cost pressure and temporary losses for SHI in 2007. The land rent on the 99 year land leases are fixed annually at the discretion of the Tanzanian Government. However, the rental cost for most lease land is set on a national basis for all farmers and other land owners, and large changes are believed to be unlikely.

## *International Timber Prices*

Global wood products prices have recovered from a trough in 2003 back up to the levels of the late 1990s. While we believe the industry has entered a period with higher prices, prices might once more fall back.

## *East African Business Environment*

Green Resources has experienced many operational set-backs since it commenced operations, including, but not limited to problems with export authorities, port authorities and at times in relations with the local authorities. However, most problems have been solved in an amicable way. Green Resources believes there has been a significant improvement in the East African business environment since it started operating in the region in 1995.

## *Working Capital Requirement*

Green Resources has at times been short of cash, leading to interruption of industrial production. The strengthening of the Company's equity since 2006 has minimised the risk of such situation in the future. Most of the company's forest is not ready for harvesting, and there will be annual costs associated with maintenance and silviculture before final logging can take place. Green Resources will continue to rely on raising new equity before the company becomes cash flow positive.

## *Significance of Largest Customers*

The transmission pole business is dominated by large national utility companies, and in 2008 the largest customer accounted for more than 1/3 of revenues for the industrial operations. Green Resources is broadening the customer base and participating in all regional tenders, but the reliance on a small number of customers for part of the business remains.

## (C) FINANCIAL RISKS

The Company and Group activities, potentially expose it to a variety of financial risks, including credit risk, interest rate risk and the effects of the changes in foreign currency exchange rates. The Company's and the Group's Management Programme takes account of the unpredictability of foreign exchange rate trends and seeks to minimise potential adverse effects on its financial performance.

### *Exchange Rate Risks*

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily, with respect to the Tanzania and Uganda shillings. This risk is not hedged. Green Resources has booked large exchange rate losses in the past, mainly caused by the strengthening of the Norwegian kroner against the US dollar and Schilling.

At 31 December 2008, if the functional currency had strengthened/weakened by 10% against local currencies with all other variables held constant, post-tax profit for the year would have been NOK 6 mn (2007: NOK 8.6 mn) lower/higher, mainly as a result of foreign exchange gains on translation of Tanzania and Uganda shilling denominated current assets and borrowings.

GRAS's assets are denominated in Eastern African currencies. Based on the risk of currency changes and the corresponding year end value of the assets, there are arguments for creating a currency hedge for these assets by borrowing in local currencies. However, wood is a global commodity, traded in international currencies, and in the long term, most of the wood produced in Green Resources' plantations will be exported. Furthermore, GRAS' biological asset valuation model is a USD based model. While the export typically is priced in USD, the costs of the key competitors are based in Brazilian real, Canadian dollar, Euro, New Zealand dollar and South African rand, and it is these currencies that matter most for the long-term competitiveness and pricing of GRAS' products.

The large majority of the Company's costs are denominated in East African currencies and many of the revenues are generated in other currencies. Thus, the value of Green Resources is likely to benefit long term from depreciating East African currencies, irrespective of any short term balance sheet related currency losses. The underlying value of the assets, and the future cash flow from these assets, will not be significantly affected by the changes in the East African and Norwegian exchange rates. Thus, GRAS will concentrate the long term borrowing in EUR and USD. The high real interest rate in the East African economies supports this decision.

### *Interest Rate Risks*

Green Resources' investments have to date only been to a small extent funded by external debt and fluctuating interest rates have only minor direct impact on the P&L. To date, the interest rate level has directly influenced the value of the company through the discount rate used in the Biological Asset Valuation Model. A higher interest rate, and discount rate, will reduce the value of Green Resources' forest land. On the other hand, higher interest rates are often associated with higher inflation, and increased inflation is believed to lead to expectations of higher future wood prices, offsetting the negative effect on the biological asset value of higher interest rates.

It is GRAS' objective to increase the borrowing in order to provide a more optimal financing of the company and reduce the cost of capital. Interest rate fluctuations will therefore become a more important risk factor. This is generally the case for capital intensive industries like forestry and carbon credit project developments. In order to reduce this risk, GRAS will aim to fix the interest rate for the maximum period possible, as long as the cost of fixing the interest is moderate. We are currently experiencing historically low interest rates and a relative flat yield curve.

### *Credit Risks*

From 2008, the Group has had no significant concentrations of credit risk. The Group has policies in place to ensure that sales of products and services are made to customers with an appropriate credit history. Green Resources' industrial operations were hit by late payments from one customer in 2006. The payment was recovered in full.

The amount that best represents the Group's maximum exposure to credit risk at 31 December 2008 is made up as follows:

<b>Credit risk maximum exposure</b>			
<b>NOK millions</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Cash and cash equivalents	86.9	17	2
Trade and other receivables	13.5	6	1
Prepayments	5.9	8	-
<b>Total</b>	<b>106.4</b>	<b>32</b>	<b>3</b>

### *Liquidity Risks*

Prudent liquidity risk management includes maintaining sufficient cash balances, and the availability of funding from an adequate amount of committed credit facilities. Due to the dynamic nature of the underlying businesses, the finance department maintains flexibility in funding by maintaining availability under committed credit lines. Management monitors rolling forecasts of the group's liquidity reserve on the basis of expected cash flow. This is generally carried out at local level in the operating companies of the group in accordance with practice and limits set by the group.

*Capital Risk Management*

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. Consistent with others in the industry, the Group monitors capital on the basis of the gearing ratio:

Total capital and gearing ratio NOK millions	2008	2007	2006
Total borrowings (incl overdraft)	82	28	24
Less cash and cash equivalents	87	17	10
Net debt	-	11	14
Equity	340	183	95
Total Capital	340	194	109
Gearing ratio	0 %	6 %	13 %
Equity ratio	100 %	94 %	87 %

The decrease in gearing ratio during 2008 resulted primarily from the issue of share capital and the increased gain on fair value of biological assets registered during the year.

**NOTE 3 OPERATING PROFIT**

## OPERATING PROFIT

The following items have been charged in arriving at the operating profit:

Operating profit: NOK millions	2008	2007	2006
Depreciation of property, plant and equipment (note 8)	7	4	2
Fair value (gain)/loss on biological assets	-84	-63	-12
Impairment of financial assets			
Staff costs (see table below)	24	12	5

## STAFF COSTS

The following items are included within staff costs:

Staff costs NOK millions	2008	2007	2006
Salaries and wages	23	11	4
Social security	1	1	1
Pension cost - defined contr. plans			
Total	24	12	5

In 2008 the board of directors and representatives in the parent company received remuneration at a total of NOK 352,495 (2007: NOK 374,610). NOK 1,800,000 was paid for services provided by the managing director. The auditor cost for the year was NOK 332,249. Subsidiaries fee to auditors related to the financial statements was NOK 780,000.

**NOTE 4 OPERATIONAL COST BY NATURE**

NOK millions	2008	2007	2006
Cost of raw material and other purchased goods	5	10	5
Salary and wages (note 3)	24	12	5
Depreciation and write offs (note 7)	7	4	2
Freight	9	10	4
Repair and maintenance cost	2	2	1
Marketing costs	-	-	-
Rent and leasing costs	4	2	-
Other operational costs	30	23	16
Total operational cost	81	63	33

**NOTE 5 FINANCE COST**

NOK millions	2008	2007	2006
Interest income	-	1	-
Interest expense	-6	-3	4
Foreign exchange differences	1	-	5
Total finance costs	-4	-1	8

**NOTE 6 INCOME TAX EXPENSE**

There is no tax charge for the year. In view of the loss incurred and brought forward tax losses in the individual entities of the group. Gains arising on changes in fair value of biological assets resulted in a net deferred income tax liability of NOK 21mn in 2008. See note 13 for further specification.

## NOTE 7 PROPERTY, PLANT AND EQUIPMENT

The Company's buildings were revalued at 31 December 2006 by an Independent professional qualified valuer, Nyange and Associates Limited. Valuations were based on current prices in an active market for properties.

NOK millions	Buildings	Motor veh.	Plant and equip.	Furn. and office equip.	Cap. work in progr.	Total
<b>Year ended 31 December 2008</b>						
<b>Cost</b>						
At start of year	17	13	27	4	-	60
Additions	2	4	12	1	2	20
Transfer	-	-	-	-	-	-
Revaluation	-	-	-	-	-	-
Disposal	-	-1	-2	-	-	-3
Exchange differences	3	1	5	-	-	10
<b>At end of year</b>	<b>21</b>	<b>17</b>	<b>42</b>	<b>5</b>	<b>2</b>	<b>87</b>
<b>Depreciation</b>						
At start of year	2	6	8	1	-	17
Charge for the year	-	2	5	1	-	7
<b>At end of year</b>	<b>2</b>	<b>8</b>	<b>13</b>	<b>2</b>	<b>-</b>	<b>25</b>
<b>Net book amount</b>						
<b>At 31 December 2008</b>	<b>19</b>	<b>8</b>	<b>30</b>	<b>3</b>	<b>2</b>	<b>62</b>
<b>Year ended 31 December 2007</b>						
<b>Cost</b>						
At start of year	16	7	11	2	-	36
Additions	1	6	16	2	-	25
Transfer	-	-	-	-	-	-
Revaluation	-	-	-	-	-	-
Disposal	-	-	-	-	-	-
Exchange differences	-1	-	-	-	-	-1
<b>At end of year</b>	<b>17</b>	<b>13</b>	<b>27</b>	<b>4</b>	<b>-</b>	<b>60</b>
<b>Depreciation</b>						
At start of year	1	5	6	1	-	13
Charge for the year	1	1	2	-	-	4
<b>At end of year</b>	<b>2</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>-</b>	<b>17</b>
<b>Net book amount</b>						
<b>At 31 December 2007</b>	<b>15</b>	<b>6</b>	<b>19</b>	<b>2</b>	<b>-</b>	<b>43</b>
<b>Year ended 31 December 2006</b>						
<b>Cost</b>						
At start of year	6	5	11	1	1	24
Additions	1	2	1	1	-	5
Transfer	1	-	-	-	-1	-
Revaluation	10	-	-	-	-	10
Disposal	-	-	-1	-	-	-1
Exchange differences	-2	-	-	-	-	-2
<b>At end of year</b>	<b>16</b>	<b>7</b>	<b>11</b>	<b>2</b>	<b>-</b>	<b>36</b>
<b>Depreciation</b>						
At start of year	1	4	5	1	-	11
Charge for the year	-	1	1	-	-	2
<b>At end of year</b>	<b>1</b>	<b>5</b>	<b>6</b>	<b>1</b>	<b>-</b>	<b>13</b>
<b>Net book amount</b>						
<b>At 31 December 2006</b>	<b>15</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>-</b>	<b>23</b>

## NOTE 8 BIOLOGICAL ASSET VALUATION

According to IAS 41, biological assets are to be valued annually at fair value. The gain or loss in fair value of these biological assets is reported in net profit. The fair value of Green Resources' biological assets at the end of 2008 was assessed to NOK 300mn (USD 42.2mn), all consisting of forest plantations, resulting in NOK 144mn in gains from changes in the fair value of biological assets. The gain was driven by new planting, higher prices, and reduced according to new verification data on planted areas.

3,477 ha of new forest were established in 2008 in the plantations covered by the BAV assessment, and at the end of 2008, Green Resources' plantations in Tanzania, Uganda and Mozambique consisted of 10,099 ha net planted land. The average net value per ha of forest is USD 4,173 per ha.

Direct planting costs in 2008 have been capitalised and offset against the gross change in BAV when arriving at the net gains of NOK 144mn from changes in fair value of biological asset value. When arriving at the NPV of the forest, projected future costs are deducted from the projected future revenues. The future maintenance costs include field maintenance, land lease, fire protection, road maintenance and administration costs.

The Biological asset valuation model (BAV) estimates the net present value (NPV) of Green Resources AS's plantations in Tanzania, Uganda and Mozambique. In Tanzania this includes plantations under the subsidiary companies Green Resources Ltd (Uchindile, Mapanda, Idete and Sao Hill plantations), Tanga Forest Ltd and Lindi Forest Ltd. In Uganda it includes Busoga Forest Company Ltd (Bukaleba plantation) and the Norwegian Afforestation Group Ltd (Kachung plantation). In Mozambique we have included the plantation in Niassa province under management of Malondo Tree Farms Ltd.

Biological asset value per ha NOK millions	2008	2007	2006
<b>MOZAMBIQUE</b>			
NPV ('000)	1,963	-	-
Area (in ha)	475	-	-
Log price (per m <sup>3</sup> )	21.5	-	-
NPV/planted area	4,136	-	-
<b>TANZANIA</b>			
NPV ('000)	27,862	21,154	9,695
Area (in ha)	6,769	5,604	3,849
Log price (per m <sup>3</sup> )	21.5	24.3	7.0
NPV/planted area	4,116	3,775	2,519
<b>UGANDA</b>			
NPV ('000)	12,321	7,395	4,473
Area (in ha)	2,856	1,774	1,211
Log price (per m <sup>3</sup> )	23.3	23.6	21.8
NPV/planted area	4,315	4,168	3,694
<b>Planted area and net new planting by region</b>			
In ha	Accum.	2008	2007
<b>EUCALYPTUS</b>			
Mozambique	228	122	106
Southern highlands, Tanzania	2,733	692	324
Coastal region, Tanzania	404	331	56
Uganda	654	204	49
<b>Total</b>	<b>4,018</b>	<b>1,348</b>	<b>534</b>
<b>PINE</b>			
Mozambique	240	108	132
Southern highlands, Tanzania	3,096	862	947
Coastal region, Tanzania	-	-	-
Uganda	2,095	852	539
<b>Total</b>	<b>5,431</b>	<b>1,822</b>	<b>1,618</b>
<b>TEAK, OTHER HARDWOODS</b>			
Mozambique	7	7	-
Southern highlands, Tanzania	27	-	11
Coastal region, Tanzania	510	292	215
Uganda	107	7	9
<b>Total</b>	<b>650</b>	<b>307</b>	<b>234</b>
<b>TOTAL</b>			
Mozambique	475	237	238
Southern highlands, Tanzania	5,855	1,554	1,281
Coastal region, Tanzania	914	623	271
Uganda	2,856	1,063	596
<b>Total</b>	<b>10,099</b>	<b>3,477</b>	<b>2,386</b>

Biological asset value NOK millions	2008	2007	2006
At start of year	156	89	83
Increases due to purchases	20	9	2
Gains arising from changes in fair value	84	63	12
Exchange difference	42	-6	-8
Carrying amount	301	156	89
Change in fair value of biological assets	145	67	6

Green Resources has a total of 10,099 ha verified planting at the end of 2008 in the subsidiaries covered by the consolidated accounts.

#### (b) Discount Rate and Inflation Assumptions

The model assumes a discount rate of 1.2%, and an inflation rate of 5% for Tanzania, Uganda and Mozambique, implying a real rate of 7%. Inflation rates have throughout 2007/08 increased far above this level in all countries, driven by the rapid increase in international food, raw material and energy prices. Towards the end of 2008 the trend is again downwards, and according to IMF prognosis in 2008 for all three countries inflation is expected to fall back to 5% again by 2009/10.

Expected real returns and cash yield for US timberland has fallen from 9% in 2000 to 4.5% in 2007, according to GMO (2007). However, 'the return premiums for timberland relative to commercial real estate properties and government bonds are at relatively high levels', according to HTRG Research (April 2007). 'Most [US] institutional investors expect their timber investments to outperform inflation by about 800 basis points', according to Merrill Lynch (Sept 2007), but 'experts' suggested that more realistic return expectations will be in the range of CPI +400-500bp. Traditionally, Nordic forestry (and hydropower) investors have expected 4.5% real return, which traditionally has been the discount factor for valuation of the forest of the Nordic paper companies. In 2004, Europe's largest forest deal, Bergvik, was priced at 6.25% pa nominal return for the equity. In Norway, the discount rate used by the Government for valuation purposes is now 5%, but Hoen, Eid & Okseter claim the actual discount rate for private transactions is 1.5-2%. Nominal returns expectations in emerging markets are 10-13% pa, according to Green Resources' assessment.

#### (c) Timber Prices

The future wood prices have been modeled based on sales to three different markets; the domestic (Tanzania, Uganda or Mozambique), East African and Export prices. The price forecasts have two components. Firstly, three scenarios are considered, Low, Medium and High. For Tanzania and Mozambique, a 20%/60%/20% probability distribution has been employed. For Uganda, the corresponding figures are 20%/70%/10%, because the Ugandan prices are already comparatively higher. The Low scenario assumes 0% growth, Medium scenario 5% growth and the High scenario 8-9% annual growth in nominal prices. Secondly, wood prices have been modeled with reference to a given mix between domestic sales, East African sales and Export out of the region. The applied market mix is 40%/30%/30% between domestic, East Africa and Export for Tanzania/Mozambique and 40%/40%/20% for Uganda.

Historically, all East African standing wood prices have been dominated by administratively set prices by the respective Government. Uganda was the first to end this practice, with introduction of competitive public bidding in 2004. In 2007, the Tanzania Government's tripling of wood prices was a move to close the gap with the market price in the region, and the price has been kept unchanged for 2008. In both Tanzania and Uganda, prices are below world market prices, but this is justified based on the quality of the timber and the market conditions. It has been assumed that East African prices will catch up with global prices over time. In Kenya the Government increased in 2008 the log fee for pine diameter 240-320mm with 66% to USD 31.5/m<sup>3</sup>.

The Tanzanian prices are based on the latest price list for Government forests of 5th December 2007, as determined by the Ministry of Natural Resources and Tourism and diameter tables developed for the Sao Hill forest plantations. The average sales price including royalties and other fees are 19 and 24 USD/m<sup>3</sup> for pine and eucalyptus respectively, down 1.2% due to the weakened shilling against the dollar.

Green Resources have planted 274ha of teak in its plantations at the coast of Lindi and Tanga. Teak prices used in the model is based on the Government price list for teak stumpage at USD 114/m<sup>3</sup>. This is a very moderate price level compared with international log prices of teak.

Pine prices for Uganda are based on the average bid price from 2007 and 2008 at Uganda's National Forest Authority (NFA) public competitive biddings for 2008, reduced by 15% to cover the volume of the top less than 17cm. In USD the price remained almost constant at USD 29/m<sup>3</sup>. For Eucalyptus we have not obtained any new price information since 2007, but based on the rapid increase in demand for transmission poles we have used the 2007 price level adjusted with 10% in local currency, implying a price in USD at 17/m<sup>3</sup>.

Currently, there is only a small export of timber products from East Africa, but this is set to increase over time, and there is a significant import of wood products to the region, including transmission poles, panel boards and paper products. Furthermore, Green Resources' plantations are established to serve export markets. Thus, the international price level is also considered when establishing the fair value of the biological assets. A conservative estimate of an international competitive price level for pine and eucalyptus export from East Africa is USD36.8 and USD37.8 per m<sup>3</sup>, respectively. For teak we have set an export price of USD 200/m<sup>3</sup>, based on information from the ITTO Tropical Forest Update 18/2 2008 showing that most teak plantation prices internationally lie between USD 200 and 300 per m<sup>3</sup>.

#### (d) Growth and Yield Assumptions

The volume growth models used for Tanzania and Uganda are based on scientifically developed volume functions for each of the countries government plantations, including the following publications: Malimbwi, R.E.; Mugasha, A.G.; Zahabu, E. (1998): Yield tables for *Pinus patula* at Sao Hill Forest Plantations, Southern Tanzania. Forcounslut report to the Forestry and Beekeeping Division, Ministry of Natural Resources and Tourism, United Republic of Tanzania and Alder, D; Drichi, P; Elungat, D. 2003. Yields of Eucalyptus and Caribbean Pine in Uganda. Uganda Forest Resources Management and Conservation Programme. For the plantation in the highlands of Niassa in Mozambique we have used the same growth models as for the southern highlands in Tanzania with similar physical growth characteristics.

Selection of site classes (production index) are based on measurement of permanent sample plots (PSP). We assume maturity of pine and eucalyptus at 21 and 13 years, respectively. For the plantation in Mapanda, Tanzania, the eucalypts have shown poor performance and time of final harvest has been increased to 15 years. In Tanzania 30 % of standing volume of pine will be harvested as thinning after 11 years and again after 15 years for pine, and similarly at 10 and 14 years for Uganda. Eucalyptus is assumed to give better yield in the second and third rotation from coppice, because the new stems will grow from the stumps of the harvested trees and thus have a full grown root system from the start.

The Tanzanian growth models have a mean annual increment (MAI) of 21 m<sup>3</sup>/ha/yr for pine and 23 m<sup>3</sup>/ha/yr for eucalyptus. MAI is expected to be 15-25 m<sup>3</sup>/ha/yr and 25-45 m<sup>3</sup>/ha/yr for pinus caribea and Eucalyptus ssp. in Uganda.

Volume functions for teak at the coast of Tanzania has been established based on a report dated May 7 by Indufor in consortium with The Institute of Resource Assessment, University of Dar Es Salaam. We assume maturity at age 25 with harvestable volume of 240 m<sup>3</sup>/ha after 3 thinnings at age 8, 12 and 18.

#### (e) Harvesting Plans

GRL conducted in November 2008 a selected harvesting of transmission poles from the eucalypt compartment planted in 1997. A total of 1600 poles were harvested, taking out an estimated 20% of the total number of trees. Harvesting of the oldest compartments from 1997/98 will be conducted in two phases around age 11 and most likely age 14 to optimize the output of transmission poles, with the main area harvestable in 2011. BFC did their first harvesting in late 2006 with supply of transmission poles in 2007 to UDECL. The harvest will continue in 2009/10.

#### (f) Management of biological risks

Forest plantations are subject to different types of risks, the most important

being wild fires, pest and diseases and windfall. Since 2007 we have continued the investments in fire protection equipment and improved management practices. Fire towers and forest patrols with radio communications, 24 hours stand-by fire fighting crews with necessary equipment during the dry season has been established. Fire breaks to stop fires from outside and compartment fire breaks to reduce the scale of any fire has been established. We believe the risk of fires is correlated with pre-emptive actions, and now clearly see the results of these investments with no material loss to fires since 2004 except in Tanga were 75ha of young eucalyptus were destroyed in 2008. We have therefore from 2008 changed the assumptions into 5% of the fire prone plantations to be destroyed by incidents every 5th year, except for Tanga and Lindi where we assume every 3rd year due to less developed fire protection preparedness in new plantations.

(g) Changes in fair value from 2005 - 2007

Planting included in the BAV are verified by our mapping and inventory department through a combination of GPS tracking and satellite image interpretation. As a result of a complete verification of the aggregated planting belonging to GRAS companies, significant areas previously included in the BAV have been written off. This includes 1,012 ha in GRL, 122 ha in BFC and 217 ha in NAG. There are a mixture of reasons for this including previous inaccurate mapping, losses to drought and weed competition and uprooting of plantings being done too close to watersheds in GRL. These adjustments reduce the NPV of the plantations with USD 7.8mn. The new planting of 3477 ha in total increases the NPV with USD 13.1mn, while adding one year's growth to existing plantings contributes USD 2.6mn. Wood price adjustments (in local currency) mainly from Uganda and the regional price level adds USD 3.2mn, while reduction in the assumptions for expected future fire losses increases the NPV with USD 3.2mn. In Uganda, BFC have included 358 ha of plantings from the purchase of Deutche Forst Consult Ltd, adding a NPV of USD 1.2mn. Finally, the weakened currency of the shillings in Tanzania and Uganda reduces the NPV with USD 1.9mn. For 2008 there have not been any other technical model assumptions with impacts on the NPV.

Biological asset value scenarios				
USD mn	Tanzania	Uganda	Mozambique	Total
NPV 31.12.2005	7.8	4.7	-	12.5
Planting in 2006	2.5	0.7	-	3.2
Volume growth	0.9	0.7	-	1.6
Wood price adjustments	-0.7	-0.1	-	-0.8
Forest fire assumptions	2.3	2.8	-	5.1
Forest fires	-	-	-	-
Input costs	-0.1	-1.0	-	-1.1
Other assumptions	-2.2	-2.7	-	-4.9
NPV 31.12.2006	10.5	5.1	-	15.6
Planting in 2007	4.7	2.4	-	7.1
Volume growth	2.0	0.7	-	2.7
Wood price adjustments	10.4	-0.6	-	9.8
Forest fires	0.0	-0.3	-	-0.3
Input costs	-2.7	0.3	-	-2.4
Other assumptions	-3.7	-0.9	-	-4.6
NPV of purchased plantations	0.0	0.7	-	0.7
NPV 31.12.2007	21.2	7.4	-	28.6
Planted area adjustments	-6.6	-1.3	-	-7.8
Planting in 2008	8.3	2.9	2.0	13.1
Volume growth	1.8	0.7	-	2.6
Wood price adjustments	1.5	1.7	-	3.2
Fire loss assumptions	2.6	0.6	-	3.2
Input costs	0.3	-0.2	-	0.1
Other assumptions	-1.2	-0.7	-	-1.9
NPV of purchased plantations	-	1.2	-	1.2
NPV 31.12.2008	27.9	12.3	2.0	42.2

Biological asset value scenarios USD per ha	Price scenarios <----->			
	Low	Medium	High	Weighted average
Pine	2,336	3,804	5,415	3,752
Eucalyptus	4,822	7,250	10,233	7,315
Teak	5,231	9,029	13,873	9,238
Other	2,901	4,857	6,898	4,846
Average/Total	3,425	5,356	7,617	5,360
Costs	-1,187	-1,187	-1,187	-1,187
Average, net of costs	2,238	4,170	6,431	4,173

Key assumptions for the BAV Model			
	2008	2007	2006
<b>GENERAL</b>			
Discount rate	12 %	12 %	12 %
Last year included for NPV of Pine	2029	2028	2028
Last year included for NPV of Eucalyptus	2047	2046	2044
Inflation rate for Tanzania	5 %	5 %	5 %
Inflation rate for Uganda	5 %	5 %	4 %
Exchange rate TSH/USD	1132	1132	1305
Exchange rate USH/USD	1703	1703	1786
<b>ESTIMATED PRICE RISE PA</b>			
Low	0 %	0 %	0 %
Medium	5%/6%*	5%/6%*	9 %
High	8 %	8 %	11 %
Estimated price rise pa for exports	5 %	5 %	4 %
Price premium for pruned pine	10 %	10 %	60 %
<b>SCENARIO PROBABILITIES (TZ/UG/MZ)</b>			
Low	20 %	20 %	10 %
Medium	60%/70%	60%/70%	50%/70%
High	20%/10%	20%/10%	40%/20%
<b>ROTATION LENGTH (YEARS)</b>			
Pine	21	21	21
Eucalyptus	13 (15**)	13 (15**)	13
Teak	25	-	-
<b>MEAN ANNUAL INCREMENT (M3/HA/YR)</b>			
<i>Pine</i>			
Mozambique	20.7	-	-
Tanzania	20.7	20.7	20.7
Uganda	24.8	24.8	24.8
<i>Eucalyptus</i>			
Mozambique	22.5	-	-
Tanzania	22.5	22.5	22.5
Uganda	22.5	22.5	22.5
<i>Teak</i>			
Tanzania	15.0	-	-
<b>EFFECTS ON INCIDENTS (FIRE, PESTS, DRAUGHTS ETC.)</b>			
Years prone to fire (pine/eucalyptus):			
Tanzania	15 / 4	15 / 4	15 / 4
Uganda	14 / 2	14 / 2	14 / 2
<b>AREA AND FREQUENCY OF LOSSES (% OF AREA EVERY X YEAR)</b>			
Tanzania	5%/5th yr	8%/3rd yr	8%/3rd yr
Uganda	5%/5th yr	7%/4th yr	7%/4th yr
Notes: * = Tanzania; ** = Mapanda			



## NOTE 9 INVENTORY

NOK millions	2008	2007	2006
Finished goods	14	7	2
Consumables	3	5	5
Goods in transit	-	1	3
Total	17	14	10

## NOTE 10 RECEIVABLES AND PREPAYMENTS

NOK millions	2008	2007	2006
Trade receivables	12	7	3
Prepayments and other receivables	16	12	4
Receivables from related parties (note 15(ii))	1	1	-
VAT / Withholding tax refundable	2	1	-
Total	30	22	7

## NOTE 11 SHARE CAPITAL

The movement in share capital was as follows:

NOK millions	2008	2007	2006
Balance at 1 January	125	68	49
Issue of shares	16	56	19
Capital reduction	-	-	-
Balance at 31 December	141	125	68

The authorized number of ordinary shares is 28,136,178 (2007: 25,001,982) with a par value of NOK 5 per share with a total book value of NOK 141mn. All Issued shares are fully paid.

The movement in the number of Issued shares is as follows:

Number of Shares	2008	2007	2006
Balance at 1 January	25,001,980	1,040,063	744,584
Issue of new shares	3,134,198	262,674	295,479
1:20 share split	-	23,699,243	-
Balance at 31 December	28,136,178	25,001,980	1,040,063

## NOTE 12 BORROWINGS

NOK millions	2008	2007	2006
<b>NON-CURRENT</b>			
PP Wilhelmsen	-	7	-
Norfund - non current portion	-	-	6
Phaunos Norge AS	68	-	-
Other	1	-	-
	69	7	6
<b>CURRENT</b>			
Norfund Loan - current portion	9	10	5
Macama Invest AS	-	-	2
Verbena Investment Ltd	-	-	4
Zurich Trust Ltd	-	5	-
Retiro AS	-	5	5
Svein Høgseth	4	-	-
	12	20	16
<b>TOTAL BORROWING</b>	<b>81</b>	<b>26</b>	<b>22</b>

The borrowings are made up of the following:

One of the loans from Norfund, originally at NOK 8,5mn and with remaining balance at NOK 5,8mn, was advanced to one of the subsidiaries, Sao Hill Industries Limited in 2006. The loan is denominated in Norwegian Kroner and is secured against all property, plant and equipment of Sao Hill Industries Limited as well as Green Resources AS' shares in the Company. The loan carries interest at 7,5% per annum and the company has been making annual repayment of NOK 800,000 as from January 2007. The second loan from Norfund, originally at NOK 4mn and with remaining balance at NOK 2,9mn carries interest at 8% per annum. Both Norfund loans expire in 2009 (March).

## NOTE 13 DEFERRED TAXES

Deferred Income tax is calculated using the actual tax rate of 30%.

NOK millions	2008	2007	2006
At start of the year	26	13	12
Charge to profit and loss account	21	13	1
Exchange differences	7	-	-
At end of the year	54	26	13
Charge to profit & loss by country			
NOK millions	2008	2007	2006
Tanzania	9	11	1
Uganda	9	3	-
Mozambique	3	-	-
	21	14	1

Deferred Income tax assets and liabilities and deferred income tax credit in the profit and loss account are attributable to the following items:

NOK millions	Charged/ credited to		Charged/ credited to		31-12-06
	31-12-08	profit and loss	31-12-07	profit and loss	
<b>Deferred income tax liabilities</b>					
Fair Value gains	75	34	41	15	26
Accelerated tax depreciation	5	3	1	1	-
	79	37	42	16	26
<b>Deferred income tax assets</b>					
Other timing differences	-4	-4	-	1	-1
Trading loss	-27	-12	-16	-4	-12
Exchange differences	7	-	-	-	-
	-25	-16	-16	-3	-13
Deferred income tax liability	55	21	26	13	13

## NOTE 14 TRADE AND OTHER PAYABLES

NOK millions	2008	2007	2006
Trade payables	14	12	4
Amounts due to related parties (note 14 (i))	-	-	-
Accrued expenses	2	-	1
Other payables	13	4	4
Current portion - borrowings	14	21	16
<b>Total</b>	<b>43</b>	<b>37</b>	<b>25</b>
Net of current portion	30	16	9
Change	13	7	-1

## NOTE 15 RELATED PARTY TRANSACTIONS

The company is controlled by Mads Asprem, Phaunos Norge AS, Steinerud AS and Storebrand Livsforsikring AS. A total of NOK 1,800,000 was booked as service fees to Asprem Analytics Ltd, where Mads Asprem is the ultimate beneficiary.

Chairman of the board, Tom Vidar Rygh, receives NOK 75,000 per year for his services as Chairman. In addition Steinerud AS (originally Northcap AS) receives NOK 575,000 for other services performed on behalf of the company. Steinerud AS is owned by T.V.Rygh. The agreement, which became effective in 2006, is valid for three years and both amounts have a right of conversion into shares at a price of NOK 12,50. The full liability to Steinerud AS was converted into shares as per December 4, 2008 under the obligation that the company is bound to the agreement for the full three year period.

There were no other transactions with related parties during the year. The following are the balances with related parties.

NOK millions	2008	2007	2006
Tom Vidar Rygh (Retiro AS), chairman	-	5	5
Mads Asprem - managing director	-	1	1
Vebena Investment Holdings	-	-	-
(ii) Loans to related parties			
TreeFarms Mozambique	-	-	1
TreeFarms UK Ltd	-	-	1
Total	-	-	2

## NOTE 16 CASH AND CASH EQUIVALENTS

For the purpose of the cash flow statement, the year-end cash equivalents comprise the following:

NOK millions	2008	2007	2006
Bank and cash balances	87	17	10
Bank overdraft	-1	-1	-2
Total	86	16	8

## NOTE 17 INCORPORATION

The Company is incorporated in Norway as a private Company with limited liability.

## NOTE 18 INVESTMENT IN SUBSIDIARIES

Company	Country	Type of Business	Date of Incorporation	Company Reg No.	Number of Shares	Value per Share I.c. mn	Share Capital I.c. mn	Share Capital NOK mn	Shareholders	No of Shares	% of Shares	GRAS BV (NOK'000)
Africa Green Power Ltd	Tanzania	Energy	23-06-04	49269	500	100,000	50	0.2	GRAS Nortan AS	499 1	99.8 0.2	269
Busoga Forestry Company Ltd	Uganda	Plantation	14-03-96	31967	478,000	5,000	2,390	8.5	GRAS Nortan	477,999 1	100.0 0.0	10,023
Florestal de Cabo Delgado SARL	Mozambique	Plantation	22-09-06	100004984	1,300	500	0.65	0.0	GRAS Cardoso	1,299 1	99.9 0.1	154
Green Resources Ltd	Tanzania	Plantation	04-09-01	42081	200,000	10,000	2,000	11.0	GRAS Nortan	199,999 1	100.0 0.0	53,969
Green Resources Mozambique SARL	Mozambique	Plantation	22-09-06	100005018	1,300	1,000	1.30	0.0	GRAS Cardoso	1,299 1	99.9 0.1	308
Lindi Forests Ltd	Tanzania	Plantation	23-12-05	54989	1,000	100,000	100	0.5	GRAS Nortan	999 1	99.9 0.1	1,702
Lurio Green Resources SARL	Mozambique	Plantation	22-09-06	100004992	1,300	500	0.65	0.0	GRAS Cardoso	1,299 1	99.9 0.1	154
Malonda TreeFarms SARL	Mozambique	Plantation	06-08-07		1,300	10,000	13	0.0	GRAS Malonda GR Moz	1,027 260 13	79.0 20.0 1.0	2,329
Nortan AS	Norway	Finance	17-09-95	976006763	13,000	150	1.95	1.95	GRAS	13,000	100.0	0
Norwegian Afforestation Group (U) Ltd	Uganda	Plantation	02-11-99	42463	1,650	905,607	1,494	5.3	GRAS NAG AS Others	1,384 99 167	83.9 6.0 10.1	4,115
Sao Hill Contractors Ltd	Tanzania	Building	26-06-09	71713	10,000	100,000	1,000	5.5	GRAS Nortan	9,998 2	100.0 0.0	
Sao Hill Energy Ltd	Tanzania	Energy	19-09-00	40027	62,500	16,000	1,000	5.5	GRAS Nortan	62,499 1	100.0 0.0	4,024
Sao Hill Industries Ltd	Tanzania	Industrial	27-03-96	29623	4,700,000	1,000	4,700	25.8	GRAS Nortan	4,526,100 173,900	96.3 3.7	52,807
Sao Hill Transport Ltd	Tanzania	Industrial	29-07-04	49610	2,000,000	1,000	1,000	5.5	GRAS Nortan	1,826,100 173,900	91.3 8.7	8,085
Tanga Forests Ltd	Tanzania	Plantation	23-12-05	54988	1,000	100,000	100	0.5	GRAS Nortan	999 1	99.9 0.1	2,553

## NOTE 19 SHAREHOLDERS' AND DIRECTORS' OWNERSHIP

The company had issued 28,136,178 shares at the balance sheet date distributed among 58 shareholders. The ten largest shareholders' and the directors' share ownership is shown in Note 4 under the accounts for Green

Resources AS. An updated list of the shareholders as of 30 June 2009 is shown on page 65.



<b>PROFIT AND LOSS ACCOUNT</b>	<b>Notes</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
NOK millions				
Sales		-	-	1
Other operating income		1	-	-
<b>Total operating Income</b>		<b>1</b>	<b>-</b>	<b>1</b>
Raw materials and consumables used		-	-	1
Staff costs	2	4	3	1
Other operating expenses	2	7	4	2
<b>Total operating expenses</b>		<b>11</b>	<b>7</b>	<b>4</b>
<b>Results of operations</b>		<b>-10</b>	<b>-7</b>	<b>-3</b>
Income from investments in subsidiaries and associates		-	-	-
Interest received from group companies		-	-	-
Other financial income		-	1	-
Other financial expense		-7	-1	-2
<b>Operating results before tax</b>		<b>-16</b>	<b>-7</b>	<b>-5</b>
<b>Operating results</b>		<b>-16</b>	<b>-7</b>	<b>-5</b>
<b>Results for the year</b>		<b>-16</b>	<b>-7</b>	<b>-5</b>
<b>Transfers</b>				
Other equity	5	-16	-7	-5
<b>Total</b>	<b>1</b>	<b>-16</b>	<b>-7</b>	<b>-5</b>

<b>CASH FLOW STATEMENT</b>	<b>Notes</b>	<b>2008</b>	<b>2007</b>
NOK millions			
<b>Profit before taxation</b>		<b>-16</b>	<b>-7</b>
<b>Movement in working capital:</b>			
Change in short term receivables		-9	-
Change in payables and accrued exp		1	2
<b>Net cash used by operating activities</b>		<b>-25</b>	<b>-5</b>
<b>Investment activities</b>			
Purchases of shares in subsidiaries		-75	-13
Loan to subsidiaries, net		14	-45
<b>Net cash outflow</b>		<b>-62</b>	<b>-57</b>
<b>Financing activities</b>			
Issue of shares		91	67
Loans proceeds, net		61	-2
<b>Net cash inflow</b>		<b>152</b>	<b>65</b>
Increase in cash and cash equivalents		66	-1
<b>Cash/cash equivalents start of year</b>		<b>9</b>	<b>6</b>
<b>Cash/cash equivalents at end of year</b>		<b>75</b>	<b>9</b>

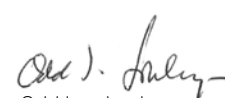
BALANCE SHEET	Notes	2008	2007	2006
NOK millions				
<b>Non-current assets</b>				
Financial fixed assets				
Loans to group companies	9	80	94	49
Investment in shares		141	66	53
<b>Total Fixed assets</b>		221	159	102
<b>Current assets</b>				
Receivables				
Other debtors		10	1	0.4
Subscribed capital called but not paid		-	-	0.5
Total receivables		10	1	1
Bank deposits, cash in hand, etc	3	75	9	6
<b>Total current assets</b>		85	10	7
<b>Total assets</b>	1	306	169	109
<b>Equity and liabilities</b>				
Paid in capital				
Share capital	5	141	125	68
Share premium	5	84	9	13
Other paid-in capital		-	-	10
Other equity		2	18	-
<b>Total equity</b>	5	227	152	91
<b>Non current liabilities</b>				
Other long-term liabilities		-	-	6
		-	-	6
<b>Current liabilities</b>				
Convertible loans		68	1	6
Trade creditors	7	2	1	-
Public duties payable		-	-	-
Other short-term liabilities		8	15	6
	7			
<b>Total current liabilities</b>		79	17	12
<b>Total liabilities</b>		79	17	18
<b>Total equity and liabilities</b>		306	169	109

Oslo, 15 April 2009

  
Tom Vidar Rygh  
Chairman

  
Mads Aspren  
CEO

  
Juha Niemela

  
Odd Ivar Løvhaugen

  
Ambroise Bryant  
Chukwueloka Orjiako

  
Elvin Mutuma Marangu

  
Liane Luke

  
Kristoffer Olsen

Green Resources AS is the Norwegian holding company within the Green Resources group.

## NOTE 1 ACCOUNTING PRINCIPLES

### (A) BASIS OF PREPARATION

The year's annual report is set up in accordance with the laws of accounting and in accordance with good accounting practices and terms. Consolidated accounts are established, based on IFRS standards. Green Resources AS is part of the Green Resources group, and the consolidated group accounts can be obtained in Strandveien 35, 1366 Lysaker, Norway.

### (B) REVENUE RECOGNITION

Revenue from sales of goods is recognised at the time of delivery. Revenue from the sales of services is recognised when the services are executed. The share of sales revenue associated with future service is recorded in the balance sheet as deferred sales revenue, and is recognized as revenue at the time of execution.

### (C) FOREIGN CURRENCIES

Items denominated in foreign currencies are translated into Norske Kroner at the exchange rate on the balance sheet date.

### (D) INVESTMENTS IN SUBSIDIARIES

Investments in subsidiaries are valued at cost in the company accounts. The investment is valued as cost of acquiring shares, providing they are not impaired.

### (E) TAXES

Deferred tax is calculated as 28% of the temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Temporary differences, both positive and negative, are offset within the same period. Deferred tax assets are recorded in the balance sheet when it is more likely than not that the tax assets will be utilized. Deferred tax assets and deferred tax liabilities are presented net in the balance sheet.

### (F) CASH AND CASH EQUIVALENTS

The cash flow statement has been prepared according to the indirect method. Cash and cash equivalents include cash, bank deposits, and other short term highly liquid investments with maturities of three months or less from the purchase date.

## NOTE 2 EMPLOYEES REMUNERATION ETC

NOK millions	2008	2007
Salary for employees	2.4	1.7
Salary and other expenses	-	-
Other salary related expenses	0.1	-
Employee fees	-	-
Pension cost - defined contribution plan	0.1	-
	2.7	1.8
Number of employees	6	5

There has been charged, but not yet paid, NOK 352,495 as compensation to the board members. A total of NOK 1,800,000 was booked as service fees to Aspre Analytics Ltd, where Mads Aspre is the ultimate beneficiary.

Chairman of the board, Tom Vidar Rygh, receives NOK 75,000 per year for his services as Chairman. In addition Steinerud AS (originally Northcap AS) receives NOK 575,000 for other services performed on behalf of the company. Steinerud AS is owned by T.V. Rygh. There were no other transactions with related parties during the year.

The auditor has been paid the amount of NOK 332,249 for statutory audits. The company has established the obligatory pension security system. The company operates a defined contribution plan which includes 6 permanent employees. See Consolidated Notes, section 1 (j).

## NOTE 3 BOUND ASSETS

Of the company's bank deposits, NOK 104,325 is bound for tax purposes.

## NOTE 4 SHAREHOLDERS' AND DIRECTORS' SHARE OWNERSHIP 31.12.2008

The company had 28,136,178 shares divided between 58 shareholders at the end of the year, where the major shareholders are:

Bank of New York (New Africa)	7,873,620	shares	28.0 %
Phaunos Norge AS	3,310,000	shares	11.8 %
Steinerud AS	2,614,980	shares	9.3 %
Storebrand Livsforsikring AS	2,400,000	shares	8.5 %
Verbena Investment Holdings Ltd.	2,317,640	shares	8.2 %
Macama Invest AS	2,052,580	shares	7.3 %
The Resource Group (TRG) AS	1,314,840	shares	4.7 %
Rybø AS	1,308,180	shares	4.6 %
Petter P. Wilhelmsen	938,198	shares	3.3 %
Neville Investment Management Ltd.	743,020	shares	2.6 %
	24,873,058	shares	88.4 %

No other shareholder has more than a 2% stake of the company. Face value per share is NOK 5. All shares have the same rights.

As of 31 December, the chairman of the board Tom Vidar Rygh holds 2,614,980 shares through the company Steinerud AS, and holds 654,090 through Rybø AS (50% ownership). The managing director Mads Aspre holds 774,431 shares, including 369,680 shares through the company New Africa AS, and owns more than 90% of NewAfrica Ltd (held through Bank of New York) which holds 7,873,620 shares. Board member Mutuma Marangu holds 2,317,640 shares through Verbena Investment Holdings Ltd. Board member Dr. A.B.C. Orjiako holds 743,020 shares through Neville Investment Management Ltd. Board member Kristoffer Olsen holds 603,569 shares, including 300,000 shares through the company Jotunfjell AS and 171,569 shares through the company Jotunfjell Partners AS. Board member Odd Ivar Løvhaugen holds 322,760 shares. Board member Liane Luke is representing Phaunos Norge AS, which holds 3,310,000 shares. The company is guaranteeing a short term loan from NORAD/Norfund of NOK 8,5 mn. The loan expired March 2009.

## NOTE 5 EQUITY

NOK millions	Share equity	Share premium Reserve	Other equity	Paid, not registered equity	Sum equity
Equity 01/01/2007	69	13	-	10	92
Equity increase 2007	56	-4	25	-10	67
This year's results	-	-	-7	-	-7
Equity 31/12/2007	125	9	18	-	152
Equity 01/01/2008	125	9	18	-	152
Equity increase 2008	16	76	-	-	91
This year's results	-	-	-16	-	-16
Equity 31/12/2008	141	85	2	-	227

## NOTE 6 INCOME TAXES

The company has a taxable deficit of NOK 42,757,889 giving a tax credit of NOK 11,972,209 which is not in the current balance account.

CALCULATION OF DEFERRED TAX/DEFERRED TAX ASSET:

NOK millions	2008	2007
Net temporary differences	-	-
Tax losses carried forward	43	27
Total	43	27
28 % deferred tax	12	7
Deferred tax assets not recognised	-12	-7
Deferred tax in the balance sheet	-	-

BASIS FOR INCOME TAX EXPENSE, CHANGES IN DEFERRED TAX AND TAX PAYABLE:

NOK millions	2008	2007
Profit/loss before income tax	-16	-7
Permanent differences	-	-
Basis for the tax expense of the year	-16	-7
Changes in temporary differences	-	-
Basis for tax payable in the profit and loss statement	-16	-7
+/- Group contributions paid/received	-	-
Basis for tax payable liability	-16	-7

#### NOTE 7 BORROWINGS

The company had NOK 75mn of borrowings at the end of 2008, up from NOK 14mn in 2007, of which NOK 67mn was a convertible bond which the company has the option to convert into equity before the end of 2009.

#### NOTE 8 GOVERNMENTS GRANTS

The Group has received government grants of NOK 1.5mn for dedicated renewable energy pilot projects. The grants are recognized once the grants are received. There are no unfulfilled conditions attached to the grant agreements.

#### NOTE 9 INTERCOMPANY TRANSACTIONS AND BALANCES

As per Dec 31 2008 the Company had the following balances with subsidiaries:

NOK millions	2008	2007
Busoga Forestry Co Ltd	14.1	6.1
Norwegian Afforestation Group (U) Ltd	0.0	-
Sao Hill Industries Ltd	0.5	29.7
Green Resources Ltd	26.1	43.3
Sao Hill Transport Ltd	10.5	1.7
Sao Hill Energy Ltd	1.1	0.3
Tanga Forest Company Ltd	4.6	2.1
Lindi Forest Company Ltd	2.5	1.6
TreeFarms Mozambique	11.1	4.1
Florestal Del Cabo Delgado	0.2	-
Malonda TreeFarms Ltd	0.7	0.2
TreeFarms (S)	2.0	0.2
TreeFarms UK	4.8	2.2
	78.3	91.4

#### NOTE 10 SUBSIDIARIES

Green Resources AS has through the accounting year been the major shareholder in numerous companies. See note 18 in the Consolidated Accounts.



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 NO-0106 Oslo  
 Telephone +47 02316  
 Telefax +47 23 16 10 00

To the Annual Shareholders' Meeting of Green Resources AS

### Auditor's report for 2008

We have audited the annual financial statements of Green Resources AS as of December 31, 2008, showing a loss of TNOK 16 097 for the parent company and a profit of TNOK 32 511 for the group. We have also audited the information in the directors' report concerning the financial statements, the going concern assumption, and the proposal for the coverage of the loss. The annual financial statements comprise the financial statements of the parent company and the group. The financial statements of the parent company comprise the balance sheet, the statements of income and cash flows, and the accompanying notes. The financial statements of the group comprise the balance sheet, the statements of income and cash flows, the statement of changes in equity and the accompanying notes. The regulations of the Norwegian accounting act and accounting standards, principles and practices generally accepted in Norway have been applied in the preparation of the financial statements of the parent company. International Financial Reporting Standards as adopted by the EU have been applied in the preparation of the financial statements of the group. These financial statements are the responsibility of the Company's Board of Directors and Managing Director. Our responsibility is to express an opinion on these financial statements and on other information according to the requirements of the Norwegian Act on Auditing and Auditors.

We conducted our audit in accordance with laws, regulations and auditing standards and practices generally accepted in Norway, including standards on auditing adopted by The Norwegian Institute of Public Accountants. These auditing standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. To the extent required by law and auditing standards an audit also comprises a review of the management of the Company's financial affairs and its accounting and internal control systems. We believe that our audit provides a reasonable basis for our opinion.

In our opinion,

- the financial statements of the parent company have been prepared in accordance with the law and regulations and give a true and fair view of the financial position of the company as of December 31, 2008 and the results of its operations and its cash flows and the changes in equity for the year then ended, in accordance with accounting standards, principles and practices generally accepted in Norway
- the financial statements of the group have been prepared in accordance with the law and regulations and give a true and fair view of the financial position of the group as of December 31, 2008, and the results of its operations and its cash flows and the changes in equity for the year then ended, in accordance with International Financial Reporting Standards as adopted by the EU
- the company's management has fulfilled its duty to produce a proper and clearly set out registration and documentation of accounting information in accordance with the law and good bookkeeping practice in Norway
- the information in the directors' report concerning the financial statements, the going concern assumption, and the proposal for the coverage of the loss are consistent with the financial statements and comply with the law and regulations.

Oslo, 15 April, 2009

PricewaterhouseCoopers AS

Bjørn Leiknes

State Authorised Public Accountant (Norway)

**Note: This translation from Norwegian has been prepared for information purposes only.**

Alta Rendal Bergen Bodø Drammen Egersund Florø Fredrikstad Førde Gardermoen Gol Hamar Hammerfest Hardanger Harstad Haugesund Kongsberg Kongsvinger Kristiansand Lyngseidet Mandal Mo i Rana Molde Mosjøen Måloy Namsos Oslo Sandefjord Sogndal Stavanger Stryn Tromsø Trondheim Tønsberg Ulsteinvik Ålesund  
 PricewaterhouseCoopers navnet refererer til individuelle medlemsfirmaer tilknyttet den verdensomspennende PricewaterhouseCoopers organisasjonen  
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Green Resources AS is a Limited Company registered in Norway with organisation number 975 879 968. It was established on 26 August 1995 and registered on 23 November 1995.

#### SHARE CAPITAL

The Company's issued share capital on 30 June 2009 was NOK 140,925,890 divided in 28,185,178 freely transferable shares of NOK 5 each, all of which are fully paid. The shares have been issued according to Norwegian law.

#### SHARE REGISTRATION

The shares are registered under VPS, the Norwegian electronic share register, under the International Securities Identification Number (ISIN) NO 000 3100208. The registrar for the shares is DnB NOR ASA.

#### SHARE ISSUES

The shareholders have contributed NOK 354m in new equity (including a convertible bond) to the Company from 1995 to the end of 2008, during a number of share issues. The company has raised new equity as the company has required new capital. During 2008, Green Resources issued 2,900,000 new shares.

#### OUTSTANDING SHARE OPTIONS AND CONVERTIBLE LOANS

There is a convertible loan of NOK 67.51 mn that can be converted into 2,045,758 shares at a price of NOK 33 per share from 1 December 2009 to 30 November 2010. Green Resources has the right to convert the loan into shares from 1 December 2009. There is an option program for the CEO, such that he has the right to purchase 150,000 shares at NOK 33 per share before 1 July 2012 upon completion of his services for 2009, 2010 and 2011, respectively.

#### AUTHORISATION TO ISSUE SHARES

The 2007 AGM gave the Board the right to issue 500,000 new shares with a nominal value of NOK 5 per share for a period of one year following the AGM.

#### AUTHORISATION TO PURCHASE SHARES

The BoD has the right to purchase 10% of the Company's shares at a minimum price of NOK 10 and maximum NOK 50 per share.

#### SHAREHOLDER POLICY

Tree planting is a long term undertaking and the Company's strategy has been to provide maximum long term return for the shareholders. The Company has not encouraged liquidity in its shares. However, it is Green Resources long term objective to become a publicly listed company.

#### DIVIDEND POLICY

Green Resources is not paying a dividend. The company has significant investment opportunities, which are believed to generate high returns and the Company does not expect to pay a dividend for several years.

#### MAJOR SHAREHOLDERS

As of 30th June 2009, the Company had 61 shareholders. The table below shows the largest shareholders.

Shareholders	Beneficial Owner	Shares	Percentage
NewAfrica Ltd1	Mads Asprem	8,648,051	30.7%
Phaunos Timber Fund		3,310,000	11.7%
Steinerud AS	Tom Vidar Rygh	2,614,980	9.3%
Storebrand ASA		2,400,000	8.5%
Verbea Investment Ltd	Mutuma Marangu	2,317,640	8.2%
Macama Invest AS	Bohler	2,052,580	7.3%
The Resource Group TRG AS		1,314,840	4.7%
Rybo	Bohler/Rygh	1,308,180	4.6%
Preben Invest AS2	PP Wilhelmsen	1,072,378	3.8%
Neville Investment Ltd	ABC Orjaco	743,020	2.6%
Jotunfjell AS3	Kristoffer Olsen	603,569	2.1%
Odd Ivar Lovhaugen		322,760	1.1%
Shareholders with 100-299.000 shares	4 shareholders	792,860	2.8%
Shareholders with 20-99.000 shares	18 shareholders	560,000	2.0%
Shareholders with less than 20.000 shares	22 shareholders	124,320	0.4%
<b>Total Shares</b>		<b>28,185 178</b>	<b>100%</b>

1. incl. NewAfrica AS and Mads Asprem

## GENERAL MEETING OF SHAREHOLDERS

The Annual General Meeting (AGM) is held annually before the end of June. The General Meeting of Shareholders' is the Company's supreme decision making body. The following items, among others, are decided by the AGM:

- amendments to the Articles of Association
- elections of the Board of Directors
- issue of new shares and acquisitions of own shares
- adoption of the Accounts
- payment of dividend
- election of the Company's auditors and their fees

The right to attend a General Meeting of the Shareholders shall apply to any shareholder who is registered as a shareholder of the Company at the day of the AGM.

## BOARD OF DIRECTORS

The Board of Directors is responsible for the governance of the Company and for the proper organisation of its activities in accordance with the legislation and the Articles of Association. The Board of Directors established the principles of the strategy, organisation, accounting and control of the Company and appoints the Managing Director and CEO, who acts in accordance with the orders of the Board of Directors. The Board of Directors held seven meetings in 2008.

## FEES TO THE BOARD OF DIRECTORS

The Directors have been paid an annual fee of NOK 25,000 per year from 2005, with an additional NOK 5,000 per attended meeting. The Chairman is paid an annual fee of NOK 75,000. A total fee of NOK 325,000 was paid to the Directors in 2008. Northcap AS received NOK 575,000 for other services rendered by the Chairman. A company associated with Mutuma Marangu has initiated and executed certain contracts for the sale of transmission poles and has been paid a normal commission for this.

## BOARD COMMITTEES

Green Resources has two Board Committees. The Audit Committee consists of Kristoffer Olsen, Odd Ivar Lovhaugen and Mutuma Marangu and the Compensation Committee consists of Juha Niemela, Tom Vidar Rygh and Liane Luke.

## COMPANY SIGNATURE AND PROKURA

The Company is signed by the Chairman and one Director. Prokura is held by the Chairman.

## MANAGING DIRECTOR AND CEO

The Board of Directors employs a Managing Director and CEO for the Company. The Managing Director and CEO are responsible for the day-to-day management of the Company's affairs. The Company paid NOK 1,800,000 in 2008 for services rendered by the CEO, a payment made at the end of the year, together with the compensation for 2007, which was the first payment made to the CEO for about 20,000 hours of work undertaken for the company since 1995.

## AUDITORS

The Annual General Meeting elects an auditor to scrutinize the Company's Accounts. The AGM elected PricewaterhouseCoopers to act as the Company's Auditor. The fees paid to the auditor in the holding company were NOK 332,249.

## COMPANY BY-LAWS

1. The name of the Company is Green Resources AS.
2. The Company's business address is in Baerum.
3. The purpose of the Company is to invest in financial and productive assets and to carry out production and consulting activities.
4. The Company's share capital is NOK 140,925,890 divided in 28,185,178 freely transferable shares of NOK 5 each.
5. The Board of Directors is to consist of from 5 to 10 members. The Board is elected for one year at a time. The board members may be re-elected. In case of a tie during votes among the members of the Board of Directors, the Chairman is to have a double vote. The Board of Directors is to meet at least once per quarter. A Board Meeting is to be summoned with a minimum of 5 days written notice. Any shareholder representing at least 20% of the shares can appoint a Director of the Board. At least half the members of the Board must be elected by the shareholders' meeting.
6. The Chairman of the Board and one member of the board jointly will sign for the Company. The Board may issue a limited power to sign, "prokura".

7. The Company's shares are to be registered in VPS (Verdipapirsentralen).

8. The Ordinary General Meeting is to be held each year within the end of the month of June. Summons is to be sent in writing with 2 weeks notice. The summons is to specify the matters which are to be dealt with. The General Meeting is to be chaired by the Chairman of the Board, unless another leader of the meeting is elected. At the General Meeting each share has one vote. Shareholders may be represented by written Power of Attorney.

9. At the Ordinary General Meeting the following matters shall be dealt with:

- a) The Annual Report of the Board of Directors.
- b) Adoption of Profit and Loss Account and Balance Sheet.
- c) Decision concerning fees for Members of the Board and the Auditor.
- d) Use of profits or covering of deficits according to the Balance Sheet and payment of dividends.
- e) Election of Board and Auditor if applicable.
- f) Other matters, which according to law or by-laws are to be dealt with by the General Meeting.

10. An Extraordinary General Meeting is to be held when the Board finds this necessary or one shareholder, who represents at least 10% of the share capital, demands it.

Summons of an Extraordinary General Meeting must be done with at least 8 days notice. At an Extraordinary General Meeting only the matters specified in the Agenda included in the summons may be dealt with.

11. Green Resources AS' Board of Directors has the right to raise debt from development finance institutions, working capital loans and loans with a duration of less than one year. Issuance of any other debt requires unanimous approval by the Board of Directors.

Green Resources AS shall invest in countries in Southern Africa (SADC) and the East African Community (EAC). Any investment that represents more than 5% of the Company's invested capital in any one country outside of this region requires unanimous approval of the Board of Directors.

Green Resources AS will manage its operations in accordance with the Forest Stewardship Council's Standards.

*Juha Niemelä, Chairman*

Joined the Board in 2008 as Vice Chairman. Born 1946. Finnish MSc in Economics and Business Admin., Turku School of Economics, Finland. Dr (Econ) h.c. 2000 and Dr (Tech) h.c. 2004. 1996-2004 Ceo of UPM-Kymmene, 1993-1995 Executive Vice President, Yhtyneet Paperitehtaat Oy (UPM), 1983-1993 Vice President, UPM. Chairman of European Paper Industry Federation (CEPI) 2000-2001. Board Member in Merita-Nordbanken (Nordea) 1998-2000. Presently Chairman of Veikkaus Oy, the national lottery company of Finland, Board Member in M-real Oyj and Powerflute Oyj, paper and board companies.

*Tom Vidar Rygh, Vice Chairman*

Chairman from 2006-2009. Born 1958, Norwegian. MSc in Business Administration, Norwegian School of Economics and Business Administration. CEO of Enskilda Securities 2002-04. Member of the Executive Committee/Responsible for all Investments Orkla ASA 1988-2001. Financial Analyst/Fund Manager Orkla Ind. 1983-1988. Has acted as Chairman of Telenor, Findexa, Aktiv Kapital, Oslo Stock Exchange, Helly Hansen etc. and as Board Member of Storebrand, Eniro AB, Industrikapital Ltd., Carlsberg Breweries etc

*Mads Asprem,*

Member since 1995, Chairman 2004-6, Vice Chairman 2006-2008. Born 1961, Norwegian. BSc in Economics Wharton School, USA, 1983, MBA, Univ. of Chicago, USA, 1987. First VP, equity analyst and head of the global forest products and paper research team at Merrill Lynch 2000-05. Managing Director and head of forest products and paper global research team of Morgan Stanley 1991-2000. Equity analyst CSFB 1990-1991. Consultant Monitor Company 1987-89. Portfolio manager Storebrand 1984-85. Met as substitute member to the Norwegian Parliament. Established Green Resources in 1995 and took over as Managing Director in 2006.

*Marius Bohler*

Member since 2006. Born 1979, Norwegian. BBA Parson School of Design, Design and Management. The New School University, New York 2002-04, BBA Parsons School of Design, Design and Management. The New School University, Paris 2000-02. Project Manager,

Scandinavian Development, Norway 2004 - present.

*Odd Ivar Lovhaugen*

Member since 1998. Born 1955, Norwegian. MSc in Forestry, Norwegian University of Agriculture Managing Director of Namsos Trafikklag since 2001. Managing Director of Green Resources 1998 - 2000. Chief Operating Officer of Statskog 1992-98. Senior Forest District Officer 1985-1992. Junior District Forest Officer 1981-84. Chairman Statskog Borregaard skogsdrift 1996-98.

*Liane Gaumont Luke*

Member since 2008. Born 1951, United States. MBA in Finance, School of Management, Yale University. Managing Director and Chief Timber Officer, FourWinds Capital Management, since 2006. Member, Board of Directors, Phaunos Timber Fund Limited (LSE:PTF) since 2006. Principal, Greenway Investments, since 2005. Principal and Managing Director, RMS Forest, 1998-2005. Vice President, Hancock Timber Resource Group, 1996-1998.

*Mutuma Marangu*

Member since 2003. Born 1961, Kenyan. BA in Economics, Vassar College, USA, 1984; MPH in Econ & Politics, Cambridge, UK, 1987, MBA, Wharton School, USA, 1989. Market analyst and commodity trader, Glencore 1991-2003, commodity trader trainee, Phillip Brothers, 1989-1990, financial analyst, Morgan Stanley, 1984-86. Director of Shebah Exploration, Allenne, and other companies.

*Kristoffer Olsen*

Member since 1998. Chairman 1999-2004. Born 1962 BSc in Economics, Wharton School, USA. MBA, INSEAD, France. Chairman of Jotunfjell Partners, a private equity and advisory company. Senior Partner Innovation Consulting 2001-03. Managing Director Scandinavian Retail Group 1996-98, Managing Director/Finance Director Voice of Europe, 1992-96. Project Manager/Associate McKinsey & Co, 1985-92.

## BOARD OF DIRECTORS' IN SUBSIDIARIS

## MOZAMBIQUE

*Green Resources Moçambique SA*  
Mads Asprem (Chairman)  
Leonor Teixeira Gomes Cardoso  
Arlito Cuco

*Lúrio Green Resources SA*  
Mads Asprem (Chairman)  
Leonor Teixeira Gomes Cardoso  
Arlito Cuco

*Malonda TreeFarms SARL*  
Mads Asprem (Chairman)  
Leonor Cardoso  
Eurico Cruz

## SOUTHERN SUDAN

*Sudan TreeFarms Ltd*  
Mwaniki Ngibuini (Chairman)  
Joseph Kulang, Vice Chairman  
Victoria Bakulumpagi  
Timothy Thwol  
Isaac Samson  
Kiir Chol Deng Acuil

## TANZANIA

*Green Resources Ltd*  
Mwaniki Ngibuini (Chairman)  
Mutuma Marangu  
Roselyne Mariki  
Prof Salim Maliondo  
Prof Peter Reuben Gillah  
Olav Bjella

*Lindi Forests Ltd*  
Mwaniki Ngibuini (Chairman)  
Prof Emmanuel Luoga  
Maokola Majogo  
Roselyne Mariki  
Mads Asprem  
Olav Bjella

*Sao Hill Builders Merchant Ltd*  
Mwaniki Ngibuini (Chairman)  
Mutuma Marangu  
Mads Asprem  
Godlisten Minja

*Sao Hill Energy Ltd*  
Mutuma Marangu (Chairman)  
Mwaniki Ngibuini  
Prof Jamidu Katima  
Roselyne Mariki  
Olav Bjella  
Jannicke Koch-Hagen

*Sao Hill Industries Ltd*  
 Odiva Lovhaugen (Chairman)  
 Mwaniki Ngibuini  
 Kristoffer Olsen  
 Major General James Luhanga

*Sao Hill Transport Ltd*  
 Peter Preben Wilhelmsen (Chairman)  
 Hans Martin Gerrits  
 Godlisten Minja  
 Mwaniki Ngibuini  
 Jannicke Koch-Hagen

*Tanga Forests Ltd*  
 Prof. Salim Maliondo (Chairman)  
 Capt. Jaka Mwambi  
 Olav Bjella  
 Prof. Emmanuel Luoga  
 Roselyne Mariki  
 Mads Asprem  
 Mwaniki Ngibuini

UGANDA  
*Busoga Forestry Company Ltd*  
 Jossy Byama (Chairman)  
 Mads Asprem  
 Hon Aggrey Bagiire  
 Dr. John R S Kabogoza  
 Gershom Onyango

*Norwegian Afforestation Group (U) Ltd*  
 Olav Bjella (Chairman)  
 Karl Solberg  
 Mads Asprem  
 Jossy Byamah  
 Isaac Kapalaga

## DIRECTORS' DUTIES IN SUBSIDIARY COMPANIES

The Board of Directors of Green Resources subsidiaries shall perform the normal functions of a Board.

1) The Directors of the Green Resources subsidiary (the Company) are elected at the Annual General Meeting (AGM) of the Company for one year at a time, or according to decisions made by any interim AGMs. The Directors are compensated according to Green Resources' rates.

2) The Company is a private profit oriented company. It shall aim at following the best international environmental and social standards, and good corporate governance. The Directors shall work to promote the interests of the Company.

3) The Board of Directors is expected to meet approximately four times per year.

4) The prime functions of the Directors in the subsidiary companies are to:

a) Ensure that the Company is governed by the policies and objectives formulated and agreed upon by the Board of Green Resources and that of the Company.

b) Contribute to the growth of the Company.

c) Ensure that the interests of the main stakeholders are taken into account, in the daily operations and long term strategies of the Company.

d) Ensure that the Company follows all national legislation, including the preparation of an Annual Report.

e) Appoint the Managing Director (MD) of the Company, to whom responsibility for the administration of the organisation is delegated, following the recommendation of Green Resources Chief Executive Officer (CEO). There shall be an Annual Review of the MD's performance and regular guidance in his/her work.

f) Agree on the Company's long term plan as proposed by the MD of the Company and the CEO of Green Resources and reviewing the plan once a year, typically during Q3.

g) Agree on the Company's Annual Budget, as proposed by the MD of the Company and the CEO of Green Resources, the latest by 15 November of the year prior to the budget year.

h) Ensure that the Company adheres to the approved budget and that management follows the policies set out in Green Resources' Company Handbook.

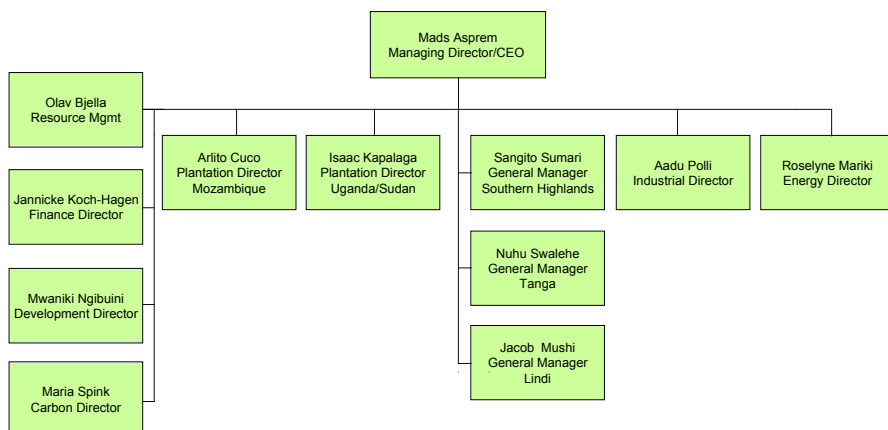
i) Approve all loans and significant long term contracts agreed by the Company, as proposed by the MD of the Company and the CEO of Green Resources. The AGM, not the Directors, shall deal with all issues related to the shares of the Company.

5) The Directors shall assist in building and enhancing the Company's 'public image' and representing the Company externally, as agreed with the MD of the Company.

6) All decisions related to share issues, borrowings that accumulative exceeds ¼ of the equity value of the Company, acquisitions with a value exceeding ¼ of the net asset value of the Company or divestitures of more than 10% of the Company's asset shall be approved by the Company's Annual General Meeting. The Company's issued and paid up capital shall always be equal.

7) Directors might from time-to-time, undertake consulting work for the Company, as requested by the MD and approved by Green Resources. This work shall be conducted according to Green Resources rates.

## EXECUTIVE MANAGEMENT GROUP



**Mads Asprem**  
*Managing Director and CEO*  
CEO from October 2006. See above under Directors.

**Olav Bjella**  
*Resource Management Director*  
Born 1963, Norwegian. Joined 2007. MSc Forest Economy and Planning, Agricultural University of Norway, 1990. Executive Director National Forest Authority, Uganda 2004-06. Director of Consultancy, Prevista 2001-04. Managing Director Ressordata and positions at Statskog 1993-01.

**Arlito Cuco**  
*MD Mozambique Plantations*  
Born in 1960. Mozambican. Joined 2007. MSc Forestry from University of Helsinki, Finland, 1991 and BSc in Forestry Engineering from Eduardo Mondalane University (EMU), Mozambique. National Director of Forestry and Wildlife 1998-2006, National Director Lands, Forests and Wildlife 2006-07, Chairman African Forestry and Wildlife Commission 2006-07. Previously worked with IFLOMA and as a Lecturer at EMU.

**Isaac Kapalaga**  
*MD Uganda Plantations*  
Born 1958. Joined February 2009. MSc in Forest Business Management, Aberdeen University – Scotland, UK (1991), BSc Forestry, Makerere University – Uganda, 2007 – 2008 Operations Manager, USAID Uganda Rural Financial Services Project, 2004 – 2006 Technical Services Director, National Forestry Authority, 2006 – to date, Board Member, GATSBY Tree Biotechnology Project, 2001 – 2003 Operations Manager, USAID Uganda

Enterprise Expansion & Development Project, 1988 – to date, Board Chair, Mawotto Plantations, 1992 -1994 Forest Park Manager and 1981 – 1991 Forest Officer, Uganda Forest Department.

**Jannicke Koch-Hagen**  
*Finance Director*  
Born 1968. Norwegian. Joined 2006. MBA, Henley Management College, 1996. Auditor, Handelshoyskolen BI, 1990. Financial advisor, Oakfield ANS, 2004-2006. Held a number of positions in Alpharma AS 1990-2003, including Director of Business Development, HPI, Director Finance Supply Chain and, Controller Supply Chain.

**Roselyne Mariki**  
*Energy and Environmental Director*  
Born 1967, Tanzanian, first joined in 1997. BSc Engineering in Chemical and Process, University of Dar es Salaam, Tanzania 2005-09 Founding Member and Partner in Managing for Impact Ltd, a Tanzanian management and finance consultancy. Company. 2002-2009 established, managed and still own Great African Safari, a specialised tour operator. 1998-2002 Managing Director of Green Growth Ltd, an agriculture investment company, while also managing the newafrica.com website and developing Green Resources' carbon business. 1997-98 Industrial Analyst with Green Resources. 1995-97 Tutoring Assistant in Chemical and Process Engineering department, University of Dar es Salaam.

**Mwaniki Ngibuini**  
*Plantation Director*  
Born in 1949. Kenyan. Joined 2004. BSc in Forestry Mkerere University, Uganda.

MSc Forestry (engineering) from University of Dar es Salaam, Tanzania. Joined 2003. Principal of Kenya Forestry College 1977-82. Marketing director for Timsales Ltd 1985-90 and managing director 1991-98, a company listed on the Nairobi Stock Exchange and the leading forest products company in East Africa. Chairman of Kenya Forest Research Institute.

**Aadu Polli**  
*Industrial Director*  
Born 1977, Estonian, joined in 2009. Bachelor of International Economics and Economic Theory, Tartu University, Estonia. 2007-09 established and Chairman of Construction Equipment Rental Company, Bulgaria. 2005-07 Mill Manager of Alytus sawmill, Lithuanian Stora Enso. 2003-05 Mill Manager of Sauga sawmill, Sylvester and Stora Enso. 2000-2002 Finance Manager of Sauga sawmill, Sylvester, Estonia.

**Maria Spink**  
*Carbon Director*  
Born 1960, Finnish, joined in 2007. Bachelor of Economics, Swedish School of Economics and Business Administration (SSE), Helsinki, Finland. 1990-2007 worked in corporate finance focusing on debt capital markets, including Head of European frequent borrowers and Head of Nordic strategic clients, in positions including Executive Director and Managing Director, at BNP Paribas, Daiwa Europe, DrKB and ABN Amro in London, UK. 1985-1989 capital markets of Union Bank of Finland, Helsinki. 1983-1985 Assistant Lecturer in macro-economics at SSE.

ABBREVIATIONS	GIS	Geographic information system	TIMO	Timber Investment Management Organisation	
A/R	Afforestation and Reforestation	GoSS	Government of Southern Sudan	TZS	Tanzanian shilling
ACESA	American Clean Energy and Security Act	Ha	Hectares, which is 10 decares and 1/100 km <sup>2</sup>	UEDCL	Ugandan Electricity Distribution Company
AGM	Annual General Meeting	HFC	Hydrofluorocarbon	UGX	Ugandan shilling
ASL	Above sea level	IAS	International Accounting Standards	UNFCCC	United Nations Framework Convention on Climate Change, signed in 1992
BAV	Biological Asset Value – the value of forests and other biological assets, typically expressed as the NPV	IFRS	International Financial Reporting Standards	USD	United States dollar
Bn	Billion	IFC	International Finance Corporation	VAT	Value Added Tax
Carbon Credit	Greenhouse gas emission reduction that is arising from project based activities.	IFRS	International Financial Reporting Standards – international regulation of accounting methods	VCS	Voluntary Carbon Standard
CCBA	Climate, Community and Biodiversity Alliance	IRR	Internal Rate of Return – the profitability of a project or company expressed in a form similar to an interest rate	VER	Verified Emission Reduction
CCM	Chama Cha Mapinduzi	ISIN	International Securities Identification Number	VPS	Verdipapirsentralen
CDM	Clean Development Mechanism. The provision in of the Kyoto Protocol that governs project based carbon credit transactions between developed and developing countries	ISO	International Organisation for Standards		
CEO	Chief Executive Officer	IUCN	International Union for Conservation of Nature		
CER	Certified Emission Reduction - one CER corresponds to one tonne of CO <sub>2</sub> e	Jl	Joint Implementation		
I-tCER	Long-term Certified Emission Reduction	Kyoto Protocol	International agreement under which industrialised countries commit to reduce GHG emissions		
tCER	Temporary Certified Emission Reduction	LULUCF	Land Use, Land Use Change and Forestry – a subset of the CDM.		
vCER	Voluntary Certified Emission Reduction emission reductions.	MAI	Mean Annual Increment		
CHP	Combined Heat and Power	Mn	Million		
CPA	Comprehensive Peace Agreement	MtCO <sub>2</sub> e	Million tonnes of Carbon Dioxide equivalent		
CO <sub>2</sub> e	Carbon Dioxide Equivalent – a trading unit for CERs.	MZM	Mozambican metical		
CoP	Conference of Parties of the Kyoto protocol	NCP	National Congress Party		
EU ETS	European Union Emission Trading Scheme – a market based ‘cap and trade’ system for GHGs adopted by the EU in 2005 the help the member states comply with the Kyoto protocol	NCREIF	National Council of Real Estate Investment Fiduciaries – publishes a quarterly timberland Index along with a range of other indices for the US		
DBH	Diameter at Breast Height	NCASI	National Council for Air and Stream Improvement		
EBIT	Earnings before Interest and Tax	NGO	Non-Government Organisation		
EUR	Euros	NRM	National Resistance Movement		
FAO	Food and Agriculture Organisation	NOK	Norwegian krone		
FICAT	Forest Industry Carbon Assessment Tool	NPV	Net Present Value - the current value of future cash flows at a given discount rate.		
FIFO	First in-first out	ODA	Official Development Assistance		
Frelimo	Frente de Libertacao de Mocambique	PA	Per annum		
FSC	Forest Stewardship Council	PSP	Permanent Sample Plots		
FDI	Foreign Direct Investment	REDD	Reducing Emissions from Deforestation and Degradation		
GBP	British pounds	RENAMO	The Mozambican National Resistance		
GCC	Gulf Co-operation Council	Saccos	Savings And Credit Co-Operative Societies		
GDP	Gross Domestic Product	SPGS	Sawlog Grant Production Scheme		
GHG	Greenhouse Gasses, such as CO <sub>2</sub> , methane and N <sub>2</sub> O that traps heat in the atmosphere.	SPLM	Southern People Liberation Movement		
		S&P 500	Standards & Poor's 500 - An index of 500 large US stocks assembled by S&P		





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