



PRECIOUS WOODS

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Precious Woods Sustainability and Transparency Report 2018



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The mark of
responsible forestry

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The term PEFC™ used herein is a registered trademark of the Program for the Endorsement of Forest Certification Schemes (PEFC™ 15-31-0090)

Precious Woods –Sustainability as Core of Our Business

Sustainable and Certified Forest Management

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 tropical rainforest in the south-east of Gabon. Our 3'300 employees are managing these forests under rigorous Sustainable Forest Management (FSM) rules and certified against the two most strict certification schemes; the Forest Stewardship Council® FSC® and the Project for the Endorsement of Forest Certification PEFC™. Most of the timber is processed in our two sawmills and our veneer plant in Gabon as well as in our sawmill in Brazil. Our trading unit is predominantly selling our own products but does also trade logs and timber from PEFC or FSC certified¹ partners.

Triple bottom line approach to sustainability

We believe that sustainability is founded on social, ecological and economic factors - our triple bottom line approach to sustainability. While economic data must be processed and published by law, an enormous amount of ecological and social data is collected annually in Precious Woods' operations too. This report aims to make these data available to our stake- and shareholder and underlines our leading position in Environmental Social Governance (ESG) and Corporate Social Responsibility (CSR) in the tropical forest industry.



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

Scope of this report

- This report covers all Precious Woods operations worldwide.
- This report covers all products produced, processed and traded by Precious Woods. These are: logs, timber and timber products
- All commitments of Precious Woods apply to all products, to all sourcing regions, to all operations and to all direct and in-direct third-party suppliers. 100% of the commodities are covered by these commitments. Full implementation of these commitments is already accomplished through valid FSC and PEFC certificates¹ covering all operations, the whole supply chain and all trading activities.
- Financial aspects are not part of this report. Annual and Half-Year Reports are available on our website.

Further Information

You can find the latest news and more in-depth information on our website and on social media.

- Precious Woods [Website](#)
- Precious Woods on [Facebook](#)
- Precious Woods Amazon on [Facebook](#)
- Cultural Centre in Gabon on [Facebook](#)
- Precious Woods Holding on [Instagram](#)
- Precious Woods Amazon on [Instagram](#)

Commitment to Certified and Sustainable Forest Management

Certification as an inherent part of our business ethic

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 certified¹.

Since 2009 all our operations are FSC FM and CoC certified, additionally, since 2018 all operations are PEFC FM and CoC certified. Besides having a sustainable social, economic and ecological impact, certification obliges us to monitor social and environmental indicators as well as our supply chain constantly to maintain certification. These monitoring and verification activities as well as compliance with certification requirements are checked annually by accredited and independent auditors. Non-compliance would lead to the suspension and loss of the certification. Being certificated also obliges us to apply Free, Prior and Informed Consent (FPIC), the conventions of the International Labour Organization and to apply gender equality.

100% FSC or PEFC certified

We are active members of the following organizations that are engaging in the promotion and development of sustainable forestry.

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

Third-party assessments

Every year Precious Woods is assessed by various third-party organizations in order to evaluate our level of sustainability and transparency. We do welcome these initiatives that will help investors and customers to better distinguish between sustainable and unsustainable companies. All Precious Woods operations are double certified against the FSC and PEFC standards. These schemes cover by default most aspects asked for by assessments schemes. However, often assessments schemes do not automatically accept FSC and PEFC certification as a measure for compliance in order to create a comparable framework for certified and non-certified companies. We do not agree with this approach as we believe that certified companies do exceed all requirements of most assessment schemes. We believe that organizations doing such assessments should better and automatically consider the efforts of FSC and PEFC certified companies. It would be more valuable for our forest if we could spend more time caring about sustainable forest management than about compliance with these assessment schemes.

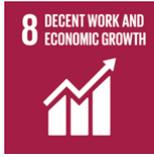
An alignment of this report's content to the indicators of the Zoological Society of London's Sustainability Policy Transparency Toolkit (SPOTT)² and Global Canopy's Forest 500³ assessment can be found at the [end of this report](#).

² <https://www.spott.org>

³ <https://forest500.org>

Precious Woods and 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 STGs 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 11 of the 17 STGs.

Sustainable Development Goal	Precious Woods Contribution	
1: End poverty in all its forms everywhere	With more than 1'300 employees in rural areas and a total of 53 communities surrounding our forest area, Precious Woods is responsible for more than 15'000 people's income and living standard. The salary level is higher than the minimum wages and, in most cases, no other employment would be possible. A profit-sharing program is also in place and will be distributed in form of social projects or an amount per cubic meter harvested to guarantee a fair split.	
2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	We don't have agriculture production in our area, except one cocoa plantation in Gabon in favour of the communities. But we offer to use products from our forests like seeds, resins, timber and organize courses for the communities in handcrafts and food processing. This goes very much along DSG #1.	
4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	In some areas the education of people is supported through our infrastructure. For example, in Gabon 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 the secondary education through cooperation with local universities. In both countries we train our employees continuously in their daily work and increase competences.	
5: Achieve gender equality and empower 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: 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 guaranteed 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.	
7: 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 in place. As electricity normally is produced by diesel generators the savings by using the biomass power plant accounts to approx. 12'000'000 litres of diesel per year.	
8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Precious Woods is managing 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 12m3/ha/year the recovery of the forest is guaranteed for generations but limits also the amount of timber to be produced for the market. Therefore, we are looking for additional concession areas to increase the volumes but also take the responsibility to protect natural forest by using it sustainably.	

<p>9: Ensure sustainable consumption and production patterns</p>	<p>With a scientific based inventory of our forests we guarantee the natural recovery of the forest after harvesting.</p> <p>The road planning is based on that inventory which includes water courses as well as altitudes to enable to have as less impact as possible.</p>	
<p>13: Take urgent action to combat climate change and its impacts</p>	<p>In its forests Precious Woods maintains a carbon stock of some 330'000'000 tons.</p> <p>As to studies from universities (performed in the Amazon) the growth of tree biomass in sustainably managed areas is 3m3/ha/year where in just protected areas it shrinks by 3m3/ha/year.</p>	
<p>15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>	<p>Although a sustainable forest management has its impact on forest by creating roads the outweighing positive impact is that deforestation will be prevented.</p> <p>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.</p> <p>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.</p>	
<p>17: Strengthen the means of implementation and revitalize the global partnership for sustainable development</p>	<p>Precious Woods was the first company in Brazil but also in Gabon who achieved the FSC certification. The continuous improvements of the standards are performed together with environmental and social partners.</p> <p>Since end of 2017/early 2018 the whole group is also certified to PEFC/PAFC standards.</p> <p>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.</p>	



SOCIAL PERSPECTIVE

Workforce and Equality

Our employees are the starting point of sustainability. Motivated and well-trained employees are the foundation for a sustainable triple bottom line development. With their daily dedication at work, they are the basis for our economic success and the wellbeing of their families. 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 does also foster the economy of entire regions. We estimate that – besides our employees' families - more than 10'000 people do directly and indirectly depend on our operations or profit of Precious Woods' employments.

Gender equality and payment of minimum wages are non-negotiable parts of our business ethics. We do not hire temporary staff, all employees do have permanent positions. Annual employee turnover was at 2.3% in 2018.



Employees	Brazil				Gabon				Switzerland			
	2017		2018		2017		2018		2017		2018	
Women	66	12.5%	60	12.0%	79	9.1%	77	9.3%	6	50.0%	7	50.0%
Men	459	87.5%	439	88.0%	793	90.9%	753	90.7%	6	50.0%	7	50.0%
Total	524	100.0%	499	100.0%	872	100.0%	830	100.0%	12	100.0%	14	100.0%

Table 1: Precious Woods' Workforce

Board Members	2017		2018		2019	
Women*	1	20%	1	25%	1	25%
Men	4	80%	3	75%	3	75%
Total	5	100%	4	100%	4	100%

*Katharina Lehmann, president of the board

Table 2: Precious Woods' Board of Directors

Senior Management Team	2017		2018		2019	
Women	0	0%	0	0%	0	0%
Men	2	100%	2	100%	2	100%
Total	2	100%	2	100%	2	100%

Table 3: Precious Woods' Management Team

Monthly gross wages 2018*	Gabon		Brazil	
	Women	Men	Women	Men
Legal minimum	€ 228.67	€ 228.67	€ 222.41	€ 222.41
Company minimum	€ 228.67	€ 228.67	€ 232.15	€ 232.15
% of legal minimum	100.00%	100.00%	104.38%	104.38%

*fx rate as of 12.09.2019

Table 4: Gross wages

Inclusion of Women

Women have an unquantifiable importance in the economic development of their countries and the subsistence of their families. We hire women whenever possible and had a share of female workforce of 10.7% in 2018, which we consider being too low though. We thus strongly support all initiatives that urge towards an equal inclusion of women in the working world especially in regions or sectors where men still represent the majority of the workforce. In general, the timber industry is one of these sectors where women are usually underrepresented for various reasons. We strive to overcome these barriers but have to accept that there is still a long way to go.



Brazil

Female workforce in general

Female workforce is mostly employed in administration, forest and technical engineering, the industries and the canteen. Three women are part of the local management team. As it is common in the forestry industry globally, women are not or only marginally represented in harvesting operations. Women represented 12% of our workforce in Brazil in 2018.

Barriers faced

As in most other countries the job market for technical positions, especially in milling and forest operations, does present a gender disequilibrium. This is not a specifically Brazilian issue but a global problem. We would like to see more young women to train in technical professions in order to increase our female workforce. Gender equality is implemented.

Actions taken

The local management does actively attempt to increase the female workforce. In cooperation with local educational facilities we offer regular trainee programs with a high share of female trainees in order to make our company better known amongst and more attractive for young female professionals.

Gabon

Female workforce in general

Female workforce is mostly employed in administration, veneer production, housekeeping and in the canteen. As it is common in the forestry industry globally, women are not or only marginally represented in active forest and milling operations. Women represented 9.3% of our workforce in Gabon in 2018.

Barriers faced

Cultural barriers (mainly in rural areas): The main tasks assigned to women turn mostly around housekeeping, parenting and subsistence agriculture. Especially in rural areas, women are often not accepted to be the breadwinner for the family. It must be annotated that often women themselves share such mindsets.

Educational barriers (mainly in rural areas): Women in rural areas do often have a lower educational level than men as they leave school earlier due to various reasons. Thus, it is often impossible to hire female employees that dispose of a sufficient education level to work in forest operations.

Actions taken

151 women working at Precious Woods

Precious Woods Holding AG hired a female consultant, a specialist in social work and education. One of her tasks is to assist Precious Woods – CEB in Gabon in tackling women education and gender equality. The long-term objectives are (i) to have more qualified female workforce available for our operations and (ii) to create a better business environment for women in general. The underlying idea is that there is a growing demand for small business and all kind of services in and around our camps and that this services and business can be provided by women (e.g. shop owner, business provider, restaurant owner, etc). The consultant started her assignment mid-July 2019.

Switzerland

Female workforce in general

All employees in Switzerland work in administration or management as no forest operations take place in Switzerland. Women represented 50% of our workforce in Switzerland in 2018.

Barriers faced

Enough qualified female workforce is available on the job market. Gender equality is implemented. No barriers faced.

Actions taken

None

Occupational Health, Safety and Training

In forestry and timber processing heavy equipment is used in often difficult work environments. This does increase the chance for work accidents. We did not have any fatal accidents since 2015 but will still consider that our accident rate is too high. We aim to push this rate to be constantly below 6% by 2022.



Number of accidents	2015	2016	2017	2018
Brazil	20	35	18	24
Gabon	66	86	68	63
Total	86	121	86	87
Accident rate	6.8%	9.8%	6.2%	6.5%
Fatal accidents	0	0	0	0

Table 5: Work accidents

In order to improve awareness and knowledge amongst employees, we maintain Health and Safety Teams in Gabon and Brazil. Safety officer supervise constantly if safety rules are applied and all safety equipment is in place and operative, on employees and equipment respectively.

Personal protective equipment is delivered to all employees in order to comply with the rules of the International Labour Organization and FSC and PEFC certification.

Additionally, we run regular sensitization trainings and designated employees undergo regular first-aid trainings. We maintain own fire brigades that are trained by internal and external experts



Picture 1: First Aid Training in Gabon

Besides safety trainings, advanced professional training is provided to specialised employees occupying critical and crucial positions. For example, loggers and sharpeners in Gabon are undergoing training by external specialist every year to strengthen and enlarge their professional skills. We strongly increased our investment in training in 2018 and we strive to maintain a high level.

Training	2016	2017	2018
Total training hours	848	970	1,895
Hours per employee	0.7	0.7	1.4

Table 6: Training hours

Social Responsibility and Education

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



[Visit our Cultural Centre on Facebook](#)

Our employees in Brazil do benefit from special access to health service. We do also regularly sponsor local events and the construction of public open spaces, such as playgrounds.

In Gabon, all employees⁴ and their families live in our own camps and benefit from free access to electricity and potable water. Moreover, grocery stores and infirmaries with doctors and nurses as well as waste management are provided and organized by Precious Woods. Isolated in the forest, the cultural offer on our site in Gabon is limited and this is why we initiated a cultural project, unique in its kind, to promote social development and sustainability. Our cultural

⁴ Employees working for Compagnie Equatoriale des Bois

centre features a library, computers with internet access and enough space for various events. Our cultural committee does also organize various events throughout the year and the annual soccer cup has become an important constant of our social life. Our cultural centre does also offer continuing education for our employees, for example in informatics or literacy. We also support the public education system in Gabon in its efforts to provide education for everyone. To do so, we build and maintain school buildings and provide housing for teachers.



Picture 2: Cultural Centre in Gabon

Science for Sustainability

Tropical forests still have an enormous potential for pioneering research. We do support scientists in their efforts to provide new knowledge on forest growth and forest dynamics as well as on new solutions improving sustainable forest management. In 2018, more than 10 research projects have been promoted financially as well as with logistical support and local knowledge.

Practical research does also help students and young professionals to get in touch with the private industry, adding an important aspect to their curriculum. Several of them have become our colleagues after finishing university and do foster our motivation to invest in research and higher education. Currently, we regularly partner with eight research institutions and with a lot of others on occasional basis.



Picture 3: Field trip of the University of Franceville, Gabon

Local Communities and Development

Nine communities in Brazil and 41 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 time⁵. Guaranteeing their customary rights of use is an inviolable part of our business ethic. 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 are...:

- ➔ ...contributing and supporting local economic development
- ➔ ...favouring local employees
- ➔ ...supporting the communities in sound and sustainable use of natural resources
- ➔ ...encouraging improvements in education and health care

Our Free, Prior and Informed Consent (FPIC) procedure 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 a 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 FPIC and Grievance Procedures. This is how we guarantee that conflicts can be solved in a transparent and satisfying way for all parties involved.

**We are partnering
with 50 communities**



Grievances 2018	Brazil	Gabon
Openend	3	3
Solved	3	3
Ongoing	0	0

Table 7: Grievances 2018

⁵ 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.



ENVIRONMENTAL PERSPECTIVE

Certified and Sustainable Forest Management

Managing forests or managing them sustainably under double certification are two worlds apart. While forest management mostly focuses on economic aspects, sustainable and certified forest management takes the holistic, triple bottom line approach.

Sustainable forest operations from first inventories over road construction, to reduced impact logging, log extraction, transformation and finally transport ask for sound and proactive planning. Only with every step organized with vigilance and by skilled staff, sustainable forest management can be possible.

With harvesting cycles of 35 years in Brazil and 25 in Gabon we guarantee that the forests are not overused and that they always fulfil their role as the green lung of the world and the save haven for a magnificent fauna and flora. Even if legal thresholds would allow to harvest average volumes of 30m³ per hectare, we limit ourselves to much lower quantities and did never harvest more than 15.5 m³ per hectare the last years. Otherwise the holistic protection of our forests would be put in jeopardy.



m3 harvested /ha	2015	2016	2017	2018
Brazil	10.4	12.2	14.6	15.5
Gabon	11.1	10.8	10.8	10.2

Table 8: m3 harvested per hectare

Forst Protection and Conservation

Combining Protection and Conservation

The best way to maintain a healthy forest is a well-balanced mix of sustainable and certified forest management and forest conservation. We sustainably protect 1.1 million ha of natural tropical rain forests through our certified management activities. Our business model guarantees that the forest area does not decrease. More importantly, we guarantee that the biodiversity will not diminish and that the forests can fulfil their functions as the green lung of the earth and 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 12% of our forest area under strict conservation to keep these forests in their original estate.

1.1 million ha protected



Forest area 2018 (ha)	Brazil		Gabon		Precious Woods	
Total forest area	506,697		600,000		1,106,697	
whereof conservation area	83,125	16.41%	53,195	8.87%	136,320	12.32%

Table 9: Precious Woods' Forest Area

Commitment to archive deforestation- and conversion-free production and procurement for the whole supply chain

FSC does not accept deforestation and conversion. For all own operations and our FSC certified supply we thus commit automatically to deforestation- and conversion-free production.

PEFC does accept small-scale conversion of maximal 5% of the certified area only if it “*makes a contribution to long-term conservation, economic, and social benefits*”. To avoid timber originating from deforested or converted lands in our supply chain, we commit to only source PEFC certified products if they origin from countries where deforestation and conversion is not tolerated by the law and where the legislation is enforced reliably. Today, we only source PEFC certified products from middle Europe.

Deforestation inside Precious Woods management area

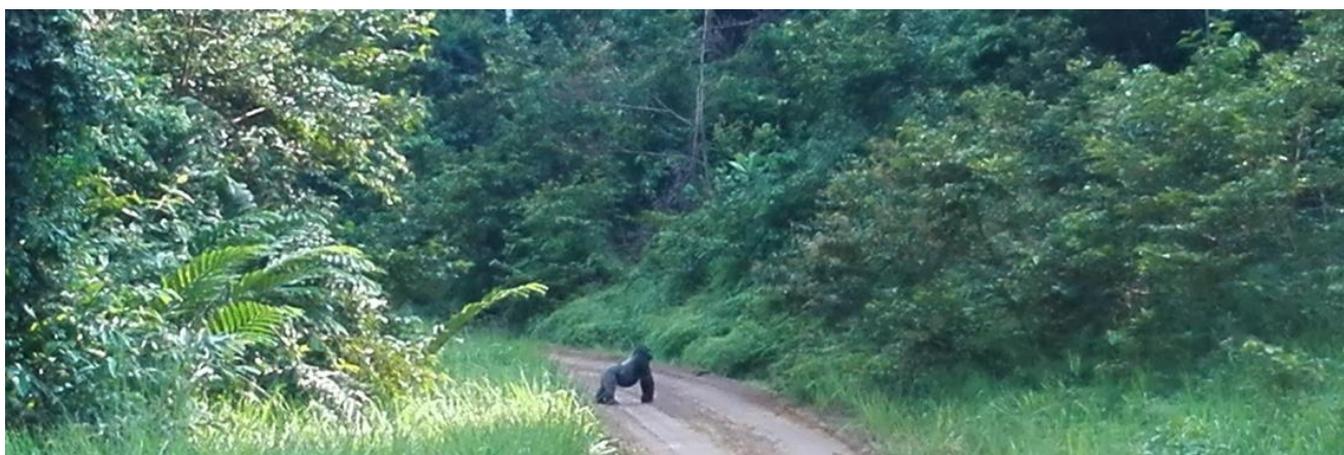
The deforestation by third parties reported in 2018 concern the opening of quarries inside our concession area by a mining company. The quarries are used to exploit gravel used for road construction. The mining companies holds valid authorisations and the quarry operations do meet legal standards. The company is cooperating with us to minimize their impact inside of our concession area. Precious Woods staff undertakes field controls in the respective area on a weekly base. Precious Woods will start reforestating the quarries in 2019 on behalf of the mining company.

Concession area (total surface)	2017		2018	
	Deforestation from own operations	Deforestation from third party operations	Deforestation from own operations	Deforestation from third party operations
Brazil (506'699 ha)	0 ha	0 ha	0 ha	0 ha
Gabon (596'800 ha)	0 ha	0 ha	0 ha	4.92 ha*
All (1'103'499 ha)	0 ha	0 ha	0 ha	4.92 ha*
*see text for additional explanations				

Table 10: Deforestation of third parties

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 a company wildlife team to prevent poaching, our concession has become save haven for the stunning fauna. Nevertheless, poaching around our area seems to be on the rise. Therefore, the Gabonese government, the NGO Conservation Justice and Precious Woods signed a partnership to join forces against illegal hunting in the buffer zones of our concession in early 2019. The convention will be implemented from the beginning of 2020 on aiming to prevent poaching from spreading.



Picture 4: Gorilla inside Precious Woods concession, Gabon

Meanwhile, scientists from Gabon, Switzerland, Belgium and the USA are working jointly on fauna inventories and the impact of sustainable forest management on fauna distribution. They are using newest methodologies such as phonetic wildlife monitoring equipment. First results can be expected in late 2020.

In Brazil, scientists as well are monitoring specific aspects of the fauna. Anti-poaching actions are taken jointly by our monitoring team and local authorities. Around 160 designated community members act as scouts indicating potential illegal activities.

Anti-poaching patrols Gabon	2018
Days of patrolling	181
Foot patrols (km)	927
Boat patrols (km)	325
Car patrols (km)	24,204
Idividuals checked	800
Arms seized	20

Table 11: Anti-poaching activities 2018

Landscape-Level Approach to Biodiversity Conservation



Brazil

In the north-east, our forest property borders a national Sustainable Development Reserve (RDS)⁶. We decided to exclude around 17'000ha of our forest bordering this area from any activities to create a buffer zone. This action was taken to better protect the reserve and the entire landscape spanning the reserve, our forest and the surrounding area.

Gabon

As mentioned before, a convention has been elaborated between the government, the NGO Conservation Justice and Precious Woods. The geographical scope of the convention covers parts of the CEB concession and the bordering buffer zone to the Ivindo National Parc. The convention aims to implement a joint action plan for 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 has been signed in early 2019. Joint patrols with the authorities in this area are already taking place but will be intensified after the convention will be implemented from 2020 on.

**Wildlife Protection
Convention signed in Gabon**

Switzerland

No operations in Switzerland.

Carbon Stock, CO2 Emission and Bioenergy



Carbon stock and sequestration

The forests we manage do permanently stock around 330'000'000 tonnes of Carbon⁷. However, our forests do grow permanently, and part of this process is the extraction of CO₂ from the atmosphere. During photosynthesis this CO₂ is split into carbon and oxygen. While the oxygen is released into the atmosphere and helps regulating the climate, the carbon is permanently stocked in the trees and approximately 50% of the wood consists of carbon. Taking an average wood density of 800kg/m³, every cubic meter of wood does permanently sequester around 0.4 tonnes of carbon. This is why forests are an active and indispensable part in avoiding and mitigating carbon emissions and thus, climate change.

⁶ Reserva de Desenvolvimento sustentável do Uatumã

⁷ Calculation basis: 300tC/ha

Precious Woods’ carbon account

We are annually reporting Level 1 to 3 carbon emissions. However, we believe that these number do not picture the real impact of Precious Woods activities. As our forests do sequestrate an important amount of carbon every year, these immissions should be taken into account when calculating our carbon footprint.

330’000’000 t of Carbon permanently stored in our forests

To know how much carbon will be sequestered annually, one needs to know growth rate. Usually growth rates are higher in managed than in unmanaged areas due to various reasons. These assumptions have been proved in Brazil in studies with local universities. In Gabon, P3FAC, a multi-stakeholder research project⁸, is currently investigating growth dynamics in central African forests. A large P3FAC research area is located in Precious Woods concession and we expect to have in depth knowledge on growth rates in Gabon by 2022.

CO2 emission, intensity and reduction targets

Our CO₂ emission is calculated annually using the classification of the World Resources Institute (WRI). The main indicator to make this emission comparable is to link it to the harvesting volume, the core of our business. The parameter we are using is the carbon intensity per m³, that is to say the tonne of carbon emitted per m³ harvested. Since 2010 we continuously increased our annual harvesting volume while simultaneously reducing our carbon intensity. Since 2015, our carbon intensity is constantly below 0.07 tC/m³/year.

CO₂ emission per m³ reduced by 21% since 2010

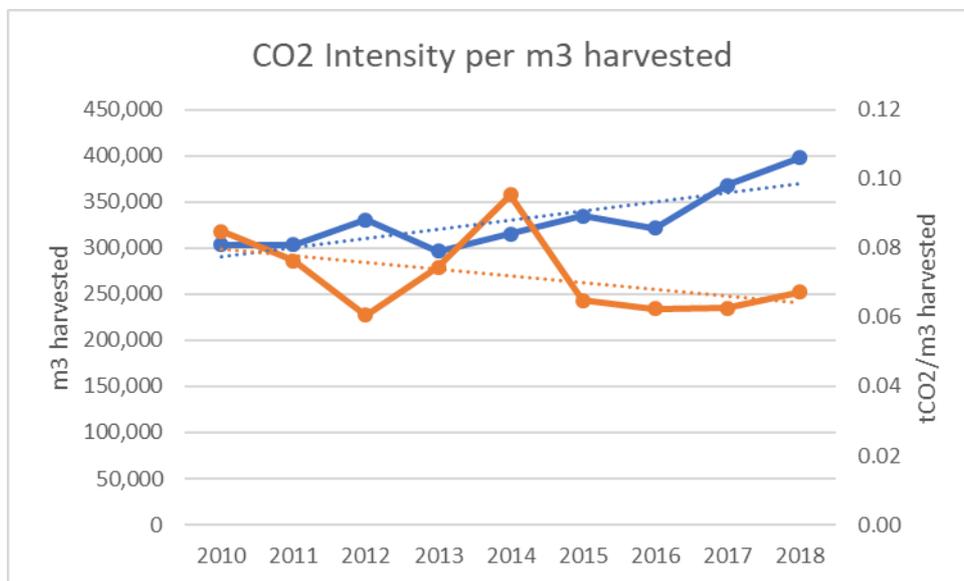


Figure 1: CO2 intensity: blue, m3 harvested; orange, CO2 intensity

⁸ https://www.gembloux.uliege.be/cms/c_4135397/en/p3fac-new-research-project-for-sustainable-forest-management

Emission intensity in Gabon is higher, as we do run three processing plants instead of one in Brazil, because distances are longer, and we must provide energy and potable water for all employees. Moreover, in Gabon we must produce energy from fossil fuels whilst we can use renewable energy in Brazil. The CO₂ emission intensity is heavily linked to the distance of the harvesting area, the condition of the public road and railway network and weather conditions. All four of them facts on that we do not have any or only limited influence. Nevertheless, we aim to keep our overall intensity below 0.07 tC/m³/year over the coming 10 years.

Tonnes CO2	2016		2017		2018		Δ 2010-2018
Level 1 - Direct emissions	12,635	63.0%	13,023	56.4%	13,341	49.9%	
Level 2 - Indirect emissions	3,484	17.4%	3,416	14.8%	4,422	16.5%	
Level 3 - Travel	418	2.1%	536	2.3%	768	2.9%	
Level 3 - Transport	3,519	17.5%	6,101	26.4%	8,191	30.7%	
Total t CO2	20,056	100.0%	23,076	100.0%	26,722	100.0%	
Harveting m ³	321,200		368,200		397,900		131%
CO2 intensity (tCO2/m³)	0.0624		0.0627		0.0672		79%
Intensity Δ y -1		-3.6%		0.4%		7.2%	

Table 12: CO2 intensity, details 2016 to 2018

CO2 Neutral Energy Production

In Brazil we own a minority stake in the 9-megwatt cogeneration plant BK Energia, situated next to our sawmill. BK Energia only consumes residues from our sawing operations and thus exclusively uses FSC and PEFC certified wood for energy production. 45'000MWh are produced annually whereof a small portion is used to run our plants and offices. 80% of the production is delivered to the nearby city of Itacoatiara which would otherwise use more than 10 million litres of diesel annually to produce the same amount of energy.

More than 10 million litres of diesel saved

Wildfire monitoring and management

Our certification and sustainability managers and their teams do monitor wildfires in Brazil and Gabon. However, identification and verification on the ground is 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 do mostly rely on remote sensing data for our fire monitoring activities, This does also explain, that the number shown in Table 13 are approximations. In Brazil, we are using the data of the National Institute for Space Research INPE⁹. For monitoring in Gabon, we rely on FIRMS-VIIRS data provided by NASA¹⁰.

⁹ <http://queimadas.dgi.inpe.br/queimadas/portal>

¹⁰ <https://earthdata.nasa.gov/earth-observation-data/near-real-time/firms>

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. These fires fade when approaching the forest border as well managed and healthy tropical rainforest are too humid to catch fire. In general, sustainably managed tropical rainforests are too humid to catch fire. If trees get inflamed by natural events such as lightning these events stay isolated and do not spread.

The best answer to wildfires is a sustainably managed forest

In Brazil and Gabon, farmers inside our concessional have the right to apply slash-and-burn 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 our forests. We do monitor these fires to make sure that they are only used in a purposive way and to avoid illegal forest conversion or degradation for agriculture.

In the past years we did not observe large-scale natural or slash-and-burn fires that endangered forests.

2018	Brazil	Gabon
Natural wildfires	0	6
Slash-and-burn	3	2

Table 13: Wildfires 2018

Fuels, Chemicals and Pest Management

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

To run our forest operations in Brazil and Gabon and our processing plants in Gabon, we rely on fossil fuels. In 2018, we used 4.8 million litres of diesel, which corresponds to 0.08 l/m³ harvested. We also need other fuels like oils, petrol and grease which are all used in accordance with legal regulations and certification standards. Waste oil and used filters are collected and disposed by accredited companies.

Integrated Pest Management (IPM) is compulsory under PEFC certification¹¹. FSC certification as well obliges us to develop and apply IPM through its International Standard¹² and its Pesticides Policy¹². For the use of Highly Hazardous Pesticides (HPP), we follow the PEFC standards and FSC Pesticides Policy and we strictly commit to not to use HPP listed under international agreements¹³ and to respect these agreements in their entirety.



Drinking Water and Water Treatment

Drinking water is provided to all our employees in Brazil and Gabon. Additionally, all camps are connected to our potable water network. Water is treated on site and quality tests are performed regularly.

One of our major concerns is to not let water run-off from our operations penetrate to the nature. Thus, run-off from our production sites in Brazil and Gabon are directed to decanters for treatment before they are released into the nature. These installations are authorized and controlled by authorities regularly. From 2019 on, we will perform tests on Biological and Chemical Oxygen Demand (BOD/COD) in Gabon. Our aim for BOC and COD levels from 2019 on is to stay below the levels fixed by national authorities and where these do not exist, the limits defined by the European Union.



¹¹ PEFC ST 1003:2018, Requirement 8.2.6;

¹² FSC-STD-01-001 V5-2 EN, Criteria 10.7 and FSC-POL-30-001 V3-0 EN

¹³ International Agreements that are integrated part of Precious Woods' IPM

- World Health Organization, International Programme on Chemical Safety, Class 1a and 1b. https://www.who.int/health-topics/chemical-safety#tab=tab_1
- Stockholm Convention on Persistent Organic Pollutants, Annex A, <http://www.pops.int/>
- Rotterdam Convention on the Prior Informed Consent Procedure, Annex III, <http://www.pic.int/>
- Montreal Protocol on Substances that Deplete the Ozone Layer, <http://ozone.unep.org/>



ECONOMIC PERSPECTIVE

Wood supply and volumes

Precious Woods does only process wood harvested under FSC and PEFC regime inside Precious Woods' own forests or concession areas. 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 do also trade timber and timber products of third parties that must be either FSC or PEFC certified¹. If third parties do lose their certificates due to non-compliances, we will immediately suspend any cooperation but encourage them to undertake all

100% FSC or PEFC certified

necessary actions to regain certification. In 2018, all timber products traded from third parties originated from European forests, mostly from France, and were PEFC certified¹. In 2019, we will start trading FSC certified timber from partners in South America.

Some third-party assessment schemes do not accept PEFC standards but the FSC Controlled Wood standard with argumentations that seem unreasonable to us. We believe in the PEFC standards used in the countries we operate in and we refuse to apply standards that we believe are insufficient to prove sustainability only to comply with third party assessors.

Origin of Precious Woods timber products (2018)		Volume m3	FSC	PEFC*
Processed in own mills	Brazil	27,800	100.0%	100.0%
	Gabon	115,700	100.0%	100.0%
Trading of third party products		18,700	0.0%	100.0%
Total		162,200	88.5%	100.0%

Table 14: All wood supply 2018

Third-party supply to Precious Woods operations (2018)		Volume m3	FSC certified	PEFC certified
For processing in own mills		0	0.0%	0.0%
For trading purposes only	Logs	14,920	0.0%	100.0%
	Sawn wood	3,780	0.0%	100.0%
Total		18,700	0.0%	100.0%

Table 15: Supply from third parties only ¹⁴

¹⁴ From outgrower schemes and/or independent suppliers



TRANSPARENCY



Procurement and independent suppliers

Procurement policy

We commit to follow strict procurement guidelines and to assess our roundwood and timber suppliers in line with PEFC Due Diligence standards¹⁵. Our Procurement Policy can be found on our website.

Suppliers covered by this disclosure

This disclosure is limited to third parties supplying roundwood to our mills and to third parties supplying our trading activities with processed timber products or logs. We did not purchase any roundwood for our mills from third parties in 2018.

FPIC, workers' rights and gender equality

We commit to only source wood for our trading activities from FSC or PEFC certified¹ suppliers and thus, they are obliged to respect the principles of FPIC, workers' rights and gender equality. If these third-party suppliers violate the above principles, they will lose their certification or their claim, and we will immediately quit any collaboration.

Small-scale producers

We only accept FSC or PEFC certified¹ products in our supply chain. It often appears to be difficult for small-scale producers in tropical areas to meet these criteria. This is why we do promote small-scale producers in our supply chain that actually meet these requirements or do strive towards compliance. We do, for example, partner with a FSC certified cooperative in South-America that is composed of several small-scale producers.

Scope of FPIC commitment of independent suppliers

We only have wood suppliers to our trading operations, but we do not process logs from third parties in our mills and veneer plants. We require all these suppliers to be either FSC or PEFC certified¹ which implies that they respect the principles of Free, Prior and Informed Consent (FPIC) in the scope of their certified operations.

Some third-party assessment schemes are asking us to expand this FPIC commitment to all our suppliers' operations even if these operations are not linked to the certified operations and even if these operations are not related to forestry. We strongly disagree with this approach, as this would be an unverifiable and thus, irresponsible commitment.

¹⁵ PEFC:ST 2002:2013



Supply chain and traceability systems

Forest and processing operations (Brazil and Gabon)

We commit to always apply a supply chain and traceability system (later referred to as Chain of Custody System CoC) to control the supply chain and to ensure the 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 on the stump. If the log is subdivided in multiple sections, the number of the section is added to the log. During the production processes the unique number of the log 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 which are assigned specific bundle numbers. During transport, every log is marked with its unique number and every bundle with its specific bundle number that allow to trace back the log or timber bundle. Our CoC system does guarantee that every log harvested in our concession area can be traced back to the stump and that every timber product can be traced back to the annual harvesting area.

Information are recorded on paper during the production process. To avoid fraud, to guarantee data consistency and to streamline our processes, these data are then saved into a traceability software. These specialised software solutions do avoid unauthorised data alterations and only a limited circle of persons has full access codes for the system. Our CoC software allows us to locate every log and timber product at any time.

The consistency of our CoC systems - paper-based and electronics systems - is checked by authorities several times a year and once a year by FSC and PEFC certification auditors.

Trading activities

Due to certification requirements and management of internal processes, we apply the CoC system described above to our whole supply chain no matter if we are trading 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, we are operating in.

FPIC and Grievance 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 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 fill 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 2018	Brazil	Gabon
Oppenend	3	3
Solved	3	3
Ongoing	0	0

Table 16: Grievances 2018

Grievance and FPIC mechanisms in Brazil

Our Brazilian Sustainability Department, *Departamento de Sustentabilidade DS*, is responsible for implementing and supervising FPIC and Grievance procedures and figures as vocal point for all FPIC and grievance related tasks. Our grievance and PFIC processes for communities follow the model in Figure 2 while our grievance procedure for employees are structured as shown in Figure 3.

To streamline community grievance processes, three meetings are held annually in each community. The meetings serve to declare, negotiate and solve grievances. From the moment of declaration to the solution a grievance a three months period has to 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 members of the Occupational Safety Team

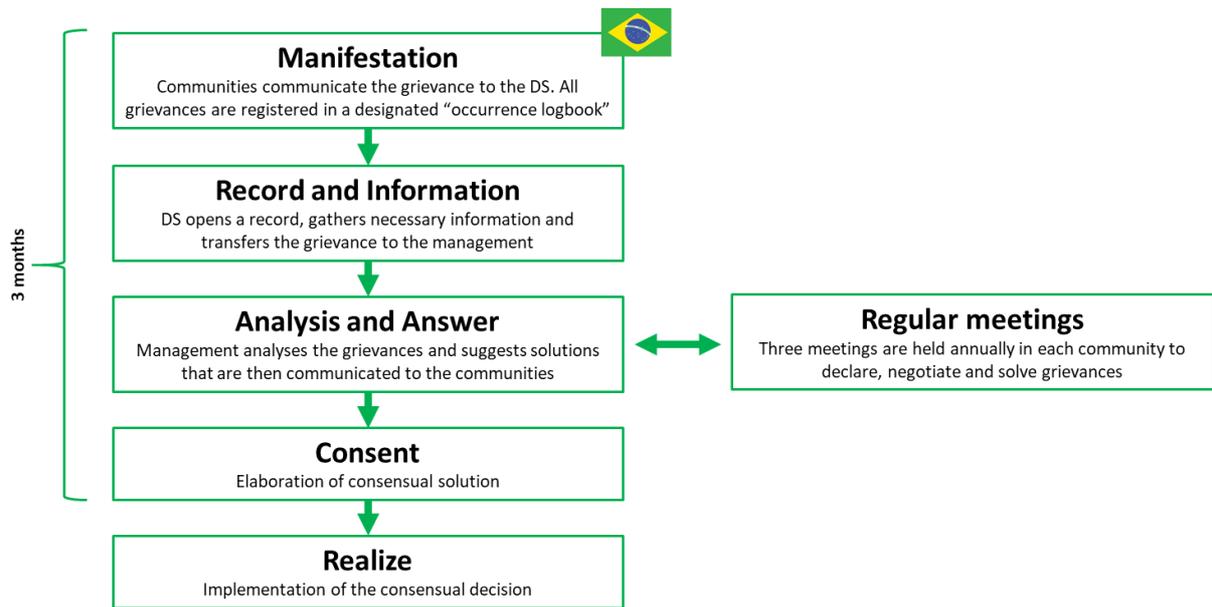


Figure 2: FPIC and Grievance procedure for communities in Brazil

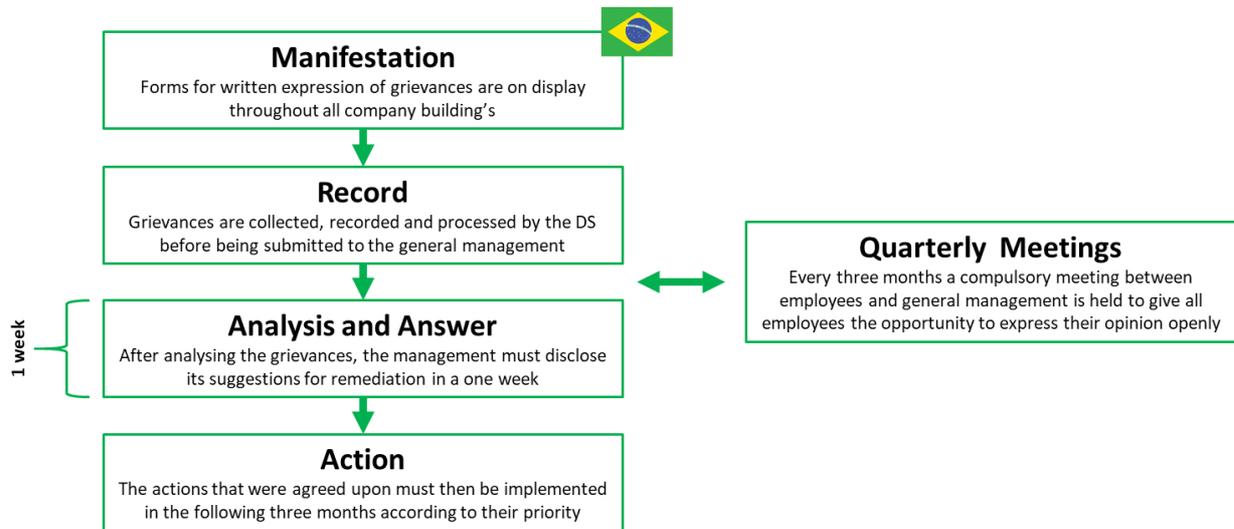


Figure 3: Grievance mechanisms for employees in Brazil

Grievance and FPIC 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 Act¹⁶ a multi-stakeholder committee for the management of community projects is responsible for supervising the FPIC and grievances process. This so-called *Comité de Gestion et de Suivi des Projets CGSP* is composed of 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. These have been identified as conflicts linked to our operations, financial conflicts, destruction of socio-cultural values and destructive impact on agricultural land and plantations

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

After reception of the grievance a record is opened for every conflict and 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 to negotiate consensual solutions between community leaders, designated authorities and the BAEV. If no consensual solution can be agreed upon, the grievance is brought to the CGSP and, if no solution could be found neither, to the court in charge. Figure 4 shows the general structure of grievance and FPIC procedures for all stakeholders

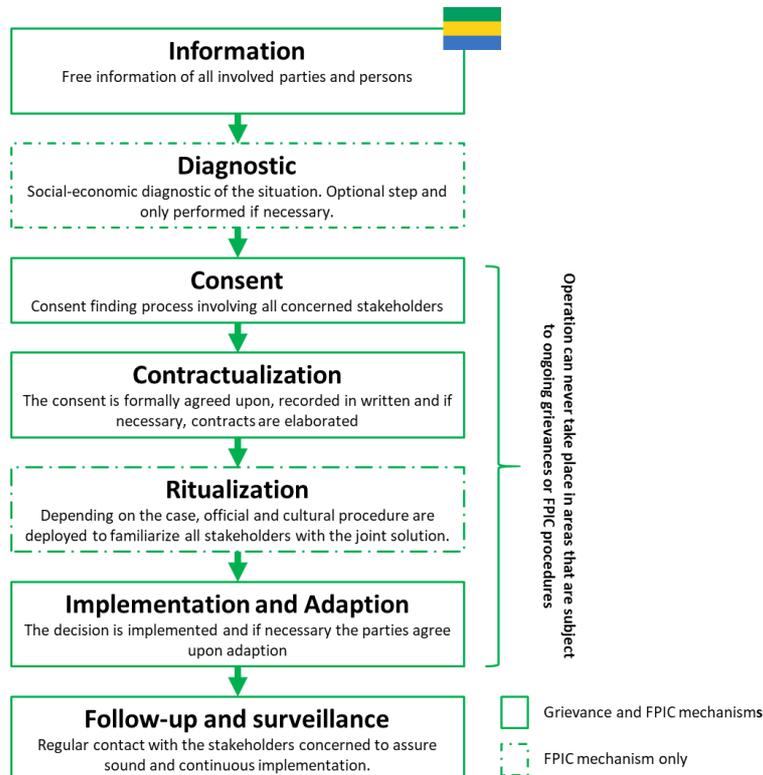


Figure 4: Grievance and FPIC procedures in Gabon

¹⁶ Arrêté n° 105/MFEPRN/SG/DGF/DDF/SACF du 06 mai 2014 fixant le mode le de cahier de charges contractuelles

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

All forests managed by PW in Gabon are state property with customary rights of use for the surrounding communities. A specific procedure exists with the aim to guarantee FPIC before forest operations can take place inside these forests. This procedure does ensure FPIC through the five main steps shown in Figure 5.

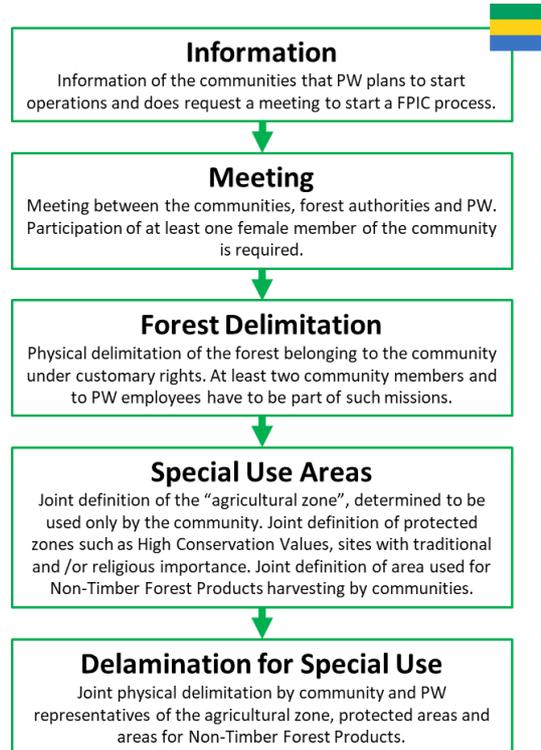


Figure 5: FPIC procedure for community mapping in Gabon