SUSTAINABILITY AND TRANSPARENCY REPORT

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Precious Wood's Highlights 2020



View over our Gabonese forest concession





Our sustainability and transparency report



Not all changes every year, and this is also why you might find several chapters that have not been changed or only slightly adapted from last year's report. Of course, we updated all relevant aspects and numbers. Topics that were special or completely new in 2020 are highlighted.

While economic data must be published by law, an enormous amount of ecological and social data is collected annually in our operations too. This report aims to make these data available to our stake- and shareholders and underlines our leading position in creating shared value in the tropical forest industry.

This report covers all our operations worldwide and all products produced, processed, and traded by Precious Woods. Our products are logs, timber, and timber products. Precious Woods does not supply the Pulp and Paper industry and has no land or planted area on peat lands.

All Precious Woods' commitments apply to all products, sourcing regions, operations, and direct and in-direct third-party suppliers. These commitments cover 100% of the commodities. Full implementation of these commitments is already accomplished through valid FSC and PEFC certificates covering all operations, the whole supply chain, and all trading activities.

Financial aspects and information on tax payments are not part of this report. Annual and Half-Year Reports, as well as our Tax Policy, are available on our website. We do not run any forest management or timber processing operations in Switzerland.

As sustainability and transparency are of high importance to us, we think these topics should be treated on the highest management level. Thus, we have delegated the responsibility for sustainability unto our Chief Executive Officer.

Latest news and more information on Precious Woods

A challenging year



When the pandemic hit the planet in early 2020, it rapidly became clear that we must take precautions to save our employees and their families. It paid

out that we have invested in occupational health and safety staff and equipment ever since. Our teams could set up necessary additional sanitary and safety measures to maintain our operations during the whole year. We could also take advantage of the fact that most of our operations are locked under the open sky or in well-aerated buildings and that forest and milling operations do mostly allow us to adhere to social distances. Where necessary or requested by authorities, office employees moved to home office, mainly in Switzerland and at our Gabonese headquarters in Libreville. When infections were detected or employees showed symptoms, strict quarantine measures were applied.

In Gabon, our infirmary was the focal point for testing in cooperation with the authorities, and the facility was at no point orerrun or had to handle severe cases. In Brazil, we supplied additional health care equipment and oxygen to the local hospital.

We do not communicate numbers of infections as this is under the respective governments' responsibility and should and cannot be done by private companies.

In the year 2020 we, we grieved two Brazilian employees who lost the fight against the virus.



Shared value as core of our business

Precious Woods is an international company with subsidiaries in Brazil and Gabon and its headquarters in Switzerland. We own 500'000 ha of tropical rainforest in the Brazilian state of Amazonas and hold the concession rights on 600'000 ha of tropical rainforest in the south-east of Gabon. Our employees manage these forests under rigorous Sustainable Forest Management (FSM) rules. All activities are certified according to the two most strict certification schemes; the Forest Stewardship Council® FSC® and the Project for the Endorsement of Forest Certification PEFC[™]. In 2020, we processed most of our harvesting volume in our three sawmills or our veneer plant in Gabon and our sawmill in Brazil. Our trading unit is predominantly selling our own products but also trades logs and timber from PEFC or FSC certified partners.

Precious Woods takes a leading role in proving that certified and sustainable forestry must be an essential part of protecting our world's forests and that only real and honest sustainability can create shared value for all. Only the sound management of natural forests can guarantee the long-term protection of the precious tropical forests while boosting social and economic development - benefits that strict conservation approaches fall short of. We also leave the concepts of Corporate Social and Environmental Responsibility behind. They are often solely based on philanthropic ideas or external pressure and are uncoupled from the company's economic development and the local economy. To create sustainable value for all share- and stakeholders, we consider social, ecological, and economic factors equally – the foundation of our approach to sustainability.

An external, unbiassed view is vital to achieving our sustainability objectives. Therefore, our board and management can always rely on Precious Woods' Advisory Panel. Its valuable members are Simone Stammbach from WWF Switzerland, Claude Martin, climate expert and member of the Club of Rome, and Christoph Wiedmer of the Society for Threatened Peoples. Having these three internationally known and recognized experts in our Advisory Panel helps us to guarantee that we are following our sustainable way at any time.



" Precious Woods enables stakeholders to create and share sustainable value "

1 FSC FM or FSC CoC, PEFC FM or CoC certified or with PEFC Controlled Source claim

Certification as an inherent part of our business ethics

Precious Woods commits to certify all own operations and the whole supply chain against the FSC or PEFC Forest Management (FM) and Chain of Custody (Coc) certification schemes. We also commit to only source from third parties if they are FSC or PEFC certified.

Since 2009 all our operations are FSC FM and CoC and additionally PEFC FM and CoC certified since 2018. Besides having a sustainable social, economic, and ecological impact, certification obliges us to monitor and verify social and environmental indicators as well as our supply chain constantly. These activities and compliance with certification requirements are checked annually by accredited and independent auditors.

We are active members of organizations engaging in promoting and developing sustainable and certified forestry.

- Association Technique Internationale des Bois Tropicaux (ATIBT)
- Union des Forestiers Industriels du Gabon et Aménagistes (UFIGA)
- Coalizão Brasil Climas, Florestas E Agricultura (Colizão)
- Forest Stewardship Council (FSC), northern and southern chamber

Being certificated also obliges us to apply Free, Prior, and Informed Consent (FPIC), the conventions of the International Labour Organization and gender equality, and many other aspects discussed in this report.

Besides the annual FSC and PEFC audits, Precious Woods is assessed every year by thirdparty organizations focusing on sustainability and transparency. We do welcome these initiatives helping investors and customers to be better informed.

We are proud that our efforts and commitments are reflected in leading positions in the annual assessments of the Carbon Disclosure Project CDP, the Zoological Society of London's SPOTT assessment, and the Global Canopy's Forest 500 assessment.

We ranked second in the 2020 SPOTT assessment with 89.8 % of all possible points and were rated with a B in the CDP disclosure for forests. After occupying 15th place in the Forest 500 assessment in 2020, we recently moved forward to the top ten in 2021.

Unfortunately, these assessment schemes do not always automatically accept FSC and PEFC certification to measure compliance. We disagree with this approach as these two certifications exceed the requirements of most assessment schemes. Moreover, some schemes do not accept PEFC standards but the FSC Controlled Wood standard with arguments that seem unreasonable. We believe in the PEFC standards used in the countries we operate in, and we refuse to apply standards that we consider to be insufficient to prove sustainability only to comply with third-party assessors.

Overall, it would be more valuable for our forest if we could spend more time caring about sustainable forest management than about compliance with assessment schemes.

ranked 10th in 2021

ranked B in 2020

ranked 2nd in 2020

Impact on the UN Sustainable Development Goals

In 2015, the United Nations published the 2030 Agenda for Sustainable Development with the 17 Sustainable Development Goals (SDGs) as its central element. The SDGs are an indispensable and unique initiative to join forces across all countries, stakeholders and industries to strive towards a more sustainable and equal world. They cover a wide range of social, economic and environmental development issues and Precious Woods is actively contributing to 14 of the 17 SDGs.

Sustainab	le Development Goal	Precious Woods contribution
1 ‱n ∱ *†† †	End poverty in all its forms everywhere	With more than 1'500 employees in rural areas and a total of 50 communities surrounding our forest area, Precious Woods is responsible for more than 10'000 people's income and living standards. The salary level is higher than the mini- mum wages in areas where other employment opportunities are scarce. A profit-sharing program is also in place through social projects or an amount per cubic meter harvested to guarantee a fair split.
2 ######	End hunger, achieve food security and improved nutrition and pro- mote sustainable agriculture	We don't have agriculture production in our area, except one cocoa plantation in Gabon in favor of the communities. But we offer to use products from our forests like seeds, resins, timber and organize courses for the communities in handicrafts and food processing. This goes very much along with DSG #2
3 GOOD HEALTH AND WELL-BEING	Ensure healthy lives and promote well-being for all at all ages	Our safety officers and their teams ensure our employees' continuous training and appropriate equipment. Besides, we are also concerned about our employees and their families' general health. In Gabon, for example, they have access to three infirmaries and a doctor. Regular HIV prevention campaigns and measures against malaria are also part of our commitment. In Brazil, our employees and their families are given preferential access to public health services and can also benefit from free medical consultations.
4 courty Courtines	Ensure inclusive and equitable quality education and promote lifelong learn- ing opportunities for all	In some areas, our infrastructure helps to provide education. In Gabon, for instance, we maintain a kindergarten and a primary school with more than 800 scholars, and we provide housing for the teaching staff. We do also support secondary education through cooperation with local universities. In both countries, we train our employees continuously in their daily work and increase competencies.
5 conten resource Second	Achieve gender equality and empow- er all women and girls	As a principle within Precious Woods women and men have the same conditions when it comes to salaries and all other working conditions.
6 CLEAN WATER AND SAMPLINGS	Ensure availability and sustainable management of water and sanitation for all	In the forest we do avoid any negative impact on water courses. This is guar- anteed by sound and deliberate planning of road construction and harvesting operations based on detailed inventories. We supply the camps with fresh and filtered water for more than 5'000 people.

Sustainab	le Development Goal	Precious Woods contribution
	Ensure access to affordable, reliable, sustainable and modern energy for all	Precious Woods is not producing charcoal or pellets but uses the biomass from sawmills to produce electricity. This accounts for the time being in the Amazon but another project in Gabon is under consideration. As electricity normally is produced by diesel generators, the savings by using the biomass power plant accounts to approximately 12'000'000 liters of diesel per year.
	Promote sustained, inclusive and sus- tainable economic growth, full and productive employment and decent work for all	Precious Woods manages some 1'100'000 ha of tropical forest sustainably in a cycle of 25 in Gabon and 35 years in Brazil. With an average harvesting volume of 14.5m ³ /ha/year, the forest's recovery is guaranteed for generations but limits the amount of timber produced for the market. Therefore, we are looking for additional concession areas to increase the volumes and take the responsibility to protect natural forests by using them sustainably.
	Build resilient infrastructure, promote inclusive and sustainable industrial-ization and foster innovation	We are providing road maintenance and electricity to all our camps in Gabon and we are supplying the Brazilian city of Itacoatiara with green energy from our co- generation plant. We are constantly investing in our processing units to increase the creation of lo- cal added value and thus employment and development.
10 REDUCED REQUALTINES	Reduce inequality within and among countries.	In remote regions with limited employment opportunities, we provide jobs with fair working conditions, always respecting legal minimum wages to allow our em- ployees to stay where they come from. At Precious Woods, equality is a crucial factor. Our policies do not accept dis- crimination of any kind, and we do promote this policy actively throughout all our operations.
12 CONSIDERATION AND PRODUCTION	Ensure sustainable consumption and production patterns	With a scientific based inventory of our forests we guarantee the natural recovery of the forest after harvesting. The road planning is based on that inventory which includes water courses as well as altitudes to ensure to have as less impact as possible.
13 claure	Take urgent action to combat climate change and its impacts	In its forests Precious Woods maintains a carbon stock of some 330'000'000 t. As to studies from universities (performed in the Amazon) the growth of tree biomass in sustainably managed areas is 3 m ³ /ha/year where in just protected areas it is 1 m ³ /ha/year.
15 📖	Protect, restore and promote sustain- able use of terrestrial ecosystems, sustainably manage forests, combat decertification, and halt and reverse land degradation and halt biodiver- sity loss	Although a sustainable forest management has its impact on forests by creating roads, the outweighing positive impact is that deforestation will be prevented. Moreover, the main roads can be used for several cycles, where the secondary roads are either recovered or mapped to reuse the same road during the next harvesting cycle. Besides protecting the forest, certified and sustainable forest management does actively promote and protect biodiversity, as hunting is regulated, poaching is hindered, and the natural composition of our forest is maintained.
17 Instructioners	Strengthen the means of implementa- tion and revitalize the global partnership for sustainable development	Precious Woods was the first company in Brazil but also in Gabon that achieved the FSC certification. The continuous improvements of the standards are per- formed together with environmental and social partners. Since end of 2017/early 2018 the whole group is also certified to PEFC/PAFC standards. With more than 20 years-experience in certified and sustainable forest management Precious Woods works actively together with several NGOs to increase the quality of its work continuously even above certification standards.



Our most important capital - our employees



Our motivated and well-trained employees are the foundation for sustainable development, and the employee turnover of only 3.5 % in 2020 (3.4 % in 2019) reflects Precious Woods' attractiveness as an employer. With their daily dedication, our employees are the basis for our economic success and their families' wellbeing. Not only our employees and their families are benefiting from our activities but the entire population living in and around our forests. Being the largest regional operator and employer, our demand for governmental and private services and our staff's purchase power also fosters the economy of entire regions. We estimate that - besides our employees' families - more than 10'000 people do directly and indirectly benefit from our operations.

Despite creating 50 new jobs in our new Azobé sawmill, the total number of employees in Gabon declined by 1.6 %. This is not due to layoffs but due to the creation of the Compagnie des Placages de la Lowé CPL in cooperation with the French Arbor group. The employees of Precious Woods – Tropical Gabon Industries TGI have all been transferred to this new company and keep on working for SPL but are not accounted for in Precious Woods' staff as of October 2020. You can learn more about our new sawmill and CPL on page 37. Gender equality and payment of minimum wages are self-evident in certified operations and part of our business ethics. We do not hire temporary staff; all employees do have permanent positions. All new employees receive training from Human Resources or certification managers on their worker's rights, obligations, safety procedures, and company values

	Brazil 2020	Δ 2019	Gabon 2020	Δ 2019	Holding 2020	and Europe Δ 2019	Precior 2020	us Woods Δ 2019
Employees								
Women	58	- 7	62	- 10	7	0	127	-17
Men	618	92	796	- 25	7	0	1421	67
Total	676	85	858	- 35	14	0	1548	50
% - Women	8.6		7.2				8.2	

Board Members 2020		Senior Management Team 2020			
Women	1	25 %	Women	0	0 %
Men	3	75 %	Men	2	100 %
Total	4	100 %	Total	2	100 %

Monthly gross wages 2020	Gabon	Brazil
Legal minimum €	229	164
Company minimum €	244	170
% of legal minimum	107	104
Employes on minimum wage	70	240

Women at Precious Woods





Women have unquantifiable importance in their countries' economic development and their families' subsistence. Unfortunately, women are still a small part of the workforce in the timber industry globally and only marginally represented in harvesting operations. We hire women whenever possible to overcome this disequilibrium, and we had a share of female workforce of 8.2 % in 2020. We consider this too low and strongly support all initiatives striving towards an equal inclusion of women in the workforce. We strive to overcome these barriers but have to accept that there is still a long way to go.

In Brazil, gender equality is implemented, and women represented 8.2 % of our workforce in 2020 and were mostly employed in administration, forest and technical engineering, the industries, and the canteen. Women are also part of the local management team. As in most other countries, the job market for technical positions, especially in milling and forest operations, does present a gender disequilibrium. We would like to see younger women train in technical professions to increase our female workforce, and the local management does thus actively attempt to increase the female workforce. In coop-

eration with local educational facilities, we offer regular trainee programs with a high share of female trainees to make our company better known and attractive for young female professionals. Twelve women took advantage of this offer representing more than a third of our trainees in 2020.

The female workforce in Gabon is mostly employed in administration, veneer production, housekeeping, and in the canteen and represented 7.2 % of our workforce in 2020. The female share decreased slightly, as many women worked for TGI and did not count for the entire year 2020 in Precious Woods' workforce after creating CPL. Today, women's main tasks in rural areas are mostly housekeeping, parenting, and subsistence agriculture. Women are often not accepted to be the breadwinner for the family. Many women in rural areas share these mind sets and have a lower educational level than men as they leave school earlier for various reasons. Thus, it is often impossible to hire female employees that dispose of a sufficient education level to work at Precious Woods. Since 2016, Precious Woods Holding Ltd hired two female consultants, specialists in social work and education. One of their tasks was to assist Precious Woods in Gabon to tackle women's education and gender equality. The long-term objectives are to have a more qualified female workforce available for our operations and to create a better business environment for women in general. The underlying idea is that there is a growing demand for small businesses and all kinds of services in and around our camps and that women could provide such services and businesses (e.g. shop owner, business provider, restaurant owner, etc.). One consultant worked with us from 2016 to 2017, one from 2019 to 2020, and a new colleague might join us in 2021.

Female employees in Switzerland work in administration or management as no forest operations take place in Switzerland. They represented 50 % of our workforce in Switzerland in 2020. Enough qualified female workforce is available on the job market, gender equality is implemented, and we do not face barriers or need to take action. In forestry and timber processing, heavy equipment is often used in challenging work environments, increasing the risk of work accidents. We did not have any fatal accidents since 2015, but we will still consider that our accident rate is too high. We aim to push this rate to be below 6 % by 2024.

Occupational health, safety and training



Our Health and Safety Teams in Gabon and Brazil continually improve awareness and knowledge amongst employees. Personal protective equipment is delivered to all employees to comply with the International Labour Organization's and FSC and PEFC certification rules. Safety officers supervise if safety rules are applied and if all safety equipment is in place and properly functioning.

Additionally, we run regular sensitization training, and designated employees undergo regular first-aid training. We maintain our own fire brigades, trained by internal and external experts. Advanced professional training is provided to specialized employees occupying critical and crucial positions. For example, loggers and sharpeners in Gabon are undergoing training by an external specialist every year to strengthen and enlarge their professional skills.



Due to the pandemic, we were forced to annulate or postpone most training by external experts in 2020. Company Health and Safety teams shifted some of their training content towards sensitization and training on social distancing, sanitation, and behavior in case of any symptoms. Our own expert staff has ensured safety training for loggers, and with safety plans in place, 40 Brazilian employees have

been trained in safety and fire fighting procedures. Canceling training and adapting training content helped us reduce the pandemic's impact on our operations and did not impact workers' safety. We foresee this situation to continue, for now, to protect our employees. We closely monitor the situation to resume training as soon as possible while guarding all necessary safety dispositions to halt the spread of the pandemic.



	2018	2019	2020
Brazil	24	29	19
Gabon	63	99	96
Holding	0	0	0
Total	87	128	115
Accident rate %	6.2	8.5	7.4
Fatal accidents	0	0	0



Total train	ing hours
2017	970
2018	1 895
2019	784
2020	652

Social responsibility and education





15 615 consultations of our medical staff



We believe that every society and individuum must have the possibility to progress according to their personal needs and wishes. One of the most fundamental steps towards these goals is a solid basic education for everyone. It is the only way towards a sustainable social and economic evolution and an encompassing ecological understanding. We see it as our obligation to support such developments beyond legal obligations.

Our employees and their families in Brazil benefit from preferred access to health services and doctor's consultation, an offer that has been used 4 320 times in 2020. We do also regularly sponsor local events and the construction of public open spaces, such as playgrounds. Providing first professional experiences to the next generation is a significant objective of our Brazilian management. Every year we partner with local education facilities to provide internships at MIL Madeira to students. In 2020, we welcomed 35 trainees, of whom 12 women, for their first professional experience at Precious Woods.



In Gabon, most employees and their families live in our own camps and benefit from free access to electricity and potable water. We built 65 accommoda-

tions in 2020, now totaling 646 houses, studios, and rooms. The doctor and nurses handled 11 295 consultations of employees and employee families but also community members in our two infirmaries in 2020. Moreover, grocery stores, as well as waste management, are provided and organized by Precious Woods. In 2020 when we moved to new harvesting zones, one camp has been closed, and the concerned employees receive subsidies to rent appropriate houses in the city of Okondja for them and their families. This setup has the advantage that employees and their families live now closer to public health services, secondary education facilities, and enhanced shopping possibilities.



Isolated in the forest, the cultural offer on our sites in Gabon is limited. This is why we initiated a cultural project, unique in its kind, to promote social development and sustainability. Our cultural center features a library, computers with internet access, and enough space for various events. Our cultural committee also organizes various events throughout the year, and the annual soccer cup has become a vital constant of our social life. Our cultural center also offers continuing education for our employees, for example, in informatics or literacy. We also support Gabon's public education system in its efforts to provide education for everyone. To do so, we build and maintain school buildings and provide housing for teachers.

A lack of learning material is one of the main issues as schools do often not accept children if they cannot bring the respective material. It mainly affects the youngest children of large families, the weakest amongst the weakest, and therefore, excludes them from education. In late 2019 and again in late 2020, the cultural center launched a campaign to provide learning material to the children at a discount rate. In cooperation with the local parents' organization and financially supported by the Swiss foundation "Verein Bambidie," the cultural center purchased teaching material in large quantities in Libreville. They were sold at subsidized prices, depending on the parents' income class, to more than 500 employees' children. The initiative significantly reduced the number of children being refused by the schools at the beginning of the school year.

Local communities and development

health care consultations provided to community members Nine communities in Brazil and 44 in Gabon are located in the perimeter of our operations. These communities inside our forest concessions and estates have been living with, in and from the forest for a long time¹. Guaranteeing their customary rights of use is an inviolable part of our business ethics. In Brazil and Gabon specially trained teams under the direct supervision of the local general managers do guarantee the exchange and interaction with the communities.

We believe that only the successful development of a whole region can lead to sustainable social, ecological and economic success. This is why we are assisting the communities inside our forests with the aim to facilitate sustainable development.

- We contribute and support local economic development
- We favor local employees
- We support the communities in sound and sustainable use of natural resources
- We encourage improvements in education and health care

In Gabon, our health care service is also accessible for the communities and was used more than 700 times in 2020.

We partner in various community projects to support communities in their economic development. In Brazil, communities are supported in handicraft projects that help them preserve and valorize their traditional knowledge. In 2020, on an old log yard, a coffee plantation of around 5 600 plants had been realized with communities. The project was initiated by Precious Woods and will provide a sustainable income to the commu-



nities that we will accompany throughout the project. A similar project for cacao exists in Gabon for several years now.

Our Free, Prior, and Informed Consent (FPIC) procedures assure that all stakeholders have the same rights during decision making. We always try to mediate conflicts in direct discussions and elaborate pragmatic solutions. In case this does not lead to a solution – or if such mediation is not desired - all employees and stakeholders can fill a grievance and start our grievance procedures. Details of our FPIC and Grievance procedures are explained on page 12. Seven grievances were addressed in 2020. Most of them were solved to the satisfaction of all parties, and some grievances addressed in late 2020 will be solved in 2021. Our Free, Prior and Informed Consent (FPIC) procedures assure that all stakeholders have the same rights during decision making. We always try to mediate conflicts in direct discussions and to elaborate pragmatic solutions. In case that this does not lead to a solution - or if such a mediation is not desired - all employees and stakeholders do have the possibility to fill a grievance and to start our grievance procedures. Details of our FPIC and Grievance procedures can be found in the chapter on Transparency.

This is how we guarantee that conflicts can be solved in a transparent and satisfying way for all parties involved.

Grievances 2020

	Brazil	Gabon
Opened	6	1
Solved	5	1
Ongoing	1	0

Neither in Brazil nor in Gabon the forests we are operating in are part of areas that are frequented by indigenous communities or where indigenous communities claim traditional rights of use.

Science for sustainability



Tropical forests play a crucial role in international efforts to curb carbon emissions and maintain biodiversity. Tropical forests still have an enormous potential for pioneering research to tackle these and other challenges. We support scientists in their efforts to provide new knowledge on forests and fauna, to develop new tools for sustainable forest management, fauna protection, and carbon market development. Applied research also connects young professionals to the private industry, adding an essential aspect to their curriculum and bringing new ideas to Precious Woods. In 2020 we could again welcome a successful student as our colleague. These experiences do foster our motivation to invest in research and higher education. We currently partner with nine research institutions and many others occasionally.

Even if some research projects have been postponed or delayed due to travel restrictions, we promoted 19 projects financially as well as with logistical support and local knowledge in 2020. The projects range from fauna inventory and management, over tree growth, pollination and carbon dynamics, the valorization of timber species, the improvement of sustainable forest management, and better identification of species in the chain of custody to long-term, transnational projects on the dynamics of tropical forests.





Projects in focus in 2020



Elephants, a forest manager too

Elephants are a threatened species that find shelter in certified forest concessions. However, we do still not know much about how we best live together to improve the living conditions of the elephant populations and maybe even benefit from it. We wonder how sustainable forest management practices change their migration patterns inside our concession. We also wonder if grains digested by elephants find better growth conditions in managed areas and how we can avoid damages to planted trees caused by elephants.





Lesser Know Timber Species, use them to sustain the others

Only a very limited number of tropical species are commercialized today. Still, there is an enormous amount of Lesser Known Timber Species (LKTS) that are either not well known on the market or their potential for processing and application has never been studied. This disequilibrium bears certain obstacles for the future of sustainable forest management, and we are always looking to improve the use of LKTS.

We wonder how LKTS behave from their growth in the forest to the final processing and how they can be placed on the market. In 2020, three research projects dived into these questions looking at all possible biological, technical, and economic aspects.

OKAN and EHPVAL, Romaric Ndonda Makemba, Robin Doucet and Geal Bibang Bengono, Gemlboux Agro Bio-Tech and Université des sciences et techniques de Masuku LKTS for the Chinese market, Frank Luijckx, University of Groningen



Roles of trees in the water cycle

It is known that trees store water in their trunk, roots, and leaves and release part of it into the atmosphere. Trees are thus an essential part of the water cycle regulating our world's climate. What is unknown yet is what exact role the tree species plays in this cycle. Moreover, the influence of the tree's heights and diameters and if the proportion of heartwood and sapwood is important. Answering these questions was the aim of a research project on the water content in different parts of various tree species. The results show considerable differences between species and the various tree characteristics. Such basic research projects provide a puzzle piece better to understand the forests' role in the water cycle. Moreover, it first hints at the importance of tree diversity for the water cycle and, thus, the sustainable forest management of natural forests.

Master thesis, Anne Cristine Maciel Dos Santos, Instituto Nacional de Pesquisas da Amazônia INPA



Road planning, first step to sustainable forest management

Roads represent one of the significant impacts in sustainable forest operations and the economically most critical infrastructure. Accurate and early planning allows our engineers to build roads with the smallest possible impact by avoiding watercourses, protected areas, and erosion while avoiding steep slopes and narrow turns. With the limited topographical and geographical data available for remote tropical regions, this planning always relied on time-consuming and error-prone field reconnaissance. New satellite data seemed to provide information that could improve and simplify this vital work step, but the knowledge was still poor a few years ago. Several research projects now proved that these remote sensing data could effectively help us better plan and build our roads. There is still a lot of research to do, but the findings already heavily enhance our road operations and facilitate and streamline field reconnaissance.

Three Master theses; Bruno Rodrigues, MIL Madeiras Preciosas; Guillaume Nève, Gembloux Agro-Bio Tech; Pierre Simon, Bern University of Applied Sciences



Phonetic fauna inventory, much more than nice sounds

Fauna inventories serve to understand animal populations and their behavior, key to improve fauna protection. Today, inventories use cameras that capture animals but only on the ground and above a certain body size. Birds, building one of the biggest chunks of the fauna and enormous importance for the biodiversity, are not considered. Besides their role in biodiversity and pollination, birds might also be the first indicator for disturbance, be it climate change or illegal human-made activities. Innovative and established researchers are trying to fill his gap with new methods focusing on bioacoustics traps rather than visual ones. The complicated and time-consuming analysis of animal sounds will be rewarded by a whole new and encompassing way to look at the fauna in our world's rainforests and adapt our fauna protection and forest management measures.

Listen to the sound of our forests (https:// storymaps.arcgis.com/stories/9efd412fe3 df43438cecf1e653f41535)

SoundForestLab, Zuzana Burivalova, University of Wisconsin-Madison, in collaboration with Omar Bongo University and Bern University of Applied Sciences

Permanent research plots

Forests do not know borders. To understand how they react to a changing climate and how they can help us tackle this challenge, we need to understand their dynamics on a global level. Precious Woods enables large-scale research projects by helping researchers to install permanent research plots in our concession and study them over a long period. One of the largest projects is the DynAfFor follow-up projects P3FAC-AFRITIMB, which investigates forests' dynamics under sustainable exploitation and conservation. Only for these projects have we delimited areas that will not be harvested to allow comparative analysis with data from adjacent areas.

https://www.gembloux.ulg.ac.be/gestiondes-ressources-forestieres/2017/08/28/ installation-du-dispositif-de-suivi-de-ladynamique-forestiere-et-des-flux-degenes-en-foret-sempervirente-au-gabonprojets-afritimb-et-p3fac/

Other permanent research plots do continuously provide data to the AfriTRON network (http://www.afritron.org), part of the world-spanning RAINFOR project (http:// www.rainfor.org/en), an international network for on-the-ground long-term monitoring of tropical forests.

These projects aim not only to understand forest growth and its change over time but also the capacity of tropical forests to store and sequester carbon. A topic of immense importance for our world's climate and to generate new streams of revenue and economic development for tropical countries.

Publication on tropical forests' sensitivity with RAIN-FOR data from our research plots "Lelama": https:// science.sciencemag.org/content/368/6493/869

Permanent research areas Gabon, focal point Jean-Luis Doucet, Gembloux Agro BioTech Permanent research plots Brazil, focal point Marcos Souza, MIL Madeiras Preciosas

ENVIRONMENTAL PERSPECTIVE

elephant in our Gabonese forest concession

Sustainable forest management to protect the forests



Certified and Sustainable Forest Management

Classical forest management solely focuses on economic aspects, whereas Precious Woods' sustainable and certified forest management follows a holistic, social, environmental, and economical approach.

Sustainable forest operations range from inventories, over road construction, to reduced impact operations, processing, and finally, transport. These activities and their linkage ask for sound and proactive planning with every step organized by skilled and experienced staff.

With harvesting cycles of 35 years in Brazil and 25 in Gabon, we guarantee that the forests can always fulfill their role as the world's green lung and the safe haven for a magnificent fauna and flora. Average harvesting volume per hectare increased to an average of 14.7 m³/ha due to a change in forest types with a higher tree density and bigger trees. Despite this increase, the harvesting volume is sustainable and below the legal limits of $30 \text{ m}^3/\text{ha}$ in Gabon and $25 \text{ m}^3/\text{ha}$ in Brazil. It guarantees natural regeneration over the times pan of one rotation period and the holistic protection of our forests.

Roads represent one of the important impacts in forest operations, and we try to minimize it through sustainable forest management and reduced impact logging procedure. Most importantly, we reduce the number of new main roads to a minimum. We prefer to open small secondary roads and, in Gabon, reopen roads built during the last harvest cycle. Thanks to this approach and proactive planning, only 20 km of new main roads have been constructed out of the 267 km of roads being worked in 2020. In Gabon, even all roads have been built on existing, old roadbeds.





m³ harvest per hectare

	2018	2019	2020		2018	2019	2020	
Brazil	154 400	156 054	188 469	Brazil	15.5	14.1	16.9	
Gabon	243 500	237 070	250 102	Gabon	10.2	9.8	13.4	
Total	397 900	393 124	438 571					



Combining protection and conservation

We guarantee that 1.1 million ha of natural tropical forests are protected from deforestation, that the biodiversity will not diminish, and that the forests can fulfill their functions as a living environment for flora, fauna, and humanity. As conservation is an integrated part of certified and sustainable forest management, we also put more than 8.5 % of our forest area under strict conservation and monitor these areas closely. This well-balanced mix of sustainable and certified forest management and forest conservation is the only way to maintain our world's natural tropical forests and their role as the green lunge of the planet¹.



Brazil			
Total forest area	506 697		
Conservation & community forest	64 252 / 13 %		
whereof HCV	14 104 / 3 %		
whereof watershed protection	43 372 / 9 %		
whereof community forest	6 776 / 1%		
Gabon			
Total forest area	596 824		
Conservation & community forest	48 232 / 8 %		
whereof HCV	34 241 / 6 %		
whereof watershed protection	3 247 / 1 %		
whereof community forest	10 744 / 2 %		
Precious Woods			
Total forest area	1 103 521		
Conservation & community forest	112 484 / 10 %		
whereof HCV	48 345 / 4 %		
whereof watershed protection	46 619 / 2 %		
whereof community forest	17 520 / 2 %		



A supply chain free of deforestation- and conversion

FSC does not accept any deforestation and conversion, while PEFC does accept smallscale conversion only if it "makes a contribution to long-term conservation, economic, and social benefits." For all own operations and our FSC certified supply, we thus commit automatically to a deforestation- and conversion-free supply chain. We also commit only to source PEFC certified products if they originate from countries where deforestation and conversion are not tolerated by the law and where the legislation is enforced reliably. Today, we only source PEFC certified products from Central Europe or products complying with our Procurement Policy. If, despite all efforts, non-compliant deforestation or conversion should have occurred in our operations after 2009, we commit to reforest these areas to their original state.

We also closely monitor our forest area to detect and avoid deforestation from third parties. Sometimes land use rights such as mining are superposing with our forests providing legal permits to other companies to deforest particular areas. In the past years, only two single events of deforestation were reported. In 2018, a mining company cleared a surface of 4.9 ha inside our Gabonese forest concession for the opening of gravel quarries for road construction. The quarries were reforested in 2019 by Precious Woods on behalf of the mining company. Moreover, a Brazilian oil company deforested 6.57 ha for test drilling in 2014 and 2015. After concluding the test drilling on these areas, the company now runs a restoration project since 2018. Both companies hold valid authorizations, and their operations meet legal standards. The companies cooperate to minimize their impact inside our forest area, and we are regularly patrolling the respective regions.

"No deforesting in our supply chain "

¹ Intact Forest Landscapes (IFL) cover 242'376 ha of our forests. We do not integrate these numbers, as the IFL definition of the WRI is solely based on remote sensing data and neglects ecological values, historical human activities, and other local factors

Wildlife protection



In Gabon, our forests are home to various endangered species such as forest elephants, Gorillas, Chimpanzees, and panthers. As we patrol and control our area with our own wildlife team to prevent poaching, our concession has become a save haven for the stunning fauna. Nevertheless, poaching seems to be on the rise in areas bordering our forests. Therefore, in 2019 the Gabonese government, the NGO Conservation Justice, and Precious Woods signed a partnership to join forces against illegal hunting. The convention was implemented from mid 2020 to detect and prosecute poaching and sensitize the local population. One of the main advantages of this private-public partnership is that it assembles all necessary knowledge under one umbrella. Where long processes and coordination were required in the past, very efficient and streamlined procedure are in place today. Conservation Justice backs the project with judicial advice and social work for sensitization, the authorities lead the joint missions and enforce the state authority, and Precious Woods provides logistical and technical support. With the increasing frequency of missions, the number of reported incidents and prosecuted cases raised too. This is, of course, a double-edged success that motivates all parties to keep this convention running at a high pace to bring illegal activities to an end. We cannot communicate on specific cases for confidentiality reasons and as the legal prosecution is governed by the authorities. We are happy that no Precious Woods employees have been arrested, which proves the efficiency of the internal anti-poaching sensitization that has been in place for years.

Our Gabonese wildlife team also monitors legal subsistence hunting activities of local communities. It also advises, controls, supervises, and reports hunting of our employees during hunting seasons to guarantee that only sustainable and legal hunting takes place inside our concession area. In 2020, 145 days of patrolling have been completed. Due to adapted patrolling concepts, the kilometers covered declined, but the patrols' success increased.

In Brazil, scientists are monitoring specific fauna aspects as well. Around 160 designated community members act as scouts indicating potential illegal activities to our monitoring team. The team then transfers this information to the authorities. Our wildlife team conducts weekly wildlife patrolling. Missions are coordinated and sometimes jointly conducted with the Military Police and the Environmental Secretariat of Silves and Itacoatiara. Besides possible poaching and legal subsistence hunting, in our Brazilian forests hunting is banned.

Anti-poaching activities are important, but an even more profound knowledge of fauna populations, dynamics, and behavior is needed to even better protect the fauna. Thus, fauna-related research has become one of the main directions of the research we are supporting. Scientists from Gabon, Switzerland, Belgium, and the USA are working jointly on fauna inventories and the coexistence of fauna and sustainable forest management. They are using the newest methodologies, such as experimental phonetic wildlife monitoring equipment, to refine and expand our understanding of the fauna and the measures to protect it.

Anti-poaching patrols

Gabon	2018	2019	2020
Days of patrolling	181	144	145
Foots patrols (km)	927	1 961	933
Boat patrols (km)	325	600	80
Car patrols (km)	24 204	15 345	17 249
Arms seized	20	6	14
Infractions reported to authorities	-	-	8
Brazil			
Days of patrolling			88
Foots patrols (km)			35
Boat patrols (km)			85
Car patrols (km)			264
Arms seized			1
Infractions reported to authorities			5



Joint wildlife patrol by Gabonese forest authorities and Precious Woods - CEB

Watercourses as a source of life



Watercourses are essential resources of life for humans, animals, and flora. In Gabon and Brazil, they are thus protected by various regulations, mostly depending on their width. FSC and PEFC certification even obliges us to strengthen our efforts to protect them. Buffer zones around rivers are defined by Brazilian legislation . In Gabon, harvesting trees alongside major rivers is forbidden, and the law determines buffer zones while harvesting next to smaller rivers and streamlets is regulated. One of our colleagues has a background in harvesting education and training and does instruct the loggers in techniques that avoid any harm to these streams.

To demonstrate our efforts and commitments, we decided that Precious Woods Amazon should be one of the first companies to pass a certification audit for the new FSC Ecosystem Services Certification on Water. The pandemic delayed the process as field audits were not always possible. All necessary audits are now accomplished, and we expect to receive the certification in 2021. The certificate will prove that we are actively contributing to the long-term protection of these eminent important life resources. We are proud to be a pioneer in this future-oriented approach.



Landscape-level approach to biodiversity conservation

Our Brazilian forest property borders a national Sustainable Development Reserve (RDS). We decided to exclude around 17 000 ha of our forest from any activities to create a buffer zone for this RDS. This action was taken to better protect the reserve and the entire landscape spanning the reserve, our forest, and the surrounding area.

As mentioned before, the wildlife protection convention has been implemented in Gabon. The convention's geographical scope covers parts of the CEB concession and the bordering buffer zone to the Ivindo National Parc. It implements fauna conservation and anti-poaching measures in the landscape spanning the Ivindo National Parc and Precious Woods concession area. The convention has been negotiated and agreed upon by the end of 2018 and implemented in 2020. Joint patrols with the authorities in this area were already conducted before, but the convention increased the number of activities and their success.

"Wildlife protection convention implemented "



Carbon stock, CO₂ emission & bioenergy

Our forests permanently stock millions of tones of carbon, and as they grow, they permanently extract CO_2 from the atmosphere. While oxygen is released into the atmosphere and helps regulate the climate, every additional cubic meter of wood permanently stores around 0.4 tons of carbon. That is why forests are an active and indispensable part of reducing and mitigating carbon emissions and climate change.

Ecosystem services certification in Brazil



At Precious Woods, we always strive to live up to our reputation as a pioneer in certified and sustainable forest management. We confirmed this aspiration in 2020 when Mil Madeiras was the second company worldwide successfully passing the new FSC Ecosystem Services Certification for Carbon Sequestration and Storage¹. The certificate confirms that the carbon stock in our forests

is stable since 2007 and that, above ground alone, around 81 million tons of carbon are permanently stored in our Brazilian forests. This being said, it is evident that sustainable forest management is one of the solutions to protect our world's carbon stocks, and we are proud to be part of this solution.

National carbon project in Gabon

In 2019, Gabon and Norway signed a 150 million USD agreement for Gabon to reduce greenhouse gas emissions from deforestation and degradation and absorb carbon dioxide from natural forests². Different projects led by the Gabonese government are now underway to elaborate methodologies and frameworks to build a robust, REDD+ based system to implement the agreement.

In 2020, specialists of The Nature Conservancy developed a methodology to measure the impact of logging and how to evaluate the pre-logging levels of carbon stocks. Additionally, they are working on guidelines to improve Reduced Impact Logging for Carbon techniques.

Precious Woods had the honor to act as the test site for the new methodologies. In December 2020, a government delegation and TNC staff worked in our forests to test and refine the methodology, and more than 20 officials were trained in its application. We believe in this project as it will be one of the first carbon projects worldwide that span an entire country and the private and public sectors. We believe in this project even more as it present an enormous opportunity for Gabon and its certified forest industry. It will prove that sustainable landscape and forest management is the only way to offer a greener future with benefits for all public and private stakeholders.

¹ https://fsc.org/en/for-forests/ecosystem-services

² https://www.cafi.org/content/cafi/en/home/all-news/gabon-first-in-africa-to-receiving-payments-for-preserved-rainf.html
3 https://registry.goldstandard.org/projects/details/1181
4 https://www.myclimate.org/de/informieren/klimaschutzprojekte/detail-klimaschutzprojekte/brasilien-biomasse-7123-1/
5 https://www.gembloux.uliege.be/cms/c_4135397/en/p3fac-

new-research-project-for-sustainable-forest-management

CO₂ neutral energy production and trade in carbon credits

We own a minority stake in the 9-megawatt cogeneration plant BK Energia, situated next to our sawmill in Brazil. BK Energia consumes around 100 000 m³ of residues from our sawmill annually and, thus, exclusively uses FSC and PEFC certified wood for energy production. 45 000 MWh are produced annually, and a small portion is used to run our plants and offices. BK Energia delivers more than 75 % of the energy to the nearby city of Itacoatiara, which would otherwise use around 10 million liters of diesel annually to produce the same amount of energy. The green energy produced by BK Energia corresponds to a total saving of around 35 000 tCO₂.

BK Energia was the first company producing Carbon Emission Reduction certificates (CER) exclusively from FSC certified wood. Our CERs are eligible to the Gold Standard label for CERs³, and BK Energia can provide around 47 000 credits annually, corresponding to 47 000 tons of CO₂ equivalents. A specialized partner, the Swiss NGO Myclimate⁴, handles the trade with our CERs.

Precious Woods' carbon account

We are reporting Level 1 to 3 carbon CO₂ emissions every year, but we believe these numbers do not correctly refelct Precious Woods' impact. As our forests sequestrate an important amount of Carbon every year, these carbon inputs must be considered when calculating our carbon footprint. To know how much carbon is sequestered annually, one needs to know the growth rate, and they are usually higher in managed than in unmanaged areas. This was also proved in studies with local Brazilian universities. In our Gabonese concession, the multi-stakeholder research project P3FAC⁵ is currently investigating growth dynamics in central African forests. We expect to have in-depth knowledge of growth rates and, consequently, carbon sequestration in Gabon by 2022. These research data will help us improve and refine our carbon account over the coming years and provide a realistic picture of the positive impact of sustainable forest management.

Our CO₂ emission is calculated using the classification of the World Resources Institute (WRI). The main indicator to make these emissions comparable over time is to link it to the core of our business, the harvesting volume. As a parameter, we use the carbon intensity per m³, thus, the ton of Carbon emitted per m³ harvested. Since 2010 we have continuously increased our annual harvesting volume while simultaneously reducing our carbon intensity. From 2015 onwards, our carbon intensity is constantly below 0.07 t $CO_2/m^3/year$. Our total CO₂ emission reached a new low in 2020. The decline can mainly be attributed to lower travel and transport activities caused by the pandemic. Moreover, our Gabonese veneer plant TGI is no longer part of the account after its merger with Arbor group's PDG operation.







CO₂ Intensity per m³ harvested

Emission intensity in Gabon is higher since we run four processing plants instead of one in Brazil because distances are longer, and we provide energy and potable water to our employees. In Gabon, we must also produce energy from fossil fuels while using renewable energy in Brazil. The CO₂ emission intensity is also linked to the distance of the harvesting area, the condition of the public road and railway network, and weather conditions. Facts on which we do not have any or only limited influence. Nevertheless, we aim to keep our overall intensity below 0.07 tCO₂/m³/year over the coming ten years.

Tons CO ₂		I				
Z	2018		2019		2020	
Level 1 - Direct emissions	13 341	49.9 %	14 241	54.1 %	14 381	64 %
Level 2 - Indirect emissions	4 422	16.5 %	3 482	13.2 %	2 461	10.9 %
Level 3 - Travel	768	2.9 %	624	2.4 %	158	0.7 %
Level 3 - Transport	8 191	30.7 %	7 968	30.3 %	5 485	24.4 %
Total t CO ₂	26 722	100 %	26 315	100 %	22 485	100 %
Harvesting m ³	397 900		393 124		438 571	
CO ₂ intensity (tCO ₂ /m ³)	0.067		0.067		0.0513	

Wildfire monitoring and management

Our certification and sustainability managers and their teams monitor wildfires in Brazil and Gabon. However, identification and verification on the ground are only possible if the fires occur close to accessible areas, e.g., in case of fires set by communities. As most of our forest area is not accessible, we mostly rely on remote sensing data for our fire monitoring activities. It explains that the number are approximations. In Brazil, we use the data of the National Institute for Space Research INPE¹. For monitoring in Gabon, we rely on FIRMS-VIIRS data provided by NASA².

In the southern and eastern part, our concession in Gabon contains a vast network of savannas, some of them classified as High Conservation Values (HCV) as they host a stunning Flora and Fauna. Naturally, these savannas sometimes catch fire at the end of dry seasons. When approaching the forest border, these fires fade as well-managed and healthy tropical forests are too humid to catch fire. In our Brazilian forests, we rarely observe natural wildfires as these forest lands do not contain savannas or other drylands. If trees are ignited by natural events such as lightning, these events stay isolated and do not spread. No natural wildfire occurred inside our forests in Brazil or Gabon in 2020, and no wildfires were reported in supplier operations.

In Brazil and Gabon, farmers inside our concessional have the right to apply slash-andburn practice for subsistence agriculture in predefined areas bordering their communities. These practices are only applied at the fringes of our forests and do not affect them. We monitor these fires to ensure that they are only used in a purposive way and avoid illegal forest conversion or degradation for agricultural land.





	Brazil	Gabon
Natural wildfires	0	0
Slash-and-burn	4	0

Drinking water and water treatment

A sufficient supply of drinking water is cru- (COD) tests at our clarifying basin in Gabon cial for the health and provided to all our employees in Brazil and Gabon. All camps in Gabon are connected to our potable water network. Water is treated on site, and we perform quality tests regularly.

One of our major concerns is not letting water run-off from our operations penetrate nature. Run-off from our production sites in Brazil and Gabon is directed to clarifying basins for treatment before being released. These installations are authorized and controlled by authorities regularly. In 2019 we performed Chemical Oxygen Demand larly checked by accredited laboratories.



for the first time, but the results did not stay inside the limits set by the Gabonese legislation¹. We immediately revised our installations and procedures and committed to improving this situation in last year's Sustainability and Transparency Report. The second test in 2020 now proved that we did the right thing with a COD level below 1 ppm and the legal limit at 40 ppm.

COD levels do, however, not influence the quality of drinking water which we purify in a closed system and whose quality is regu-



Fuels, chemicals and pest management



To guarantee the supply of clean drinking water and, in addition to other filtering methods, we use chlorine for potable water conditioning. We only use non-toxic components approved by FSC and PEFC in our forest and milling operations, for instance, for the protection of logs. Still, we do not use any other chemicals such as fertilizers or pesticides in our sustainable forest operations.

To run our forest operations in Brazil and Gabon and our processing plants in Gabon, we rely on fossil fuels. In 2020, we used 5.35 million liters of diesel, which



corresponds to 0.082 l/m³ harvested. We also use other fuel products like oils, petrol, and grease, all used following legal regulations and certification standards. Waste oil and used filters are collected and disposed of by accredited companies. To avoid any negative environmental impact, we regularly collect all non-hazardous waste from our operations and our Gabonese camps. It is disposed of in designated and secured landfills, also controlled by certification bodies.

Integrated Pest Management (IPM) is compulsory under PEFC² certification, and FSC certification obliges us to develop and apply IPM through its International Standard³ and its Pesticides Policy³. For the use of Highly Hazardous Pesticides (HPP), we follow the PEFC standards and FSC Pesticides Policy. We strictly commit not to use HPP listed under international agreements and respect these agreements in their entirety.

" Successful improvement of our clarifying basin on Gabon "

- Environmental Law of 2014 2 PEFC ST 1003:2018, Requirement 8.2.6;
- 3 FSC-STD-01-001 V5-2 EN, Criteria 10.7 and FSC-POL-30-001 V3-0 EN

¹ Decree N°00198/MRS/E/PN/CENAP on the Gabonese Environmental Law of 2014

Impression from our new hardwood sawmill in Gabon

ECONOMIC PERSPECTIVE
Industrial development and cooperation



Precious Woods' long-term approach to social, environmental, and economic development implies investing in industrial projects and increasing added value in remote areas. Of course, other strategies such as the sale of logs would have been easier and cheaper to implement than investing in local industrial development, but totally against our beliefs and business practices.

New hardwood sawmill in Gabon



In 2020 we started harvesting in areas in Gabon that are rich in Azobé, Lophira alata, a hardwood species characterized by a high density and water resistance. With a density of 1 300 kg/m³, Azobé heavier than water and, for instance, used for hydraulic construction and other high-quality, long-lasting applications instead of ferro-concrete. Thus, it represents a high environmental benefit and contributes to the circular economy.

To better valorize this species and increase the degree of local added value, we partnered up with the Dutch Azobé specialist Wijma Kampen B.V.. With Wijma's support and advice, we started constructing a new sawmill specialized in the processing of Azobé in 2018 at PW-CEB in Gabon. The mill was inaugurated in 2020 by the Gabonese forest minister Prof. Lee White and offers local employment for 87 employees. When at full capacity, the mill produces 17 000 m³ of Azobé sawn wood for the European market. Building the mill did also mean investing in our housing facilities in Bambidie. Sixty-five new houses and studios, an entirely new quarter, have been constructed and guarantees the best living for our new employees and their families.

To accommodate the increased harvesting volume, we added one production line to our sawmill in the Amazon in 2019 and 2020. We also increased our capacity to process wood residues which created six additional jobs.

Merger of two leading veneer plants

In late 2020, Precious Woods and the French Arbor group announced a pioneering collaboration. Their two veneer plants Precious Woods - Tropical Gabon Industrie TGI and Arbor - Placage Déroulé du Gabon PDG were merged into the new Compagnie des Placages de la Lowé - CPL. TGI and PDG have been well-known producers of quality veneers for a long time, and the two plants will both continue proceedings under the lead of a skilled team of Precious Woods and Arbor staff. Besides owning PDG, the Arbor group is present in Europe with four companies specialized in producing wood panels from veneer and their processing for special applications. With Arbor not having its own forest operations and Precious Woods not having processing plants in Europe, this cooperation heavily increases added value for certified tropical timber and increases the market power of both companies.

"Click here for more online information about our new sawmill'





Wood supply and volumes



Precious Woods' four sawmills and one veneer plant only processed wood harvested under FSC and PEFC certification inside our forests or concession areas. We neither process thirdparty round wood or processed timber products as input for our milling operations. All volumes of products produced, processes, and traded can be found in our annual reports, publicly available on our website.

As part of our trading activities, we also trade timber and timber products of third parties that must be either FSC or PEFC certified or comply with our Procurement Policy¹. We will immediately suspend any cooperation with third parties if they lose their certificates or do not comply with our Procurement Policy. However, we will encourage them to undertake all necessary actions to regain certification. In 2020, timber products traded from third parties originated from forests in France, Belgium, and Hungary and were either FSC or PEFC certified and in compliance with our Procurement Policy. The companies supplying our trading activities source 100% of their timber from third-party operations.



Origin of Precious Woods timber products 2020

		Volume m ³	From own operations	FSC	PEFC*
Brazil	→ Sawn wood	36 795	100 %	100 %	100 %
	\rightarrow Logs	435	100 %	100 %	100 %
Gabon	\rightarrow Veneer (TGI)	20 001	100 %	100 %	100 %
	\rightarrow Sawn wood	38952	100 %	100 %	100 %
	\rightarrow Logs	53850	100 %	100 %	100 %
Trading with physical possession	→ Sawn wood	961	100 %	100 %	100 %
	\rightarrow Logs	0	0 %	0 %	0 %
Trading without physical possession	→ Sawn wood	49	0 %	0 %	100 %
	\rightarrow Logs	11286	0 %	0 %	100 %
Total		162 329	93.02 %	93.02 %	100 %

* PEFC FM/CoC or controlled sources

 $^{1\} https://www.preciouswoods.com/domains/preciouswoods_com/data/free_docs/Precious_Woods_Procurement_Policy_Public_Version.pdf$

TRANSPARENCY

Our business ethics guidelines



Our strict business ethics guidelines span a comprehensive range of topics from compliance with the law, anti-corruption policies, ethical conduct to equal opportunities, and other issues. The guidelines also contain whistleblowing procedures for employees, and they designate the Corporate Ethics Officials and the ombudsman. They are the focal points for any complaint and must always ensure adherence to the guidelines if any infractions are reported. All employees, shareholders, and stakeholders can access our Business Ethics Guideline at any time on our website¹. Our business ethics guidelines were fully implemented in 2016, and no violations were reported between 2016 and 2020.

FPIC, grievance and whistleblowing procedures



Free, Prior and Informed Consent (FPIC) describes a process assuring that all stakeholders that might be affected by our operations have the same rights during decision making. Everyone has the right to consent or dissent freely, while being informed of all details prior to the process. FPIC is an absolute condition for PEFC and FSC certification and we consider FPIC as an indispensable process in Sustainable Forest Management.

Sometimes, differences of opinions can occur internally and/or as well as with external stakeholders. We always try to mediate such conflicts in direct discussions and to elaborate pragmatic solutions. In case that this does not lead to a solution – or if such a mediation is not desired – all employees and stakeholders do have the possibility to file a grievance and to start our grievance procedures. Due to local legislation, habits and cultures the mechanisms and their application differ in Brazil and Gabon.

Grievances 2020

	Brazil	Gabon
Opened	6	1
Solved	5	1
Ongoing	1	0

FPIC, grievance and whistleblowing mechanisms in Brazil

Our Brazilian Sustainability Department, Departamento de Sustentabilidade (DS), is responsible for implementing and supervising FPIC and Grievance procedures and acts as the contact point for all FPIC- and grievance-related tasks. Our grievance and PFIC processes for communities follow the model on the right side, also our grievance procedure for employees. Three meetings are held annually in each community to streamline community grievance processes. The meetings serve to declare, negotiate and solve grievances. From the moment of the declaration to the solution of a grievance, a maximum period of three months must be respected. Grievances, especially urgent ones, can also be initiated by the communities at any moment by phone, by meeting the DS team on our site, or when meeting the DS team on the ground. All grievances of employees can be brought forward during business hours by directly contacting the Human Resources department, the DS, or the Occupational Safety Team. However, employees might prefer to stay anonymous and the procedure pictured on page 44 has been designed to ensure this need for privacy and anonymity. Therefore, employees can use our grievance forms and pens freely available on several points and transmit them through designed letter boxes without disclosing their names.

All employees can always and at any time direct their complaints anonymously to the Corporate Ethic Officials designated in Precious Woods' business Ethics Guideline¹.



3 months

FPIC and grievance procedure for communities



 $1\ https://www.preciouswoods.com/domains/preciouswoods_com/data/free_docs/2_1\%20B usiness\%20E thics\%20G uidelines\%20PW-Group_2016_en.pdf$



FPIC, grievance and whistleblowing mechanisms in Gabon

In Gabon, our Office for the Support of the Communities, Bureau d'Appui à l'Environnement Villageois BAEV, is the counterpart of the DS in Brazil. Following specific regulations of the Gabonese Forest Act¹, a multi-stakeholder committee for managing community projects is responsible for supervising the FPIC and grievances process. This so-called Comité de Gestion et de Suivi des Projets CGSP comprises representatives of the relevant civil and forest authorities, delegates of the communities, and BAEV members.

Our mechanisms are designed for four main areas of conflict; conflicts linked to our operations, financial disputes, destruction of socio-cultural values, and destructive impact on agricultural land and plantations.

Members of the communities can address conflicts by the worth of mouth during BAEV visits in the communities or directly at the BAEV office. The mechanisms can also be initiated by letter or by phone. The company's radio system can be used in areas without network coverage.

Operation can never take place in areas that are subject to ongoing grievances of FPIC procedures After the reception of the grievance, a record is opened for every conflict. Next, a meeting in the communities is scheduled accompanied, if necessary, by forest authorities. These visits aim to identify details of the grievance, collect evidence, e.g., in case of damage to plantations, and negotiate consensual solutions between community leaders, designated authorities, and the BAEV. If no consensual solution can be agreed upon, the grievances are brought to the CGSP and, if no solution could be found neither, to the court in charge. On the left is shows the general structure of grievance and FPIC procedures for all stakeholders.

Grievance and FPIC



Information

Diagnostic

Consent

parties and persons

Free information of all involved

Social-economic diagnostic of the

situation. Optional step and only performed if necessary

Consent finding process involving all

The consent is formally agreed upon,

recorded and, if necessary, contracts

Depending on the case, official and

cultural procedures are deployed to familarize all stakeholders with the

Implementation and adaption The decisions are implemented and if necessary the parties agree upon

concerned stakeholders

Contractualization

are elaborated

Ritualization

joint solution

adaptions

FPIC mechanism only

Specific FPIC procedure for community mapping and rights of use in Gabon

As illiteracy occurs amongst employees in Gabon, grievances of employees are addressed through the members of the works council. The works council is a legally binding entity, and the employees elect its members, with every department having its own representatives. Employees address their concerns to the representative of their trust, which can also be a council member of another department. If the grievance must be handled anonymously, the work council member transmits the grievance to the Human Resources department or the management in written form or by word of mouth. In any other case, the grievance is transmitted by the employee accompanied by one or more members of the works council.

All employees can always and at any time direct their complaints anonymously to the Corporate Ethics Officials designated in Precious Woods' business Ethics Guide-line².

Information

Information of the communities that PW plans to start operations and does request a meeting to start a FPIC process.



Meeting between the communities, forest authorities and PW. Participation of at least one female member of the community is required.

Forest delimitation

Physical delimitation of the forest belonging to the community under customary rights. At least two community members and two PW employees must take part in such missions.



Joint definition of the "agricultural zone", determind to be used only by the community. Joint definition of protected zones such as High Conversation Values, sites with traditional and/or religious importance. Joint definition of areas used for Non-Timber Forest products harvesting by communities.

Delimination for special use Joint physical delimitation by community and PW representatives of the agricultural zone, protected areas and areas for Non-Timber Forest products.



Whistleblowing mechanisms in Switzerland

All Swiss employees can always and at any time direct their complaints anonymously to the Corporate Ethics Officials designated in Precious Woods' business Ethics Guideline².

1 Arrêté n° 105/MFEPRN/SG/DGF/DDF/SACF du 06 mai 2014 fixant le mode le de cahier de charges contractuelles

Procurement and independent suppliers

Procurement policy

We commit to only source from FSC or PEFC certified suppliers or follow our strict procurement guidelines to assess our round wood and timber suppliers in line with PEFC Due Diligence standards. Our Procurement Policy is available on our website. All direct and indirect supply to all our activities complied with this policy in 2020.

Suppliers covered by this disclosure

This disclosure is limited to third parties supplying round wood to our mills and third parties supplying our trading activities with processed timber products or logs. We did not purchase any round wood for our mills from third parties in 2020.

Small-scale producers

We only accept products in our supply chain produced under FSC or PEFC certification or in compliance with our Procurement Policy. It often appears difficult for small-scale producers in tropical areas to meet these criteria. Therefore, we promote small-scale producers in our supply chain that meet these requirements or strive towards compliance. We do, for example, partner with FSC certified cooperatives in South-America composed of several small-scale producers.

Commitment to sustainability along the supply chain

We believe that we must ensure legality and sustainability along the entire supply chain, and thus, our commitments also apply to our suppliers. We commit to only source wood for our trading activities from FSC or PEFC certified suppliers or suppliers that comply with our Procurement Policy. Most of the commitments made throughout this report also apply to our suppliers. They must respect the principles of FPIC, workers' rights, gender equality, indigenous and local communities' rights, and legal and customary land rights. They shall also act ethically, exclude any corruption, pay minimum wages, address occupational health and safety, apply sustainable hunting, reduced impact logging, and best management practices for soils and peat land and not use genetically modified organisms. They must protect forests from illegal activities, restore non-compliant deforestation or conversion if it happened after 2018. Suppliers must also commit to biodiversity conservation, zero burning, and the protection of High Carbon stocks. Suppliers shall not use WHO Class 1A and 1B pesticides, chemicals listed under the Stockholm and the Rotterdam Convention, and always respect Fundamental ILO Conventions or Free and Fair Labour Principles. If third-party suppliers violate these requirements, we will immediately terminate any collaboration. No deforestation was recorded for suppliers' operations in 2020.

In 2020, we only had wood suppliers to our trading operations, but we did not process logs from third parties in our mills and veneer plants. We require all these suppliers to be either FSC or PEFC certified or to be in line with our Procurement Policy, which implies that they respect the principles of Free, Prior, and Informed Consent (FPIC) in the scope of their operations. Some thirdparty assessment schemes ask us to expand this FPIC commitment to all our suppliers' operations even if they are not linked to the certified operations and even if they are not related to forestry. We strongly disagree with this approach, which would be an unverifiable and irresponsible commitment.

Supply chain and traceability systems



Forest and processing operations (Brazil and Gabon)

We commit to always applying a supply chain and traceability system, later referred to as Chain of Custody System (CoC). Our CoC system allows us to control our supply chain and ensure traceability at every stage of our production, processing, and trading activities. The need for our CoC systems is based on:

- 1. Legal requirements
- 2. FSC or PEFC requirements
- 3. Internal control and process management

Trees are all numbered with a unique number during inventory and harvesting planning. Once harvested, the unique number is marked on the tree and the stump. If the log is subdivided into multiple sections, the number of the section is added to the log. During the production processes, the log's unique number is assigned to the respective production campaign. The timber from one campaign can be sorted into various sale contracts whereby all relevant campaign numbers must be assigned to the sales contract. The sales contracts are packed into bundles that are assigned specific bundle numbers.

Before transport, every log is marked with its unique number and every bundle with its specific bundle number, allowing to trace back the log or timber bundle. Our CoC system does guarantee that every log harvested can be traced back to the stump and that every timber product can be traced back to the annual harvesting area.

Information is recorded on paper during the production process. To avoid fraud, guarantee data consistency, and streamline our processes, these data are then saved into traceability software. These specialized software solutions do avoid unauthorized data alterations. This CoC software allows us to locate every log and timber product at any time. The consistency of our paper-based and electronic CoC systems is checked by authorities several times a year and once a year during FSC and PEFC certification audits.

Trading activities

Due to certification requirements and internal process management, we apply the CoC system described above to our whole supply chain, no matter if we are trading our own or third-party products. The CoC system does guarantee that every log or timber product can be traced back to the annual harvesting area. We apply our CoC systems to all our trading activities, even if this might not be a legal requirement in some countries in which we operate.



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