



Environmental and Social Gap Assessment of *Maranhão* Project - Suzano Papel e Celulose

Suzano Papel e Celulose

Reference: 0172943

www.erm.com

Suzano Papel e Celulose

Environmental and Social
Gap Assessment of
Maranhão Project - Suzano
Papel e Celulose.

December 21th, 2012

Reference: 0172943

Verified by: Leonardo Gonçalves

Project Manager

Signed: _____

Approved by: Carolina Retamal

Technical Reviewer

Signed: _____

Authorized by: Carolina Retamal

Partner in Charge

Signed: _____

TABLE OF CONTENTS

1	INTRODUCTION AND BACKGROUND INFORMATION	2
1.1	HISTORY	2
1.2	SCOPE OF WORK	2
1.3	LIMITATIONS	2
2	GAP ANALYSIS METHODOLOGY	3
3	GAP ANALYSIS RESULTS	4
ANNEX A	ENVIRONMENTAL AND SOCIAL ACTION PLAN	
ANNEX B	DUE DILIGENCE FINDINGS (EXCEL SPREADSHEET)	

1 INTRODUCTION AND BACKGROUND INFORMATION

1.1 HISTORY

Suzano has begun negotiations with international banks/agencies to obtain financing of equipment for the new pulp mill located in the city of *Imperatriz*, State of *Maranhão*, Brazil. For the financing process, an environmental and social due diligence was conducted to verify the conformance status of *Suzano's Maranhão* Project (which includes a Pulp mill, related logistics infrastructure projects and forestry operations) with IFC performance standards and IFC EHS Guidelines as reference.

In February 2012 the due diligence was concluded and the report identified some “gaps” that required a detailed analysis.

In June 2012, the environmental and social specialists of the Export Credit Agencies (ECAs) performed a visit at the project and, after that, a new Report with an updated version of the “gaps” was issued.

1.2 SCOPE OF WORK

ERM Brazil Ltda. (ERM) was commissioned by *Suzano* to perform the role of Independent Environmental and Social (E&S) Consultant for the assessment of the remaining gaps identified during the due diligence and ECA's visit at *Maranhão* Project.

The objective of the assessment was to verify if *Suzano* has developed the necessary documentation or studies that fulfill the gaps and that are in line with the applicable international standards.

1.3 LIMITATIONS

While this report has endeavored to provide a comprehensive review of the gaps against the relevant standards, the following limitations should be noted:

- The report is based upon certain facts with resultant subjective interpretations based on professional judgment. The professional judgments expressed are based on the available facts within the limits of the existing data, budget and schedule;
- This report is based primarily upon information provided through interviews and documents;
- No meetings were held between ERM and Community members;

- No visit to forest areas/ farms was conducted;
- Technical review of facilities design and operational performance was not carried out.
- The information provided in this report is not to be construed as legal advice.

2

GAP ANALYSIS METHODOLOGY

The scope of work involved the independent assessment of significant environmental and social issues associated with the Project, within the applicable regulatory and performance framework. Specifically the work entailed:

- Verifying to what extent aspects of the Project are in accordance with applicable regulatory and performance framework, and industry best practice; and
- Reviewing whether there is a sufficient capacity / management system in place to monitor and address the environmental and social issues identified.

The review took place in August/ September 2012 and comprised the following.

- **Meetings with Suzano management team and information review:** meetings to understand the history of each gap identified during the E&S due diligence and ECAs visit and review of existing information to understand the project and gaps;
- **Visit to Maranhão:** consisting of a site visit to *Itaqui* Port and *Maranhão* project in *Imperatriz*. Meetings with relevant individuals, to discuss the environmental and social issues, and additional data collection; and
- **Assessment and Reporting:** including a review of the existing information against relevant environmental and social performance standards; development of an action plan for meeting relevant standards, and preparation of an Environmental and Social Gap Analysis Report (this report).

Note that this review was neither an audit (which would entail exhaustive evaluation against a defined standard) nor an environmental impact assessment (which would aim at providing a detailed evaluation of the project's impacts on the natural and human environment). Rather, it was an evaluation of the existing gaps and associated information.

The following ERM team attended to this assessment:

- Carolina Retamal – Partner in Charge of the project;
- Leonardo Gonçalves – Environmental and Health & Safety Consultant;
- Jose Lembo – Senior Environmental Consultant;
- Helena Capparelli – Environmental Consultant;
- Fernanda Sampaio – Environmental Consultant; and
- Lidia Rebouças – Senior Social Consultant.

A site visit to *Maranhão* was carried out from 20th August – 24th August 2012 by Helena Capparelli (Environmental consultant). The facilities visited and the activities undertaken are presented in Table 2.1.

Table 2.1 *Schedule of Site Visit and Activities*

Date	Activities undertaken
20.08.12	<ul style="list-style-type: none"> • Visit to <i>Itaqui</i> Port in <i>São Luis-MA</i> • Conference call between Ana Paula Soares (Suzano Social specialist) and Lidia Rebouças (ERM – Social consultant)
21.08.12	<ul style="list-style-type: none"> • Meeting with Suzano team about <i>Bacaba</i> Community + Public Consultation, grievance mechanism, communication, consultation and relationship with nearby communities • Traditional communities: <i>quilombolas</i>, <i>babaçu</i> gatherers/ coconut breakers and compensation plans for loss of production and impacts in natural resources. • Archaeological patrimony and results of archaeological studies and management programs
22.08.12	<ul style="list-style-type: none"> • Visit to the industrial site in <i>Imperatriz-MA</i> • Visit to <i>Bacaba</i> Community • Health and Safety - UNF • Trade Union and Manpower origin. • Communication • Environmental Management Plan
23.08.12	<ul style="list-style-type: none"> • Environmental Management Procedures • Agrochemical products management and training; Pesticide Management Plan • Cumulative impacts, waste/ air emissions, alternative locations, biodiversity, critical habitats, hydrological modelling, ecosystem services.

3

GAP ANALYSIS RESULTS

This section presents the results of the gap analysis. ERM used as basis for the assessment the excel spreadsheet report developed by *Suzano* and the ECAs that contains the gaps identified during the due diligence and ECA's site visit.

As part of this Environmental and Social review, ERM prepared a preliminary Action Plan for each gap. The gaps identified during the due diligence and ECA's visit were divided according to each Performance Standards they are related to, in order to better organize the issues.

Throughout this review, the gaps were compared to relevant environmental and social performance standards. Key issues and risks were identified where:

- Existing gaps between current or planned activities and national law and/or the IFC Performance Standard requirements;
- Proposed mitigation or management measures are or would not be effective;
- Non-conformance is identified; and
- Any other significant risks exist.

In these cases, recommendations are proposed to reduce or eliminate the risk. These measures form the basis of an Environmental and Social Action Plan (ESAP) for the Project, which is presented in Annex A.

Results of Environmental and Social Review

The gaps identified during the due diligence and ECA's visit was divided according to each Performance Standards they are related to, in order to better organize the issues.

In addition, the gaps were assessed according to their themes gathered by item/ issue. For example, public consultation issues are found in gaps 5, 10 and 35 and were assessed together.

After ERM's assessment of each theme, a conclusion is provided. In some cases a recommendation is necessary to fulfill the gap and therefore clarified in an Action Plan (Annex A).

PS 1 - Assessment and Management of Environmental and Social Risks and Impacts Systems

- *Itaqui Port (Gaps 1A, 1B and 1D)*

ECA's Requirements:

1 A and B - No Environmental and Social Impact Assessment was performed for the warehouse that will be constructed at Itaqui port.

1 D- Questions marks on the berth expansion in the harbour, e.g. could the expansion be considered as an "associated infrastructure"? Will Suzano's part on

an already existing berth or will it be constructed in the future? Will the Suzano loading area be on the existing berth? How big share will Suzano's part of the berth take in percentages from the total?

ERM Assessment:

As part of the project's infrastructure of project *Maranhão*, *Suzano* will construct a warehouse for storage of pulp in the port of *Itaqui* in an area currently managed by EMAP (*Maranhão* Port Administration Authority).

As reported by *Suzano*, the pulp will be transported by railway to the warehouse, where it will be stored. From the warehouse to the loading berth, the transport will be accomplished by truck. *Suzano* will use existing pier facilities at the port and no additional structures will be built.

Suzano will initially operate on an existing berth of EMAP. Eventually, *Suzano* will operate in another berth that will be constructed by EMAP, as part of the port development plan. The future berth will not be constructed exclusively for *Suzano*, which will reportedly use 30% of the berth's capacity. ERM understands that the berth should not be considered an Associated Facility. It is noteworthy that the Port of *Itaqui* has currently 6 berths and there are plans for the operation of 16 berths in the future.

For licensing, the agency requested a RCA (Environmental Control Report) / PCA (Environmental Control Plan), given that the project will be installed in an existing port complex and is considered of low impact.

The licensing process was conducted on behalf of EMAP (the Preliminary Permit and Installation Permit are already granted in the name of EMAP), but the preparation of environmental documents was developed along with *Suzano* with the participation of EMAP. The management of the PCA will be performed by *Suzano*.

The RCA / PCA was approved by SEMA (Environmental State Agency) and licenses granted, however the work was not initiated yet due to the ongoing bidding process that will allow *Suzano* to lease the area that belongs to *Maranhão* State (see item 1C, Performance Standard 05 in which ERM technically analyzed the existing information).

The vegetation suppression and earthworks are planned to start on October 10th 2012. EMAP was responsible for hiring the consultancy companies for these activities and *Suzano* will be responsible, in cost terms, only during the infrastructure installation.

ERM considers that the RCA has identified environmental impacts adequately, but disregarded the social impact related to some families that were located at the area, the study only mentioned it in the diagnosis. (Pages 216-218 RCA).

Regarding vegetation suppression, EMAP / *Suzano* developed a forest inventory to request authorization for vegetal suppression. After the analysis, the permit # 00086/2012 was issued for the suppression of 23.27 ha to EMAP by the SEMA on August 3, 2012.

The following specific conditions were determined in this Authorization: It is not allowed:

- The use of herbicides and their derivatives;
- Dispose of material originated from vegetation in landfills and water sources;
- Use of fire to eliminate vegetation, as well as burning material originated from the deforestation;
- The suppression activities should be fully accompanied by qualified technical team;
- The cut length of the logs should enable the best possible use of the material; and
- Report to SEMA the end of the suppression activity, by presenting the final report, within 30 days after activity completion, including photographic and narrative report, quantifying the wood material generated and discrimination of destination given detailing up receivers of this material and their quantifications.

SEMA has issued Installation permit which also present requirements to be fulfilled prior to the application for the Operating Permit.

Suzano, as part of its management system, will implement the environmental programs contained in the PBA (Basic Environmental Plan) as well as the Technical Requirements of the environmental permits and authorization for vegetation suppression.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraphs 7 and 8). No further actions deemed necessary.

- ***Cumulative Impacts – Health & Safety and Assessment of adverse impacts (Gaps 4A, 4B, 9A and 12A) – Infrastructure.***

ECA's Requirements:

- 4 A- Assessment of risks and hazards - complement the existing Assessment.
- 4 B- Cumulative impact analysis.
- 9 A- Provide a plan for implementing a risk analysis/managements of these risks; details about the consultant that will be hired in 2012.
- 12 A- Assessment of adverse impacts associated with particular ambient conditions, impacts from construction and operation of each infrastructure component

ERM Assessment:

Although Brazilian requirements for impacts and risks evaluation were accomplished, additional information must be provided in order to accomplish also IFC Performance Standard 01.

The Environmental Studies presented an evaluation of the land use and occupation in the area of Railway, Roadway and Transmission Line implementation, as well as identified areas of environmental preservation and communities. In this way, important information concerning cumulative impacts is already presented in the Environmental Studies. However, for evaluation of cumulative impacts, all environmental impacts should be reassessed, considering the impacts already identified in the studies and other potential cumulative and synergic impacts.

Taking into account all potential risks, some of them were not considered in the environmental studies, especially those related to the local population.

Cumulative impacts must be assessed together with all potential risks for local population. *Suzano* should consider, at least, assessment of flood risk, electromagnetic radiation, noise from road, as well as the adverse impacts associated with particular ambient conditions. Only the operation phase must be assessed considering that between the assessment and the construction phase there will not be enough time.

The Environmental Studies have already presented some quantification analysis for electromagnetic radiation and noise from road, but this information should be reassessed considering other existing, planned or reasonably defined developments and its direct effects on local population.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraphs 8 and 9).

In order to fulfill IFC PS 01, *Suzano* must hire a consultancy company to develop a Cumulative Impact Assessment (CIA) of the infrastructure project, considering the following:

- Existing, planned or reasonably defined developments at the time the risks and impacts identification process is conducted;
- Propose mitigating measures for those risks and impacts in a manner commensurate with *Suzano's* control and influence over the third parties, and with due regard to conflict of interest;
- Adequate methodology to identify cumulative risks and impacts for operation phase that should include a qualitative analysis of the impacts or a justification for not performing it; and
- Assessment of potential risks for local population, at least, assessment of flood risk, electromagnetic radiation, noise from road, as well as the adverse impacts associated with particular ambient conditions;

Refer to ESAP table in Annex A.

- ***Cumulative Impacts (Gaps 32A and 33A) – Forest Operations***

ECA's Requirements:

32 A- The annex 7.01 and item 7.2 of the Porto Franco EIA doesn't show the interrelationship between legal, environmental, social and operational impacts of the project. Suzano mentions a land use and occupation map that identifies the preservation, plantation and infrastructure areas (micro planning and PLIMA.

33 A- Provide info about additional risks for local population (as risks derived from transportation of timber and transport of dangerous goods in major), other potentially significant risks, and a matrix that describes inter-related impacts that is presented in the EIA and the Complementary Assessment.

ERM Assessment:

Considering the plantation activities of *Suzano*, Environmental Studies were developed for specific areas in *Tocantins* and *Maranhão*. Additionally, plantation areas located in *Pará* state are under responsibility of *Vale S.A.*

Regarding the EIA developed for *Maranhão* forest activities, a complementary study was requested by the *Maranhão* Public Prosecutor through the Letter nº 010/2010 issued on June 2, 2010. The Public Prosecutor formally required a cumulative impact assessment for *Suzano's* *Maranhão* forest activities.

Suzano answered the questions through Letter nº 023/2010 issued on August 23, 2010 and submitted to the Environmental State Agency and the Public

Prosecutor a complementary study that included a cumulative impact assessment. The complementary study was developed by company STCP *Engenharia de Projetos Ltda.*

On August 10, 2011, the *Maranhão* Public Prosecutor issued the Letter nº 104/2011 informing that all questions were clarified.

ERM verified the cumulative impacts assessment which identified other developments in the region (a hydroelectric plant, a bridge over *Tocantins* River, a railway and a gas pipeline), a methodology to assess cumulative and synergic impacts, description of impacts and its contribution to intensify or not positive/negative impacts, and proposal of mitigating measures.

Main cumulative and synergistic impacts identified are shown in table below:

Cumulative and Synergistic Impacts	Other enterprises that contribute to this impact*	Assessment
Synergistic impacts on air quality	<ul style="list-style-type: none"> Hydroelectric plant: change in climate conditions; Bridge over <i>Tocantins</i> River: change in air quality; Norte-Sul Railway: change in air quality due to emissions and noise. 	Synergistic relation of the impacts intensify the negative effects
Synergistic impacts on landscape	<ul style="list-style-type: none"> Hydroelectric plant: vegetation suppression for construction of the reservoir and infrastructure; Bridge over <i>Tocantins</i> River: Permanent Preservation Area intervention Norte-Sul Railway: vegetation suppression Gas pipeline: vegetation suppression 	Synergistic relation of the impacts intensify the negative effects
Synergistic impacts on hydric resources	<ul style="list-style-type: none"> Hydroelectric plant: instability and potential erosion of embankments and marginal slopes; Intensification of the process of sedimentation upstream of the dam, changes in water quality with the reservoir formation; Bridge over <i>Tocantins</i> River: river siltation Norte-Sul Railway: risk of pollution; erosive processes generation Gas pipeline: erosive processes induction. 	Synergistic relation of the impacts intensify the negative effects

Cumulative and Synergistic Impacts	Other enterprises that contribute to this impact*	Assessment
Synergistic impacts on regional biodiversity	<ul style="list-style-type: none"> Hydroelectric plant: vegetation suppression; loss of habitats Bridge over <i>Tocantins</i> River: interference with terrestrial fauna; Permanent Preservation Area intervention Norte-Sul Railway: vegetation suppression; fauna scaring Gas pipeline: vegetation suppression 	Part of the synergistic relation of the impacts intensify the negative effects and part attenuates the negative effects
Synergistic impacts on population livelihood	<ul style="list-style-type: none"> Hydroelectric plant: interference in rural population; loss of agricultural areas Bridge over <i>Tocantins</i> River: temporary migration; change in community routine Norte-Sul Railway: deterioration of life quality Gas pipeline: Increase in social vulnerability; loss of agriculture areas 	Synergistic relation of the impacts intensify the negative effects
Synergistic impacts on employment	<ul style="list-style-type: none"> Hydroelectric plant: provision of temporary jobs Bridge over <i>Tocantins</i> River: generation of direct impacts Norte-Sul Railway: generation of direct impacts Gas pipeline: incentive to new industries development 	Part of the synergistic relation of the impacts intensify the positive effects and part attenuates the negative effects
Synergistic impacts on regional infrastructure and social public policies	<ul style="list-style-type: none"> Hydroelectric plant: increase in tax collection Bridge over <i>Tocantins</i> River: increase in tax collection Gas pipeline: increase in tax collection 	Synergistic relation of the impacts intensify the positive effects

* Examples of impacts of each enterprise were provided.

ERM considers that the study evaluated all possible cumulative impacts and had an adequate methodology. However, regarding the mitigating measures, the study presented the actions that *Suzano* will take to minimize their impacts and listed the actions that will or should be taken by the government or the other companies. No measures were taken to influence the identified stakeholders in order to promote a better mitigation of the impacts as required by IFC Performance Standards. For negative social impacts (change in the livelihood of the population), the measures described include an integration between *Suzano's* programs and other companies in order to minimize the impact. *Suzano* showed evidence that social programs, such as Health Education, Social communication and Community Agriculture were performed in integration with other companies (hydroelectric plant and railway).

No cumulative impact assessment was developed for *Tocantins* Forest activities.

In addition, potential risks for local population (e.g. risks derived from transportation of timber and transport of hazardous materials in major and minor roads that pass through local communities) and other potentially significant risks (e.g. impact of harvesting activities) have not been fully assessed and preventive/mitigation measures for certain risks have not been identified for *Maranhão* and *Tocantins* Projects (e.g. schedule harvesting activities to avoid wet season or breeding and nesting seasons for endangered species, justification of the choice of logging system to minimize soil disturbance, planning and design of roads to prevent and control impacts).

A matrix which describes inter-related impacts was included in the *Tocantins* EIA. For *Maranhão* forest project an inter-related impacts assessment was provided in EIA, and ERM considers that contains the relevant information.

The matrix of identification of social impacts for *Maranhão* has been provided for ERM analysis. It contains the identification of impacts such as change of scenery, loss of traditional access routes, damage to the property, microclimate changes, noise, dust, lightning, increase in the truck traffic, traffic accidents, problems of electricity supply, damage to public property and land conflicts. Therefore, in order to cover also cumulative impacts in the matrix there should be included some questions such as impacts on health, security, exposure to water-borne, and vector-borne diseases, and communicable diseases that could result from project activities; impacts related to access of natural resources; exposure to hazardous materials and substances that may be released by the project, or control community exposure to pesticides; and impacts related to transportation and disposal of hazardous wastes.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraphs 8 and 9).

- ***Tocantins Forest Activities***

In order to fulfill IFC PS 01, *Suzano* must hire a consultancy company to develop a Cumulative Impact Assessment (CIA) of the forest activities in *Tocantins*, considering the following:

- Existing, planned or reasonably defined developments at the time the risks and impacts identification process is conducted;
- Propose mitigating measures for those risks and impacts in a manner commensurate with *Suzano's* control and influence over the third parties, and with due regard to conflict of interest;

- Adequate methodology to identify cumulative risks and impacts for operation phase that should include a qualitative analysis of the impacts or a justification for not performing it; and
- The matrix of identification of social impacts must be reviewed in order to consider impacts on health, security, exposure to water-borne, and vector-borne diseases, and communicable diseases that could result from project activities; impacts related to access of natural resources; exposure to hazardous materials and substances that may be released by the project, or control community exposure to pesticides; impacts related to transportation and disposal of hazardous wastes; and impacts to health, safety and security of communities.
- **Maranhão Forest Activities**

Regarding mitigating measures developed for the cumulative impacts assessment and in order to fulfill IFC PS 01, *Suzano* must include measures to influence the identified stakeholders in order to promote a better mitigation of the impacts as required by international standards. This can be achieved by meetings with government agencies and other companies, where *Suzano* demonstrate influence on others to minimize negative cumulative impacts.

- The matrix of identification of social impacts must be reviewed in order to consider impacts on health, security, exposure to water-borne, and vector-borne diseases, and communicable diseases that could result from project activities; impacts related to access of natural resources; exposure to hazardous materials and substances that may be released by the project, or control community exposure to pesticides; impacts related to transportation and disposal of hazardous wastes; and impacts to health, safety and security of communities.

Refer to ESAP table in Annex A.

- **Public Consultations (Gaps 5A, 5B, 5C, 10C, 40A, and 48A)**

ECA's Requirements:

- 5 A- Info about the Public hearings that were conducted in April (Road / Transmission Line) and May, 2011(railway): stakeholders mailing, the invitations, minute of the Public Hearings, book from Clara Consulting
- 5 B- Info about the ongoing meetings with the communities and the main stakeholders: Who is invited? How are the community and the stakeholders invited? How are the community and the stakeholders able to communicate their thoughts? In what way are the comments taken in consideration for the project development?

5 C- Documentations from the meetings. What has been the output of the public hearings that have taken place?

10 C- Evidences of the public hearing for transmission lines.

40 A- Provide evidences of the public consultation with the communities and present them to the consultant

48 A- Provide an SEP for industrial site

ERM Assessment:

Suzano has a range of tools to promote public consultation with the affected communities and main stakeholders:

- a) records of the public hearings for the road held in the municipality of *Imperatriz* on July 12th, 2011 as well as public hearings concerning the railway held in *Imperatriz* and *João Lisboa* municipalities on July 13th and 14th, 2011. No public hearings were held for the transmission line construction once it's not mandatory for the Brazilian legislation for this type of license, limited to a Simplified Environmental Study – EAS. For Brazilian legislation due to the licensing process all the necessary consultations have been undertaken;
- b) records of public meetings disclosure of information with the affected communities of the Transmission Line were also provided. It is worth to mention that a formal public hearing was not required as part of the licensing process. ERM verified evidences of 3 public meetings with the *Vila Cafeteira*, *Ouro Verde* and *Jardim Sumaré* communities in the end of 2011. For the Brazilian and IFC Performance Standards requirements, all the necessary consultations have been undertaken although there was not a formal public hearing required as part of the licensing process;
- c) “Social Dialogs” which consist of public meetings and consultation with households of the transmission line influence area;
- d) grievance mechanism provided through an electronic system operated by the office in Suzano-SP called Suzano Answers - 0800 774 7440 (free call) and the email address suzanoresponde@suzano.com.br;
- e) “Suzano in the field” (Suzano em campo), which consists of a spreadsheet to be filled by a **Suzano** employee whenever is approached by any stakeholder and concern; and
- f) assessment of concerns, manifestations and consultations are input electronically into the Stakeholders System – SISPART which tracks responsibilities, time for feedback, while the effectiveness of resolutions

are analyzed by a council. Operating as an intranet, the SISPART has been recording stakeholder's manifestations since January 2010.

Also, as part of the Environmental Basic Plan for the industrial and forest installation licenses, *Suzano* has a communication plan that aims to balance stakeholder's expectations and commitments made by the company; spread of information concerning positive and negative impacts of the project and promote interaction between *Suzano* and its stakeholders.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraphs 25 to 33).

In order to fulfill IFC PS01, *Suzano* must integrate all its corporate tools of consultation to stakeholders, grievance mechanism and public disclosure of information and include them into its Corporate Management System Manual (Management System Manual MQ.00.00001) that is being reviewed. The Management System Manual should be improved to incorporate the social engagement and consultation measures that are currently adopted in order to achieve an ESMS for *Maranhão* Unit.

Existing consultation procedures should be included inside the Stakeholder Engagement procedure that will be developed as part of the ESMS of *Maranhão* Unit. This procedure will explain how consultation activities are organized and its objective. Refer to gap 7A.

Refer to ESAP table in Annex A.

- ***ESMS - E&S Assessment & Management System (Gaps 6A, 6B, 6C, 6D and 46A)***

ECA's Requirements:

6 A - *Develop an ESMS: join all documents into an ESMS (see requirements).*

6 B - *Provide a general organizational chart that explains how environmental and social management systems are integrated.*

6 C - *Describe how the environmental and social strategy fits into the company's overall strategies.*

6 D - *Confirm to us that your policy documents/management systems are supported by the management.*

46 A - *Provide an ESMP covering the whole project*

ERM Assessment:

Suzano intends to develop and implement a management system based on ISO 9001, 14001 and OHSAS 18001 in Project *Maranhão*. According to information obtained during an interview with the responsible team for the implementation of certifications, *Suzano* intends to obtain ISO and OHSAS certification 1 year after the startup of the plant operation that will be in 2014.

Suzano has no intention to certify the Project *Maranhão* in SA 8000 (Social Accountability), as it understands that FSC certification is already under implementation for forestry activities and appropriately ensures labor practices, Human Resources practices and Social Responsibility.

Suzano has developed an organizational structure for the Project *Maranhão* and has assigned environmental and social responsibilities. There are teams responsible for managing the various segments of the project, for example, forest operations, industries, and infrastructure.

Suzano has environmental, health & safety and social responsibility policies that are signed by the president of the company and applies to all employees of the group and not only to the Project *Maranhão*.

ERM understands that during the implementation phase of the project, the company has independent teams working on each part of the project (construction, environmental licensing or any other activity). *Suzano* informed that the HSE Corporate Management System Manual is currently under revision and will be used as basis for the *Maranhão* project management system that adopts the concepts of standards ISO 9001, ISO 14001 and OHSAS 18001.

ERM also reviewed the HSE Corporate Management System Manual (MQ.00.00001) and considers that it contains most of the information required by the IFC Performance Standard 01, such as:

- Policy;
- Identification of risks and impacts;
- Management Programs;
- Organizational structure of the project, for the construction and the operational phase;
- Emergency Preparedness and Response; and
- Monitoring and review.

ERM identified that only one item is not included in the Corporate Management System Manual, which is the Stakeholder Engagement.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraph 5).

In order to fulfill IFC PS01, *Suzano* must review the HSE Corporate Management System Manual and include information about Stakeholder Engagement plan.

The management system manual must explain the different procedures/ structure for industrial, forest operations and infrastructure of the project.

Refer to ESAP table in Annex A.

- **SEP - Stakeholder Engagement Plan(Gap 7A)**

ECA's Requirements:

7 A- Provide ppt regarding the Stakeholder Engagement Plan, including public consultations, grievance mechanisms for affected communities

ERM Assessment:

During the visit, *Suzano* provided a Social and Environmental Stakeholder Engagement and Communication Flow (powerpoint file) that has evidences of the tools of relationship and engagement with the affected and surrounding communities. As assessed previously in the gap 5, there are a range of consultation, grievance mechanism and communication channels, as well. There are also many specific policies to deal with the stakeholder's engagement such as:

- a) IT.00.00002 - Social Dialogues,
- b) PPG.00.00077 - Stakeholders Communication;
- c) PR.00.00004[1] - Social Responsibility;
- d) PR.03.00023 - External Grievance Treatment;
- e) PR.05.00007 - External Grievance Attendance;
- f) PR.06.00056 - Communication Management Flux to the Forest Project Surrounding Communities by the *Suzano* Book; and
- g) PR.06.00055 - Communication Management Flow to the Forest Project Surrounding Communities by the Farms, among others.

There are evidences that *Suzano* promotes public decision forums, as the Committee *Suzano*, weekly climate meetings, and working group with the municipalities and public authorities. In conclusion, there are a range of engagement procedures to the stakeholders and affected communities that are evidences of a corporate policy in course.

Evidences of community consultations and application of the social tools have been provided for analysis. These tools such as “Suzano on the field”, communication channels provided by phone or internet are able to identify and address communities’ demands towards *Suzano*. Therefore, *Suzano* is able to analyze the demands and develop an action plan. The system in which communities demands are compiled is well organized and reports can easily be developed to show communities’ requests and how these have been addressed, with responsible staff and time frame for completion.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraphs 25 to 33).

In order to fulfill IFC PS01, *Suzano* must review and assess its tools of relationship and engagement with the affected and surrounding communities in order to consolidate them into a Stakeholder Engagement Plan, as part of the ESMS for *Maranhão* Unit. Issues and concerns raised during engagement should be considered carefully and translated into actions and approaches to ESMS. The plan should be scaled to the *Suzano*’s *Maranhão* Project (including the pulp mill, logistics infrastructure and forestry operations) risks and impacts and development stage, and should be tailored to the characteristics and interests of the affected communities of each asset.

In order to achieve a stakeholder engagement required by IFC PS01, *Suzano* should create a procedure explaining how all existing tools that fulfill the content of an SEP are integrated.

The engagement process should also support the update of risks and impacts during operation of the project to affected community. Monitoring results, information about risks and impacts identified and the mitigation measures should be periodically disclosed to the affected community, at least annually, as long as the specific items are open in the management program.

Therefore, the existing communication chapter of the Corporate Management System Manual of *Suzano* should be one of the items of the SEP inside the ESMS.

Refer to ESAP table in Annex A.

- ***Bacaba Community / SEP - Stakeholder Engagement Plan (Gap 7B)***

ECA's Requirements:

7 B- *Specific schedule for the relocation of the Bacaba community.*

11 B- *Presentations about Bacaba community.*

25 A- *Describe how the Bacaba community was involved in the consultation process.*

ERM Assessment:

Concerning to the Social Report provided by *Suzano* in September 2011, *Bacaba* community has been engaged into a range of participatory activities to conduct the baseline, analyze the resettlement options, and provide inputs concerning the layout of the area and further scenarios. Some of the results of this consultation process involving interviews with 70 people who are living in 20 houses in *Bacaba* community show:

- a) 100% of them know *Suzano* and its activities; and
- b) 40% of them agree to relocation and believe it will be favorable, while 30% have some concerns regarding the infrastructure and services that will be available, 15% have not been in favor or against the resettlement. Besides, 81% of the *Bacaba* households believe that direct contacts with the company representative as well as periodic public meetings are the best channel of communication and consultation.

Evidences of such consultation processes have been provided in pictures of activities, public presentation, results of interviews and report format in Socioeconomic Diagnosis Report, conducted by company *Planave* and company *Comunicarte* Consortium in February 2012, as well as the Final Report of Community *Bacaba* Participative Diagnoses, conducted by *Comunicarte* in August 2012. The community engagement and grievance mechanisms available are in conformance to paragraphs 10 and 11 of the IFC PS 5.

ERM also assessed the document "Check List Atividades Relocação *Bacaba*" (Check List of *Bacaba* Relocation Activities) developed by *Comunicarte*, which provides detailed information of activities that were performed and future activities, time frame for completion and responsibilities. According to the document, relocation of the community will start in November 2012. ERM considers that relocation activities described in this document are in line with PS 05.

Conclusion:

This gap has been benchmarked against IFC PS 05 (paragraph 10).

In order to fulfill IFC PS05, *Suzano* to provide a periodic update and evidences of the relocation activities of the *Bacaba* Community described in the document "Check List Atividades Relocação *Bacaba*".

Refer to ESAP table in Annex A- see PS 05.

• **Transmission Line (Gaps 10A and 10B)**

ECA's Requirements:

10 A - Provide a map of the planned localization for the transmission line.

10 B- Provide a description of the associated Environment & Social impacts of the Transmission line

ERM Assessment:

The location map of the 230 kV Transmission line is included in the Simplified Environmental Study- EAS developed by *Pöyry Tecnologia Ltda* on April 8, 2011. This document was submitted to the environmental agency in order to obtain its environmental preliminary license.

Chapter III of the EAS - Simplified Environmental Study provides description of the associated environmental and social impacts including mitigation and compensatory measures.

Main impacts described in the EAS are presented in table below:

Planning Phase	Installation Phase	Operation Phase
<ul style="list-style-type: none">- Generation of expectation in the population;- Enhancement of rural property market;- Development of the project not considering the environmental variable;• Not developing the project	<ul style="list-style-type: none">- Change in the topography- Increase in the susceptibility to land erosion and slip- Change in the soil, groundwater and surface water quality- Change in air quality- Change in the noise level of the region- Change in the landscape- Suppression of native vegetation and terrestrial habitat- Interference in fauna- Increase in the risk of trampling of animals	<ul style="list-style-type: none">- Change in the soil, groundwater and surface water quality- Increase in accidents with birds- Vegetation suppression on transmission line track- Interference in fauna- Risk of electrical accident- Increase in tax collection- Increase in the supply of electricity in the region- Effects of electric and magnetic fields on the quality of the environment and people's lives

Planning Phase	Installation Phase	Operation Phase
	<ul style="list-style-type: none"> - Generation of direct and indirect temporary jobs - Increase in risk of accidents - Interference in urban infrastructure - Stimulation of local economy - Change in the archaeological heritage - Demobilization of labor - Increase in tax collection - Sectioning of farms - Change in existing cultures 	<ul style="list-style-type: none"> - Disturbance of the population due to noise and radio interference

Main environmental programs for the transmission line are:

- Construction Site Management Program;
- Social Communication Program;
- Environmental Education Program;
- Program for Waste and Wastewater Management Program for the Construction Site;
- Global Environmental Management Plan;
- Interference Mitigation Program in Road System;
- Program for Archaeological Prospection and Rescue;
- Noise Monitoring Program;
- Surface Water Monitoring Program;
- Air Pollution Control and Monitoring Program;
- Fauna Protection and Monitoring Program;
- Vehicles and Equipment Maintenance Program and Spent Oil Disposal Program;
- Degraded Areas Recovery Program; and
- Compensation / Resettlement / Expropriation Program.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraph 7).

No further recommendations deemed necessary.

- *Transmission line (Gap 47A)*

ECA's Requirements:

47 A- Description of the transmission line construction in detail.

ERM Assessment:

Transmission Line characterization and main construction information were presented in its Simplified Environmental Study - EAS, April, 2011.

Currently, *Suzano* has submitted request for Installation License and therefore no construction works have been initiated.

Further construction details will be presented on engineering executive project that currently has not been developed yet.

Reportedly, *Suzano* will use the same procedures engaged for the industrial and forestry operations for the infrastructure units.

ERM understands that for environmental impact assessment purposes, the information presented on the EAS is sufficient.

ERM assessed the available information regarding the transmission line and considering the current status of the environmental permitting process. ERM considers that *Suzano* has identified risks and impacts for the transmission line, and established environmental and social management programs according to requirements of the environmental agency. *Suzano* has submitted request for Environmental Installation License and therefore no construction works have been initiated. The planned activities for the construction and operation described in the environmental study were assessed and considered in line with IFC PS. The environmental and social programs established for the transmission line covers the following IFC PS: 1, 2, 3, 4, 5, 6, and 8, as described below:

- Construction Site Management Program (IFC PS02 – occupational health and safety);
- Social Communication Program (IFC PS01);
- Environmental Education Program (IFC PS01);

- Program for Waste and Wastewater Management Program for the Construction Site (IFC PS03);
- Global Environmental Management Plan (IFC PS03);
- Interference Mitigation Program in Road System (IFC PS04);
- Program for Archaeological Prospection and Rescue (IFC PS08);
- Noise Monitoring Program (IFC PS03);
- Surface Water Monitoring Program (IFC PS03);
- Air Pollution Control and Monitoring Program (IFC PS03);
- Fauna Protection and Monitoring Program (IFC PS06);
- Vehicles and Equipment Maintenance Program and Spent Oil Disposal Program (IFC PS03);
- Degraded Areas Recovery Program (IFC PS06); and
- Compensation / Resettlement / Expropriation Program (IFC PS05).

Conclusion:

This gap has been benchmarked against IFC PS 01, 02, 03, 04, 05, 06 and 08.

Suzano has to ensure that environmental and social management procedures/ programs are applied upon construction of the transmission line. Reports of management plans will be developed and submitted for environmental agency as part of the licensing process.

- ***Transmission line (Gap 47B)***

ECA's Requirements:

47 B- Lack of information on E&S impacts for the transmission line.

ERM Assessment:

Transmission Line impacts identification and assessment were presented in the Simplified Environmental Study - EAS, April, 2011.

ERM considers that E&S impacts were properly identified in the development of the EAS (refer to Gap 10A and 10B for list of impacts and environmental programs).

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraph 7).

No further recommendations deemed necessary.

- *Bacaba community (Gaps 11A, 11B and 25A)*

ECA's Requirements:

11 A- Report about the community expectations, social environmental inventory, plan for relocation, timeframe, description of the whole relocation process, its current stage, clarification of who is responsible for what.

ERM Assessment:

Concerning the Social Report provided by *Suzano* in September 2012, the relocation of *Bacaba* is a physical resettlement and a full voluntary process that was conducted with several consultation and engagement activities. The relocation is not a result of an Adjustment Conduct Term or part of the licensing process of the *Suzanos' Maranhão* new unit. The program has been conducted in partnership with other public agencies such as *Imperatriz* municipality, Public Defender, State Municipal Attorney. Considering the profile of the community whose income activities are based in informal urban services such as masons, carpenters, maids, drivers, the use of land is more for residential than agricultural proposes. In the context of *Bacaba*, the physical resettlement is also responsibility of the government, and *Suzano* is collaborating with the land acquisition and housing services to achieve outcomes that are consistent with the Performance Standard 5.

The planning and activities for *Bacaba* relocation that are already concluded includes:

- a) Cultural and Socioeconomic Survey, Social Inventory of *Bacaba* Community concluded in June of 2011, Households Registration and Socioeconomic Survey of Expectations (questionnaires, field research) and Feasibility Study Environmental - EVA, locational analysis of alternatives) concluded in February 2012, have evidences of the compliance with the paragraph 8 of PS 5;
- b) Participatory Rapid Diagnosis - DRP Community *Bacaba* and Meetings with Community *Bacaba* for submitting Relocation Program have evidences of the compliance with the paragraphs 9 to 11 of PS 5;
- c) Socioeconomic Diagnosis Report, conducted by *Planave* and *Comunicarte* Consortium in February of 2012, Resettlement Action Plan (RAP provided by *Comunicarte*) and Social Report provided by *Suzano* in September 2012 have evidences of the compliance with the paragraphs 19 to 29 of PS 5;

- d) Timeframe showing the conclusion of the surveys, participatory and consultation activities by September 2012. The next steps are signing of Agreement Term between stakeholders and preparatory meetings for households move. The relocation of *Bacaba* community to the host area is planned to be concluded by December 2012, according to Social Report provided by *Suzano* in September 2012, and it shows evidences of the compliance with the paragraphs 30 to 32 of PS 5;
- e) Identification of affected people and impacts; description of regulated activities, supplemental programs to restore livelihoods, financial and implementation responsibilities between *Suzano* and *Imperatriz* municipality are described in the *Bacaba* Relocation Plan provided by *Comunicarte* in August of 2012 showing evidences of compliance with the paragraph 31 of PS 5; and
- f) Intention Term signed between *Imperatriz* municipality and *Suzano* establishes the responsibilities of each one during the resettlement program. According to Social Report provided by *Suzano* in September 2012, health, education, social assistance, agriculture programs, social assistance, security, urban services such as road, water, energy and public lighting will be in charge of the *Imperatriz* municipality. *Suzano* will be responsible for the donation of a 50m² house and 500m² spot land for each of the 20 families, as well as, execution and implementation of the Resettlement Action Plan, construction of schools, health care units, church, leisure equipment's, well water, psychological support and development of community programs.

Conclusion:

This gap has been benchmarked against IFC PS 05 (paragraphs 8 to 29).

In order to fulfill IFC PS05, *Suzano* must provide a periodic update and evidences of the relocation activities of the *Bacaba* Community described in the document "Check List Atividades Relocação *Bacaba*". In particular, the following should be monitored: a) the physical progress of housing construction; b) disbursement of compensation (land spot and house); c) the effectiveness of engagement processes, including complaints and grievances and the acceptability of adjudications and redress measures; d) the extent to which displaced persons have settled in as planned; e) the level of community satisfaction (among the resettled and host community), f) the effectiveness of restoration measures; g) progress in handing over infrastructure to relevant service providers and authorities; h) key risks going forward (and development of strategies for managing these); i) the success of the resettlement.

Refer to ESAP table in Annex A- see PS 05.

- *Analysis of alternative locations for land acquisition based on social aspects(Gaps 31A, 31B, 31C and 31D) – Forest Operations*

ECA's Requirements:

31 A- *Provide the analysis about the licensing process difficulty levels, presence of environmental/social conflicts, manpower availability for the areas for MA/TO.*

31 B- *Provide assessment to identify the priority areas for biodiversity, areas not included in buffer zones, indigenous lands, parks and biological reserves.*

31 C- *Provide analysis about the manpower origin.*

31 D- *Provide information about social criteria for area selection for Tocantins (their main concern is the lack of social criteria in the TO EIA.*

ERM Assessment:

The Environmental Studies for Forest Operations did not present an analysis of alternative locations based on social aspects. Currently, **Suzano** has a management plan for social development. After acquiring the land, a social inventory is performed. Afterwards a matrix of social impact is developed, from where an action plan is set. Areas of high conservation and social value are then identified and mapped. After disclosure of **Suzano**, appropriate communications are made, and the Instrument Characterization of Traditional Communities is set.

Suzano has also developed two different reports for identifying areas of environmental concern: Plan for Biodiversity Conservation – *Maranhão* and *Tocantins* (The Nature Conservancy, 2012) and Identification of Forests of High Conservation Value – *Maranhão*.

Suzano has presented a PowerPoint presentation containing explanation of a system called Stakeholder Relationship Management – SRM developed by a third party consultant company named SEI – *Sustentabilidade, Estratégia e Inovação* . According to the information in this document, the following social interest themes were included in the assessment:

1. Qualification of manpower: Perceptions of need and responsibility for training of technical manpower in place to provide employability in the project and beyond;
2. Local Infrastructure: Perception about the need for investment in infrastructure (sanitation, electricity, paving, trash, telephone) and responsible;
3. Food Security: Perception of the possible impacts of the **Suzano's** business model facing food production for local consumption; and

4. Physical or economical displacement: Perception of population displacement caused by development.

The document also defined *Suzano's* position related to each of the social issues presented herein. The SRM is a software system in which it is possible to make consultations on a data base related to risks/opportunities by theme, stakeholders, municipality, groups or impacted area. Therefore it is possible to analyze before purchasing an area the social interest themes listed above along with other environmental and economic themes.

No physical or economical displacement was identified other than the previously mentioned *Bacaba* community issue.

Reportedly, *Suzano* considers before acquiring a land if it is outside high conservation areas such as indigenous lands, conservation units defined by federal, state or municipality and communities with traditionalist traces through specific diagnosis from SEI consultancy.

In order to consider such lands, evidence of a regional evaluation considering mapping of indigenous lands, conservation units has been provided. In addition, after acquisition of the land and verification of legal requirements, also a detailed assessment of each farm is performed in order to identify permanent preservation areas, legal reserves (both required by Brazilian legislation and this last one endorsed in the deed of property by registry), endemic or endangered species, probable social issues such as access or remains of cultural equipment. Evidences of these assessments have also been provided for ERM analysis during site visit.

Conclusion:

This gap has been benchmarked against IFC PS 05 (paragraph 8) and IFC PS 06 (paragraph 7).

No further recommendations deemed necessary.

• ***Public consultations (Gaps 35A and 35B)***

ECA's Requirements:

35 A- *Provide evidences of the consultation process, how the comments have been adressed, show a formalised periodic reporting to the affected communities, show a proactive reporting of the project.*

35 B- *Communication Program.*

ERM Assessment:

As described previously in the gap 5, the assessment of concerns, manifestations and consultations are inputted electronically into the Stakeholders System – SISPART which tracks responsibilities, time for feedback, while the effectiveness of resolutions are analyzed by a council. Also Social Communication Programs for forestry were developed for both *Maranhão* and *Tocantins* states in the Environmental Basic Plans – PBAs (*Planos Básicos Ambientais*) as part of the licensing process. Such programs include activities for disclosure of information as well as channels of dialogue with the community.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraph 30).

Based on the evidences provided, the public consultation process in course is in a culturally appropriate local language(s) and format and is understandable to affected communities as required by IFC PS01.

Also, the public consultations issue is fully addressed with the implementation of the tools and procedures described in the gap 5.

No further recommendations deemed necessary.

- ***Community engagement (Gap 40B)***

ECA's Requirements:

40 B- Provide specific procedure for land purchase (PR 13.00004) for the consultant review

ERM Assessment:

The procedure PR 13.00004 concerning of measures for identification and selection of the areas for acquisition by *Suzano* was provided for analysis. It includes land inspection and social-economic and cultural baseline questionnaire (FM.13.00018). Also as part of step 2 (Negotiation, Approval and Effective Date of Final Purchase) a population survey on the property is held (FM.13.00019). An evidence of this last document filled out was provided for assessment during the site visit. Before any purchase, *Suzano* performs an Internal Socio-Environmental Report (RISA – FM.06.00023) to detail environmental and social aspects of the area concerning water resources, biodiversity, urban facilities. Three reports filled out were provided as evidence during site visit.

The questionnaires answered can be used to tailor the Strategic Engagement Framework concerning the forestry unit.

Conclusion:

This gap has been benchmarked against IFC PS 05 (paragraph 8) and IFC PS 06 (paragraph 7).

The recommendations described in gap 7A, related to Stakeholder Engagement Plan, will also fulfill this gap.

- **ISO / OHSAS 18001 (Gap 45B)**

ECA's Requirements:

45 B - Which accredited certification firm we use for relevant ISO-certifications and OHSAS 18001.

ERM Assessment:

Suzano uses Bureau Veritas Quality International to certificate ISO9001, ISO14001, OHSAS18001 and SCS-Sysflor for FSC forest certification.

Regarding forest certification, *Suzano* intends to have from 50 to 70% of the areas certified in FSC or PEFC (which includes owned and Vale owned). Certification activities are being implemented in stages as follows:

- *Cidelândia*: initial audit was performed in September 2012; public hearings will be performed on November 22nd and 23rd 2012; certification audit scheduled for March 2013;
- *Porto Franco*: will be included in the scope in March 2014 during maintenance audit; and
- Vale Florestar: certification audit scheduled for the beginning of 2014.

Conclusion:

This gap has not been benchmarked against IFC PS, since none is applicable.

Suzano must provide periodic update and evidences of the FSC or PEFC certification activities of *Suzano* and Vale Florestar lands.

- **Project impact in TO and PA (Gap 45E)**

ECA's Requirements:

45 E - The project influences/is influenced by 3 states' system. Describe what impacts this may have and how it is addressed by *Suzano* in these 2 states (TO and PA) ?

ERM Assessment:

Suzano has no current activities in the State of *Pará*. However, *Suzano* will use wood planted by Vale Florestar project that is managed by VALE. Vale Florestar is responsible for planting and *Suzano* will harvest the wood. *Suzano* had the initiative to encourage Vale Florestar to apply for FSC certification.

Currently, Vale Florestar's plantations are in the initial stage of certification. *Suzano* plans to use the wood planted by Vale Florestar at a later stage of the project, when the areas will be already certified, according the established schedule of certification.

Suzano currently has a staff dedicated to monitoring the activities of Vale Florestar and monthly monitoring reports are prepared stating the status of activities and the implementation of FSC or PEFC certification.

In *Tocantins*, *Suzano* has its own farms. An EIA/RIMA was developed for these areas and *Suzano* has been conducting activities to certify the plantation areas according to FSC standards. The impact assessment for the forestry areas of *Tocantins* are described in the Environmental Impact Assessment Study performed by ENGETEC *Engenharia Ambiental- Georreferenciamento* on August 2009. This study was approved by the environmental agency which issued the environmental preliminary license. Additionally, the programs with mitigation and management measures for the impacts identified are inside the PBA- Environmental Basic Plan also developed by ENGETEC in 2010 in order to request the Environmental Installation Permit. Reportedly, the permit was granted and annual monitoring reports must be submitted to the environmental agency. The first PBA monitoring report issued in 2011 by ENGETEC was also provided for ERM's analysis during the site visit. No deviations were identified.

Conclusion:

This gap has not been benchmarked against IFC PS, since none is applicable.

No further recommendation is deemed necessary.

PS 2 - Labour and Working Conditions

- *Confirm that the workers are indeed free to join to trade unions (Gap 45D)*

ECA's Requirements:

45 D- Confirm that the workers are indeed free to join to trade unions

ERM Assessment:

Although the contract of work provided by *Suzano* does not include a specific clause concerning the freedom to join the trade union, it is not possible to work in a company without being enrolled to a trade union as required by Brazilian Legislation. Currently, most of the workers are enrolled to the Civil Construction Union, according to *Suzano*'s human resources manager once the majority of workers are on the construction works of the pulp mill. The contract is in compliance with the Brazilian Legislation and establishes that every worker must be represented by a trade union, and he (she) can choose the one that best represents his (her) category.

Suzano ensures that information about enrollment in trade unions is provided to all its workers.

Conclusion:

This gap has been benchmarked against IFC PS02 (paragraph 10).

According to the Brazilian legislation, it is not possible to work in a company without being enrolled to a trade union. No further recommendation is deemed necessary.

PS 3 – Resource Efficiency and Pollution Prevention

- *Spoil material & Energy (Gap 2A)*

ECA's Requirements:

2 A- Info about: construction materials, earthmoving, energy sources for the projects, calculation methodology.

ERM Assessment:

For the railway, *Suzano* made available the document *Memorial Descritivo do Projeto de Terraplenagem* (Engefoto, Abril de 2012) (Earthworks technical description), which details the calculation methodology of spoil material during the construction, resulting of earthworks. According to this document, approximately 400,000 m³ of excess inert material will have to be disposed of. This volume was calculated based on the removal of organic layer (vegetal earth) approximately 20.0 cm thick, based on geotechnical surveys. Additionally, the excess cut material was also estimated based on the cross section areas. The railway extension was divided in sections and the volumes calculated by the sum of individual prisms between each section. According to information contained in the EIA developed for the railway, this excess material will be deposited along the railway right-of-way zone and *Suzano* will apply for the authorization to use the disposal areas from the State Environmental Agency, together with the application for authorization of

vegetation suppression. In addition, it is informed that the vegetal earth will be deposited in temporary storage areas to be later reused in *Suzano* landscaping projects.

For the transmission line, the Simplified Environmental Study (EAS) mentions an excavation volume of 2,650 m³ and a refill volume of 2,000 m³ as a preliminary estimate. As informed by *Suzano*, more detailed calculation will be possible after the topography services, plotting of the supporting structures on the profile and foundation projects. It is worth mentioning that the earthmoving material will be generated at the areas where the transmission towers basis will be installed. The EAS developed for the transmission line also mentions that the earthmoving material will be deposited along the transmission line route and the location will be part of the application for vegetation suppression to be filed at the State Environmental Agency (SEMA).

For the road construction, the EIA mentions a cut volume of 350,000 m³ and a refill volume of 130,000 m³ as a preliminary estimate. It also mentions that that the earthmoving excess material will be deposited along the road route at the right-of-way zone, for which the authorization from SEMA will be requested. Reportedly, the road project is being object of internal discussions in *Suzano* and is still on hold.

The EIA of the railway also mentions that part of the spoil material generated during the construction might be disposed of at the landfill for construction debris to be installed in the industrial complex. The landfill is dimensioned for a total volume of 50,000 m³ and the estimated use for the construction wastes of the industrial site is 36,000 m³.

As for energy consumption during the infrastructure components construction stage, *Suzano* informed that energy will be provided by the use of generators. Information on energy consumption was provided for the railway construction, based on the equipment to be used, which includes three 7.5-kVA generators for the work fronts, equipment motors of the concrete mill, lodging facilities, temporary work camps, air conditioning units and others. The total estimated consumption is 81.9 kW/month. For the transmission line, no detailed estimate is still available. The EAS considers the use of one 4.5-kW concrete mixer and one 7.5 kVA generator. *Suzano* informed that the main construction camp will be installed within the industrial site. For the road construction, no information is still available on the energy consumption for the construction.

Conclusion:

This gap has not been benchmarked against IFC PS, since none is applicable.

Considering that *Suzano* will have to apply for the authorizations from SEMA for the disposal of spoil material generated during the construction phase,

ERM considers that this information will be developed during the projects detailing stage and does not bring relevant risk to the project.

Considering that the general and specific IFC guidelines for toll road, transmission line and railway do not establish standards for energy consumption in the construction phase which could be used as base for comparison, and that *Suzano* will reportedly ensure the use of well-tuned equipment (generators, for instance), ERM understands that in guaranteeing this strategy, *Suzano* is aligned with the best practice standards.

- *Waste/air emissions and GHG emissions (3A, 3B and 8A)*

ECA's Requirements:

3 A- Quantify the air/waste emissions.

3 B- Solid Waste Management Plan.

8 A - Provide a plan for implementation of estimation of GHG emissions for the mill's first five years of operation at full capacity - comparison with the emission monitored nowadays.

ERM Assessment:

Regarding the air emissions quantification, ERM understands that its exact quantification, during construction phase, can be inaccurate due to variability of construction activities. Its exact quantification will depend on the amount of vehicles and machines working together, type of vehicles and machines, portion and condition of exposed soil, moisture in the air and soil, the different activities throughout the day and time works, among others.

During construction phase of the infrastructure projects, *Suzano* has proposed a specific Program for controlling air quality and air emissions, which includes wetting of exposed areas, physical covering of exposed areas, among others. A plan for recovery of degraded areas is also being conducted for Project *Maranhão*.

For the operation phase, ERM understands that air emissions quantification can be evaluated, considering GHG emissions.

Regarding the waste quantification during the construction phase, the Environmental Studies have already presented the quantification of the "soil waste" generated by earthmoving (borrow areas and areas of excess material deposition), which is the "waste" generated in greater amounts. *Suzano* has already presented an Earthwork Project to the Environmental Agency. Other types of waste could be also estimated but the exact amount cannot be so accurate, since there will be different activities throughout the implementation phase and even the number of employees will vary along this time.

The waste management during construction and operation phases will be conducted according to the Solid Waste Management Plan, already developed by *Suzano*.

Suzano has not developed an estimate of greenhouse gas emissions for the project *Maranhão*.

ERM interviewed staff responsible for inventory of greenhouse gases from other units of *Suzano* and found that the company has consolidated systematics for conducting inventories, as well as carbon footprint programs in plants already in operation. The team responsible uses the internationally recognized methodology for these inventories.

During construction phase of infrastructure projects, keep records and regular reports to ensure compliance with Solid Waste Management Program defined in the environmental programs developed for licensing process.

Conclusion:

This gap has been benchmarked against IFC PS03 (paragraphs 7, 8 and 12).

Include in the scope of internal auditing procedure the compliance with Waste Management Plan, including preparation of inventory and spreadsheets control.

In order to fulfill IFC PS03, develop an estimate of greenhouse gas (GHG) emissions at the project stage for *Maranhão* Project, according to internationally recognized methodology, such as the Guidelines of the Intergovernmental Panel on Climate Change (IPCC) or equivalent. The estimate should consider the scope 1 and 2.

Refer to ESAP table in Annex A.

• ***Resources use and efficiency (Gap 13A)***

ECA's Requirements:

13 A- EIA for infrastructure components should incorporate total use and efficiency of resources, environmentally sensitive receptors, project demand for water, etc.

ERM Assessment:

Use and efficiency of resources, and environmentally sensitive receptors were considered for projects design and layout definition. The use of resources will occur basically during the construction phase.

The Environmental Studies presented general explanations for projects design and layout (routes), including the following aspects: best location, best technology, environment, economics and social issues.

Choosing best location includes the minimum interference on areas of environmental concern, with less social and environmental impact, among other aspects. Choosing the best technology and environment conditions includes also more efficient fuel consumption and improved safety, among others.

Additionally, some of the infrastructure services used for the factory construction can be also used for the Railway, Roadway and Transmission Line construction, such as: lodging, work site (in some cases), waste landfill, water and energy supply (in some cases).

Mechanical maintenance in vehicles and machinery can be performed in local (city) garages.

Prioritizing the hiring of local labor will reduce the need for using lodging facilities.

Environmental impacts will occur mainly during construction phase, and will be temporary.

ERM considers that *Suzano* is in line with IFC PS 03, which contains the best practices for resources use and efficiency.

Conclusion:

This gap has been benchmarked against IFC PS03 (paragraph 6).

No further recommendations deemed necessary.

- ***Land use (Gap 28A)***

ECA's Requirements:

28 A- Provide info about the progress on FSC-certification that needs to be included in the report to the ECA's.

ERM Assessment:

The forest areas are divided into sections: *Porto Franco* and *Cidelândia*.

Currently, the process for certification is being conducted for the *Cidelândia* section, whose farms are the first to be used for pulp production. The other areas will be certified at a later stage according to production.

For the areas of development, where *Suzano* will also acquire wood, another process is used today for certification, through contractual clauses to prevent slave and child labor, illegal timber and also perform the monitoring. In leased farms there are also established procedures. *Suzano's* intention is to work with 100% of certified areas (or chain of custody and controlled wood).

Document has been provided for ERM analysis regarding implementation status of the FSC certification for *Cidelândia* detailing each requirement and status of completion.

Conclusion:

This gap has not been benchmarked against IFC PS, since none is applicable.

No further actions deemed necessary, given that the certification of *Porto Franco* Section and Vale Florestar Areas in the State of *Pará* are already scheduled and will be audited by FSC certification process.

- *Energy/Materials to forestry project (Gap 29A and 29B)*

ECA's Requirements:

29 A - *Provide the Complementary Assessment for the Porto Franco EIA to present info about emergency environment procedure.*

29 B - *Confirm that the same existing procedure for Maranhão is valid for Tocantins State.*

ERM Assessment:

Suzano presented a procedure for emergency response in *Maranhão* sites (PPG.01.569), which is associated with the System for Prevention and Combat of Forest Fires and Waste Management Program.

Furthermore, *Suzano* has a prevention program for Forest Fires, called "Floresta Viva", aiming at promoting awareness and responsible attitudes among their employees, partners and community.

ERM considers *Suzano* holds adequate environmental emergency response procedures for the plantation areas that are in line with IFC PS01.

The procedure for emergency response (PPG.01.569) is applicable to the entire Project *Maranhão*, which comprises also the forest areas in the states of *Tocantins* and *Pará*.

Conclusion:

This gap has been benchmarked against IFC PS01 (paragraph 20).

No further recommendations deemed necessary.

- **Waste/air emissions (Gaps 30A and 30B)**

ECA's Requirements:

30 A - Provide the Solid Waste Management Program to present identification of all types of waste/emissions generated during all project phases.

30 B - Provide estimations of these waste/emissions.

ERM Assessment:

Solid Waste Management Program for *Tocantins* plantation areas was provided for analysis as it is part of the Environmental Basic Plan developed by ENGETEC *Engenharia Ambiental- Georreferenciamento* in 2010 in order to apply for the installation permit. In addition, *Suzano* has developed a corporate Solid Waste Management Program PR.13.00007 provided for ERM analysis in which it is included the development of the following:

- Waste inventory;
- Spreadsheet with Specification of waste Source, Segregation, Storage, and Internal and Final Waste Disposal; and
- Spreadsheet with Monthly Waste Control.

For the *Cidelândia* section of farms evidence of the waste inventory for the year 2011 and Monthly control have been provided.

For air emissions refer to item 8A.

Conclusion:

This gap has been benchmarked against IFC PS03 (paragraph 12).

In order to fulfill IFC PS03, expand estimates of waste from *Cidelândia* to the areas of *Porto Franco*, using the same methodology adopted for *Cidelândia*.

For air emissions refer to item 8A.

Refer to ESAP table in Annex A.

- *Water consumption and Hydrological models, quantification/forecast of waste and emissions (Gaps 34A, 34B, 36B and 37A)*

ECA's Requirements:

34 A - *Provide the Hydrologic Monitoring Program.*

34 B - *Provide estimations regarding water and estimation of waste.*

36 B- *Provide the Hydrus Water monitoring program, PLIMA and other documents that provides these info.*

37 A- *Provide the water demand estimate and integrated calculations for water use*

ERM Assessment:

Hydrological monitoring Program for reforested watersheds has been evidenced as a Program inside the PBA- Environmental Basic Plan developed by STCP *Engenharia de Projetos Ltda* on 2011 for the *Maranhão* forestry areas. Also inside the PBA- Environmental Basic Plan of the forestry areas of *Tocantins* developed by ENGETEC the following has been identified:

- Criteria for water supply;
- Program for groundwater monitoring; and
- Water quality monitoring program.

In addition, a schedule for water use in the *Cidelândia* section has been provided detailing water use for all farms in this section.

Estimates for water consumption of *Porto Franco* section have also been provided. ERM understands that water estimates will be developed along with schedule to obtain grant for water use and therefore *Suzano* will be obliged to perform it during the project lifecycle.

Reportedly water consumption will be 100% superficial and groundwater abstraction will not be necessary.

Water estimates are mandatory for obtaining permits for abstraction. *Suzano* has provided the estimates for *Cidelândia* region, which will be the first one to start its operations and it has been granted with proper authorizations for abstraction.

The Brazilian legislation ensures that these estimates are provided prior to abstracting the water, from both superficial and groundwater resources if necessary.

Regarding waste estimates see item 30.

Conclusion:

This gap has been benchmarked against IFC PS03 (paragraph 9).

No further recommendations deemed necessary.

- ***IPM - Integrated Pest Management and Agrochemical products and training requirements (Gaps 38A, 38B, 39A, 39B and 39D)***

ECA's Requirements:

38 A- Due to the fact that there are documents that complement the IPM, check with Environ if this point is fulfilled. These documents must justify the pest management measures selected based on the environmental/ ecological criteria.

38 B- Confirm classification of pesticides to ECA ; the EIA should demonstrate how the selected pest management products are less hazardous than others products.

39 A- Provide MO 06.00002 and MO 06.00006 about the procedures for pesticides application.

39 B- Provide item 3.5 of the EIA that mention appropriated handling plan.

39 D- Describe potential deviations from FSC's requirement on training.

ERM Assessment:

The following procedures regarding agrochemicals application have been provided for analysis:

- MO.06.00001 - Training Manual - Forestry - Control of Cutting Ants;
- MO.06.00002 - Training Manual - Forestry - Application of Herbicide With Manual Spray Carried on the Back;
- MO.06.00033 - Training Manual - Seedling Nursery - Application of Pesticides; and
- MO.06.00006 - Training Manual - Forestry - Mechanized Application of Herbicide.

In addition, evidence of subcontractors training and monthly report control for analysis has been provided in power point presentation. Training lists for pest control and herbicide application were also provided as evidence.

List of agrochemicals used was also provided for ERM analysis. Reportedly all chemicals are licensed with the environmental agency. No chemicals classified as POP (according to Stockholm Convention) are used by *Suzano*.

According to documentation provided for ERM analysis no deviations from FSC's requirements on training has been identified.

Conclusion:

This gap has been benchmarked against IFC PS03 (paragraphs 14 to 17).

No further recommendation deemed necessary.

- *Agrochemical products and training requirements (Gap 39C)*

ECA's Requirements:

39 C- *Provide internal procedure of solid waste that mention the access to pesticides (storage, handling and disposal).*

ERM Assessment:

Solid Waste Management program (PR.13.00007) does not mention proper storage, handling and disposal of pesticides packages and requirements of local legislation regarding this specific issue. MO.06.00033 - Training Manual - Seedling Nursery - Application of Pesticides mentions the triple-rinse of pesticides' packaging but does not go further with regards to storage and final disposal.

The EIA- Environmental Impact Assessment for the forestry area in *Maranhão* developed by STCP *Engenharia de Projetos Ltda.* on 2011 (item 3.5.2.11) and PBA- Environmental Basic Plan for *Tocantins* areas developed by ENGETEC contain guidelines for proper handling of empty packages of pesticides.

Procedure PR. 13.00040 for Receiving and Preservation of Products Purchased has been provided for ERM analysis. The document contains procedures for:

- 1) Inspection during receiving of products;
- 2) Treatment of Nonconforming Product;
- 3) Environmental Care during receiving;
- 4) Preservation (Storage and Packaging); and
- 5) Handling and Transfer.

The products listed include herbicides, insecticides, fungicides, insecticides and biocide products. Reportedly *Suzano* follows the procedures established by ANDEF (*Associação Nacional de Defesa Vegetal* – National Association for Vegetation Defense) which were analyzed by ERM. The procedures due include the same requirements as defined on the Pesticide Storage and Stock Control Manual – of FAO (Food and Agriculture Organization), 1996 and Brazilian legislation.

Conclusion:

This gap has been benchmarked against IFC PS03 (paragraph 16).

No further recommendation deemed necessary.

PS 4 – Community Health, Safety and Security

- *Potential risks for local communities (Gap 14A)*

ECA's Requirements:

14 A- Evaluation of the risks and impacts to the health and safety of the affected communities, specify preventive and control measures. Include in the Risk Analysis all the other projects/issues.

ERM Assessment:

Suzano has not provided evidences of an evaluation of risks and impacts of the infrastructure installation and operation plan as well as health and safety of the communities to be affected by the transmission line or railway branch. The studies of Environmental Impact Assessment developed for both assets did not include this assessment.

However during the assessment of the documents, ERM identified some procedures, such as Evaluation Matrix (*Matriz de Avaliação de Impactos Sociais*) used to identify the risks and impacts of the forestry operations that can be tailored to include the assessment of the health and safety of the affected communities of the industrial and infrastructure units. The improvement of the social impact matrix should include monitoring and evaluation of mitigation measures and their effectiveness. Also, the evaluation of the risks and impacts to security and safety of *Bacaba* community, before and after the resettlement, should be included as part of the compliance with the IFC PS4. Any impacts identified by the social impact evaluation matrix needs to be presented, mitigated and managed as relevant.

Conclusion:

This gap has been benchmarked against IFC PS04 (paragraph 5).

Refer to Gap 32 A and 33A.

Refer to ESAP table in Annex A.

- **Community exposures to diseases (36A)**

ECA's Requirements:

36 A- Provides the identification of all potential risks to community, suggestion of measures to address the risks identified earlier, a detailed plan on how to implement such measures, a monitoring program.

ERM Assessment:

There are evidences of identification of communicable and endemic diseases during the earlier studies throughout the social inventory questionnaires, and also records of informative and prevention campaigns in partnership with local health public agencies involving the spread of information material, daily meetings, health daily dialogues, and communication programs through *Suzano* communication channels in the field. However, the monitoring programs does not include the assessment of health issues.

Conclusion:

This gap has been benchmarked against IFC PS04 (paragraph 9).

In order to fulfill IFC PS04, *Suzano* must also include questions related to potential for community exposure to diseases into the social and environmental impact evaluation and baseline questionnaire already in course (FM.13.00018). The questions should also include water-borne, water-based, water-related, and vector-borne diseases, and communicable diseases that could result from project activities, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups.

In order to improve the monitoring measures to identify and prevent potential endemic diseases in communities in the project area of influence concerning forestry, industrial and infrastructure units, ERM suggests that *Suzano* include this issue in its currently Social Impact Matrix.

Also, the evaluation of the risks and impacts to health conditions of *Bacaba* community, before and after the resettlement, should be included as part of the compliance with the IFC PS4 (Refer to Gap 32 A and 33A).

Refer to ESAP table in Annex A.

PS 5 – Land Acquisition and Involuntary Resettlement

- *Itaqui Port (Gap 1C)*

ECA's Requirements:

- 1 C- Description of the relocation issues, company's influence, n° of families, provide a document verifying that the relocation will be managed by the authorities and that it has been considered before Suzano's intervention, timeframe.

ERM Assessment:

According to Legal Manager of EMAP (Maranhão Port Administration Authority), Raimundo Nonato Froes Neto, the Itaqui Port Complex is a public area under administration of EMAP (Empresa Maranhense de Administração Portuária) and the resettlement resulted from voluntary negotiation with 9 families living in the area of the project. The lawsuit was conducted in compliance with the Brazilian legislation and approved by the Civil Court of Justice of Maranhão State, which endorsed the agreement on May 15, 2012. The process was managed by consultation meetings with the families who received compensation payments and the value for their house sale. The meetings and the market transaction are registered with assignments with approval of the 9 families representatives.

As part of this assessment, ERM also visited the area on August 20th, 2012 where the *Suzano's* warehouse will be constructed at the Itaqui Port. It was possible to visualize at the time that most of the families have already left the area with the exception of 2 that still remain. The houses are partially demolished except for those of the 2 families and a bar/establishment that was closed at the time of visit. The area is not easy to be accessed and is near one of the Port's entrance. The area is being monitored by a security guard.

Although the RCA (Environmental Control Report) developed for the licensing process of the warehouse did not identify the relocation of the families as an impact, ERM considers that the process was conducted according Brazilian Legislation and the PS 5.

Conclusion:

This gap has been benchmarked against IFC PS05 (scope of application).

The resettlement resulted from voluntary land transactions, in which the seller agreed to the price and conditions of payment and was not expropriated. No further recommendations deemed necessary.

- ***Bacaba community - Compensation and benefits to displaced people and Resettlement plan (Gap 15A and 16A)***

ECA's Requirements:

15 A- Evidences of the public hearing for compensation and benefits measures.

16 A- RAP – Resettlement Action Plan for Bacaba community.

ERM Assessment:

Concerning the *Bacaba* Relocation Program performed by *Comunicarte* in August 2012 and the Social Report provided by *Suzano* in September 2012, the Resettlement Action Plan includes:

- a) socioeconomic baseline of the households including the 21 houses and a population of 70 people to be relocated;
- b) participation, consultation and engagement activities during the entire process including the selection of the host area;
- c) project impacts and affected populations considering vulnerability of the groups as students, pensioners and retirees ;
- d) legal and regulatory framework and the responsibility of the public authorities that have been following the negotiation process such as Public Prosecutors ;
- e) plans for economic livelihood restoration in the new land and resettlement assistance including psychosocial support during the transition and reallocation;
- f) budget for the implementation of the RAP that will receive investments from Brazilian Development Bank (BNDES), which will be the main financing agent;
- g) general compensation framework including the donation of house, land spot, and the construction of the health, education, water, electricity, transport, community leisure and other facilities;
- h) professional capacity and education programs, income generation initiatives,
- i) schedule for the implementation of the RAP that is planned to occur in December 2012;
- j) roles and responsibilities of *Imperatriz* Municipality and *Suzano*; and

k) monitoring and evaluation (including completion audit).

According to the results of the socioeconomic baseline, ERM understands that *Bacaba* community represents a vulnerable group because of the high dependency of social cash transfer programs implemented by the government and the fact that the majority is currently employed in activities of informal urban services. Since the host area is located nearby *Imperatriz* municipality, most of the households will keep their income activities and informal jobs. .

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraphs 25 to 33) and 05 (paragraphs 8 to 29).

Refer to Gaps 7A, 11A, 11B and 25A.

Refer to ESAP table in Annex A.

- ***Bacaba community - babaçu gatherers (17A and 18A)***

ECA's Requirements:

17 A - Report of the *Bacaba* inventory, description of how it was conducted.

18 A - Evidences of the public consults for environmental feasibility and analysis of alternatives.

ERM Assessment:

Concerning the Final Report of Community *Bacaba* Participative Diagnosis and the Relocation Program conducted by *Comunicarte* in August 2012, the inventory was carried out to collect appropriate socio-economic baseline data and identify the production of *babaçu* production. In page 86 of the socioeconomic diagnostic there are evidences of the *babaçu* production as a complementary activity.

ERM also verified that the document presents evidences of the community consultation and engagement to participate in the analysis of the host areas alternatives as well as the layout of the resettlement project.

Conclusion:

This gap has been benchmarked against IFC PS 05 (paragraph 10).

No further recommendations deemed necessary.

- ***Bacaba community – cemetery (Gap 26A and 27A)***

ECA's Requirements:

26 A - *How consideration has been taken to Bacaba, that the access to the cemetery will be good also during construction and how they were involved in the consultation process.*

27 A- *How consideration has been taken to Bacaba, that the access to the cemetery will be good also during construction and how they were involved in the consultation process.*

ERM Assessment:

According to the Community Expectations Research performed in 2011 by *Comunicarte*, the *Bacaba* community was consulted and participated in the decision concerning the cemetery. Reportedly, the cemetery will remain in the same area and will not be relocated. The access to the cemetery will remain the same, given that it is outside the construction site area. Currently it is in front of the entrance for the construction site, however according to information given by *Suzano* employees the main entrance will be a few kilometers further along the road and will not be in front of the cemetery.

Conclusion:

This gap has been benchmarked against IFC PS 05 (paragraph 10).

No further recommendations deemed necessary.

- ***Public consultation/ Methodology of a screening formal procedure to establish if compensation at full replacement cost is necessary (Gap 41A)***

ECA's Requirements:

41 A - *Provide specific procedure for land purchase (PR 13.00004) for the consultant review.*

ERM Assessment:

Reportedly, the procedure PR 13.00004 was used as a check list for the acquisition of new land for plantation and not for resettlement purpose. During the consultation process with the *Bacaba* community, *Suzano* has offered two alternatives for the resettlement concerning the results of the household's expectations survey. The choice of the area was a result of a participatory process with the *Bacaba* community that decided to be relocated to a site close to *Imperatriz* municipality in order to guarantee the same social networks and social relations to the city. As a result of full replacement each of

the 21 households have received a land spot of 500m² and a new house of 50m² as compensation measure.

Conclusion:

This gap has been benchmarked against IFC PS 05 (paragraph 9).

Refer to Gap 16A. No further recommendations deemed necessary.

PS 6 – Biodiversity Conservation and Sustainable Management of Living Nature Resources

- *Critical habitat (Gap 19A)*

ECA's Requirements:

19 A- Provide a map of the identified areas of high conservation value

ERM Assessment:

A map of the identified areas of high conservation value is presented on the Plan for biodiversity conservation, written by The Nature Conservancy – TNC organization.

In order to consider such lands, evidence of a regional evaluation considering mapping of indigenous lands, conservation units has been provided. In addition, after acquisition of the land and verification of legal requirements, also a detailed assessment of each farm is performed in order to identify permanent preservation areas, legal reserves (both required by Brazilian legislation and this last one endorsed in the deed of property by registry), endemic or endangered species, probable social issues such as access or remains of cultural equipment. Evidences of these assessments have also been provided for ERM analysis during site visit.

Although areas depicted in this map encompasses the areas associated with the infrastructure components (road, railway and transmission line), these components are not outlined and therefore it is not possible to readily visualize their interaction with the high conservation areas identified.

Conclusion:

This gap has been benchmarked against IFC PS 06 (paragraphs 16 and 17).

In order to fulfill IFC PS06, *Suzano* should include in the map showing the high conservation areas (Location Map – Forestry Unit of *Maranhão* developed in May 8th, 2012 / *Mapa de Localização - Unidade Florestal do Maranhão*), the railway, road and transmission line routes.

Refer to ESAP table in Annex A.

- ***Critical habitat (Gap 19B and 20A)***

ECA's Requirements:

19 B and 20A- Provide an analysis of the identified impacts on na APP and more details about the marginal areas that are impacted.

ERM Assessment:

Permanent preservation areas are determined by Brazilian legislation in summary as boundary zones of water resources, hilltops, mountains and hills, around water springs (50m radius), around ponds and dams, slopes steeper than 45 ° and heights above 1,800 m. These areas are protected and therefore depend on specific authorization in the case of an intervention. Thus, impacts identified on EAS- Simplified Environmental Study for the transmission line as well as EIA- Impact Assessment Study of the railway include possible impacts in these areas in general, including APP areas. Besides, the PBAs – Environmental Basic Plans provided for all three infrastructure components also have specific programs for monitoring water resources and recovery of possibly degraded areas.

Conclusion:

This gap has been benchmarked against IFC PS 06 (paragraph 20).

No further recommendation deemed necessary

- ***Biodiversity Monitoring and Review to identify priority ecosystem services (Gaps 21A, 23A and 23B)***

ECA's Requirements:

21 A- Provide the document regarding flora and plan to recovery degraded areas – PRAD.

23 A - Provide forestry inventory for the supression phase and the PRAD.

23 B- Explain how these documents fulfill international standards.

ERM Assessment:

Forestry Inventory was also developed by DTA Engenharia (consultant) in April 2012 for the Port area in the name of EMAP - Empresa Maranhense de Administração Portuária (Port Authority).

Reportedly Program for Recovery of Degraded Areas (PRAD) for the infrastructure has not been developed.

In spite of the mentioned Forestry Inventories and PRAD, which are aligned with regulations and good practices, the identification of ecosystem services is not fulfilled by these studies. *Suzano* has already developed different tools, other than Forestry Inventories and PRAD that are able to identify priority ecosystem services (refer to item 7A for detail of these tools). Minutes with photos and attendance list of meetings with leaders and community members in the proximity of the transmission line have been provided as evidences of the implementation of the “Social Dialogues”. For the other infrastructure units, railway, road and port, *Suzano* should continue to implement and keep records with evidence that the same tools are being applied.

Conclusion:

This gap has been benchmarked against IFC PS 06 (paragraphs 24 and 25).

The existing tools mentioned on the recommendations are able to identify ecosystem services as required by IFC PS 06 (paragraph 24 and 25). Therefore, it is recommended that they are continuously applied for the infrastructure areas, ensuring that priority ecosystems services impacts are evaluated and included in the assessment, as long as the project is implemented including, road, railway, transmission lines and warehouse at the port. Some of these tools are Social Dialogues, Positive Agenda, and questionnaire for identification of high conservation areas, among others.

Refer to ESAP table in Annex A.

PS 7 - Indigenous People

- *Quilombola people - Public consultation(Gap 24A)*

ECA's Requirements:

24 A- Provide evidences.

ERM Assessment:

During the visit there were evidences that “Social Dialogues” adopted by *Suzano* includes stakeholder analysis and engagement planning, disclosure of information, consultation, and participation, in a culturally appropriate manner to the traditional communities. According to the *Suzano*, Social Communities Characterization Inventory, there are 3 communities with traces of traditionality in the surroundings of the operational unit: *Coquelência* (*babaçu* gatherers), *Povoado de Imbiral* (fishing), *Aldeia Guajajara* (indigenous ancestors). These communities were identified with social tools defined by *Suzano*. After this first assessment a company named SEI consultancy (a third

party) was hired to perform a more detailed analysis and define if these communities were indeed traditional or only had traces of traditionalism. In order to perform this assessment the communities were indeed consulted. These studies have been provided for ERM analysis and conclude that these are communities with traces of traditionalism, that is, do not present livelihoods based on their traditions, for instance do not live based on gathering *babaçu*. Even after identifying these communities as nontraditional, *Suzano* decided not to interfere and considered lands for purchase away from these communities with the same criteria defined for distance maintenance of indigenous and conservation units.

Conclusion:

This gap has been benchmarked against IFC PS 07 (scope of application).

No further recommendations are deemed necessary.

- ***Babaçú gatherers (Gaps 42A and 42B)***

ECA's Requirements:

42 A- Provide evidences of a process used to identify vulnerable groups and, in case of loss or reduction of access to any natural resources is involved, provide the compensation schemes.

42 B- Confirm in a documented way that will be affected by the plantations.

ERM Assessment:

As part of the social and environmental assessment, *Suzano* provided some evidences such as:

- a) Social Impact of the Forestry Matrix (excel);
- b) High Conservation Value Areas Identification Questionnaire (*Questionário de Identificação de Áreas de Alto Valor de Conservação -AAVCs* ; and
- c) Social Communities Characterization Inventory used to identify vulnerable groups.

The results of these inventories are consolidated in the Social Data Base Monitoring for *Tocantins* and *Maranhão* Forestry Units, knowned as *Porto Franco* and *Cidelândia* Units.

The criteria used for this monitoring are: being located in the surrounding of the forestry areas, within the influence area of the port and industrial sites, in the distance of 3 kilometers from the forestry activities and along the roads used to products transport. This monitoring does not include how would be

the impact in the production of the *babaçu* gatherers groups located in the plant, port and industrial area.

ERM also verified that *Suzano* has included questions concerning the *babaçu* production in the High Conservation Value Areas Identification Questionnaire and Social Communities Characterization Inventory. These procedures can also be used to monitor and guarantee the access of the *babaçu* gatherers in the surrounding areas of the *Suzano*'s properties to not impact their production that are guaranteed by the Law No. 1.959/08 (Free *Babaçu*) which permit free access to public and private lands to traditional communities, including coconut breakers. Access to land is subject to the establishment of an agreement between the breakers and the landowners, as *Suzano*.

Conclusion:

This gap has been benchmarked against IFC PS 01 (paragraph 12).

No further recommendation deemed necessary.

- ***Participation and consent (Gap 44A)***

ECA's Requirements:

44 A- Please let the consultant review records from FUNAI that confirm that no indigenous people will be affected.

ERM Assessment:

Concerning the licensing process the EIA/RIMA studies were submitted for the appreciation fo FUNAI in July of 2011, according to oficial letter issued by *Suzano*. There are evidences that no complementary studies were required concerninh impact to indigenous people. Regarding the map of EIA RIMA, the indigenous territories are not in the directed or indirected influence area of *Suzano* projects. Reportedly, while purchasing a land, *Suzano* provides a characterization of the area and its surroundings in order to exclude the possibility to purchase areas which might be close or inside indigenous people's areas. According to the Conservation Units and Indigenous Map provided by *Suzano*, a buffer zone has been considered along the indigenous land in order to ensure that there will be no interference whatsoever. Reportedly, during site visit, concerning the indigenous areas, *Suzano* followed the legislation valid for conservation units which currently states 3km for the areas that do not have a buffer zone delimited by its Management Plan.

Conclusion:

This gap has been benchmarked against IFC PS 07 (paragraph 10).

No further recommendations are deemed necessary.

PS 8 – Cultural Heritage

- *Cultural Heritage (Gaps 43A and 43B)*

ECA's Requirements:

43 A- *Please show your Statement of Commitment to IPHAN to let the consultant confirm compliance with the principle.*

43 B- *Clarification on methods to promote public participation in the Programme for Maranhao. Ensure active and informed public consultation and participation as part of the cultural, historic and archaeological research, along with identification and protection programs for both plantations.*

ERM Assessment:

During the site visit **Suzano** provided two Statements of Commitment to IPHAN : 1) One signed on October 2010 (Process #01494.000027/2012-31); and 2) signed by June 2011. Both are requesting completion of licensing environmental impact studies regarding aspects related to impacts on the socio-economic development, in particular those of the cultural aspects of the region.

It was also published in the on the Official Gazette of the Union regarding Process # 01494.000269/2010-24 that the methodology used by IPHAN knowledge and diagnosis of intangible heritage - National Inventory of Cultural references - INRC and MATERIAL - System and Knowledge Management-SICG will be used by Susano to provide proper diagnosis. As reported during site visit, this diagnosis will be developed with partnership with the State University UEMA that will receive from Suzano a building for exposition center and laboratory for research. Evidence of the project regarding the exposition center has been also provided during site visit.

Conclusion:

This gap has been benchmarked against IFC PS 08 (paragraph 9).

No further recommendations deemed necessary.

Annex A: Environmental and Social Action Plan (ESAP)

As part of this Environmental and Social review, ERM prepared a preliminary Action Plan (Annex A) with the main issues identified and with a suggestion of responsibility and time scale to completion of the issue.

For better understanding, a description of each column of the action plan is necessary:

- **Column 01 - Infra/Plant:** identifies if the gap is related to the infrastructure (Infra) of the project, which can be the transmission line, railway, or road; or to the plantation areas (Plant). The gaps identified in *Suzano's* spreadsheet as "Extra", pointed out by the ECAs at the time of their site visit, were grouped by ERM according to the project feature they are related to (infra/plant);
- **Column 02 - N°:** refers to the number of the gap provided at the excel spreadsheet report, which was maintained by ERM;
- **Column 03 - Item/Issue:** refers to the subject of the gap provided at the excel spreadsheet report;
- **Column 04 - Recommendations:** for the gaps that ERM verified that additional actions are still required to be in line with the performance standards, recommendations were added;
- **Column 05 - Action Plan/Indicators:** detail of the actions that need to be taken or indicator to fulfill the gap.
- **Column 06 - Target related to IFC PS:** refers to the applicable IFC Performance Standard (PS) and paragraph that the gap is related. When no PS is related to the gap, this column will present "not applicable".
- **Column 07 - Responsibility:** area or person responsible in *Suzano* to address or perform the additional action; and
- **Column 08 - Time frame for completion:** estimate of time frame for completion of the additional action required to solve the gap.

Annex A: Environmental and Social Action Plan (ESAP)

Note: This action plan shall be updated if new gaps are identified during the follow up activities.

Infra/Plant	Nº	Item / Issue	Recommendations	Action Plan/Indicators	Target related to IFC PS	Responsibility	Time frame for completion
<i>PS1 Assessment and Management of Environmental and Social Risks and Impacts</i>							
Infra	4 A, 4B, 9A and 12A	Cumulative Impacts - Infrastructure	<p>Develop a Cumulative Impact Assessment (CIA) of the infrastructure project, considering the following:</p> <ul style="list-style-type: none"> - Existing, planned or reasonably defined developments at the time the risks and impacts identification process is conducted; - Propose mitigating measures for those risks and impacts in a manner commensurate with Suzano's control and influence over the third parties, and with due regard to conflict of interest; - Adequate methodology to identify cumulative risks and impacts for operation phase that should include a qualitative analysis of the impacts or a justification for not performing it; - Assessment of potential risks for local population, at least, assessment of flood risk, electromagnetic radiation, noise from road, as well as the adverse impacts associated with particular ambient conditions. 	<ol style="list-style-type: none"> 1. Define the scope/reference terms for the CIA 2. Contract a consultancy company to develop a Cumulative Impact Assessment (CIA) for the infrastructure project (railway, road and transmission line). 3. Delivery the CIA 	PS 01 paragraph 8	<ol style="list-style-type: none"> 1. Environmental Department (Industrial) and ERM 2. Environmental Department (Industrial) 3. Consultant to be hired and Suzano's Environmental Department (Industrial) 	6 months - 1 year

Infra/Plant	Nº	Item / Issue	Recommendations	Action Plan/Indicators	Target related to IFC PS	Responsibility	Time frame for completion
Plant	32A and 33A	Cumulative impacts - Forest operations	<p><i>Tocantins Forest Activities</i></p> <p>Develop a Cumulative Impact Assessment (CIA) of the forest activities in <i>Tocantins</i>, considering the following:</p> <ul style="list-style-type: none"> - Existing, planned or reasonably defined developments at the time the risks and impacts identification process is conducted; - Propose mitigating measures for those risks and impacts in a manner commensurate with Suzano's control and influence over the third parties, and with due regard to conflict of interest; - Adequate methodology to identify cumulative risks and impacts for operation phase that should include a qualitative analysis of the impacts or a justification for not performing it; - The matrix of identification of social impacts must be reviewed in order to consider impacts on health, security, exposure to water-borne, and vector-borne diseases, and communicable diseases that could result from project activities; impacts related to access of natural resources; exposure to hazardous materials and substances that may be released by the project, or control community exposure to pesticides; and impacts to health, safety and security of communities. 	<ol style="list-style-type: none"> 1. Review the matrix of social impacts. 2. Define the scope/reference terms for the CIA 3. Contract a consultancy company to develop a Cumulative Impact Assessment for the <i>Tocantins Forest Activities</i>. 4. Deliver the CIA 	PS 01 paragraph 8	<ol style="list-style-type: none"> 1. Environmental Department (Forestry) 2. Environmental Department (Forestry) and ERM 3. Suzano 4. Consultant to be hired and Suzano's Environmental Department (Forestry) 	6 months - 1 year

Infra/Plant	Nº	Item / Issue	Recommendations	Action Plan/Indicators	Target related to IFC PS	Responsibility	Time frame for completion
Plant	32A and 33A	Cumulative impacts - Forest operations	<p><i>Maranhão Forest Activities</i></p> <p>Regarding mitigating measures developed for the cumulative impacts assessment study, Suzano must include measures to influence the identified stakeholders in order to promote a better mitigation of the impacts as required by international standards.</p> <p>The matrix of identification of social impacts must be reviewed in order to consider impacts on health, security, exposure to water-borne, and vector-borne diseases, and communicable diseases that could result from project activities; impacts related to access of natural resources; exposure to hazardous materials and substances that may be released by the project, or control community exposure to pesticides; and impacts to health, safety and security of communities.</p>	<p>A report with list of actions to influence stakeholders to mitigate negative social impacts.</p> <p>An updated matrix including social impacts (health, security, exposure to water-borne, and vector-borne diseases, and communicable diseases that could result from project activities; impacts related to access of natural sources; exposure to hazardous materials and substances that may be released by the project, or control community exposure to pesticides; and impacts to health, safety and security of Bacaba community before and after the resettlement).</p>	PS 01 paragraph 8	Environmental Department (Forestry)	3 - 6 months

Infra/ Plant	Nº	Item / Issue	Recommendations	Action Plan/ Indicators	Target related to IFC PS	Responsibility	Time frame for completion
Infra	5 (A, B, C), 10C, 40A and 48A	Public Consultation	Integrate all corporate tools of consultation to stakeholders, grievance mechanism and public disclosure of information into its Corporate Management System Manual (Management System Manual MQ.00.00001) that is being reviewed. The Management System Manual should be improved to incorporate the social engagement and consultation measures that are currently adopted in order to achieve an ESMS for <i>Maranhão</i> Unit. Existing consultation procedures should be included inside the Stakeholder Engagement procedure that will be developed as part of the ESMS of <i>Maranhão</i> Unit. This procedure will explain how consultation activities are organized and its objective. Refer to gap 7A.	A Corporate Management System Manual (CMSM) that includes a Stakeholder Engagement Procedure (SEP).	PS 01 paragraphs 25 to 31	Social Department	6 months
Infra	6A, 6B, 6C, 6D and 46A	ESMS - E&S Assessment & Management System	Suzano must review the HSE Corporate Management System Manual and include information about Stakeholder Engagement plan. The management system manual must explain the different procedures/ structure for industrial, forest operations and infrastructure of the project.	A Corporate Management System Manual (CMSM) that includes a Stakeholder Engagement Procedure (SEP).	PS 01 paragraph 5	Social Department	6 months
Infra	7A	Stakeholder Engagement Plan	Suzano should create a procedure explaining how all existing tools that fulfill the content of an SEP are integrated.	A section of the Corporate Management System Manual (CMSM) that describes how all stakeholder engagement tools are integrated.	PS 01 paragraphs 25 to 31	Social Department	6 months
Plant	45B	FSC -PEFC certification	As Suzano intends to have from 50% to 70% of the areas certified on FSC or PEFC, Suzano must ensure the following: <ul style="list-style-type: none"> At least 70% (except for the years 2016, 2018 and 2019 when the minimum will be of 50%) of the pulp wood raw material used by the Project shall have FSC Forest Management Certification 	A progress report on FSC or PEFC certification with percent indicator of area which has been certified.	Not applicable	Institutional relations and Certifications	100% of the pulp wood raw material used by the Project sourced from

Infra/Plant	Nº	Item / Issue	Recommendations	Action Plan/Indicators	Target related to IFC PS	Responsibility	Time frame for completion
			<p>and/or PEFC Certification (or equivalent certification upon approval by the Facility Agent, Finnvera and the Mandated Lead Arrangers).</p> <ul style="list-style-type: none"> • Efforts will be made to increase the level of forest management certified wood to significantly exceed 70% of the pulp wood raw material used by the Project over time; • The balance of the pulp wood raw material used by the Project shall meet FSC Controlled Wood standards; • 100% of the pulp wood raw material used by the Project that is sourced from the Suzano's own plantations will be FSC Forest Management Certified and/or PEFC certified by December 31st 2014. • All efforts will be made to influence Vale Florestar to certify its raw material sold to Suzano according FSC/PEFC and report on volumes of raw material bought from Vale Florestar" 				the Suzano's own plantations by December 31st, 2014
PS3 - Resource Efficiency and Pollution Prevention							
Infra	3A, B and 8A	Waste/ air emissions and GHG emissions	<p>Include in the scope of internal auditing procedure the compliance with Waste Management Plan, including preparation of inventory and spreadsheets control.</p> <p>Develop an estimate of greenhouse gas (GHG) emissions at the project stage for <i>Maranhão</i> Project, according to internationally recognized methodology, such as the Guidelines of the Intergovernmental Panel on Climate Change (IPCC) or equivalent. The estimate should consider the scope 1 and 2. should review it annually.</p>	<p>1. Include in the scope of internal auditing procedure the compliance with Waste Management Plan, including preparation of inventory and spreadsheets control.</p> <p>2. Estimate GHG emissions</p>	PS 3 paragraphs 7, 8 and 12	<p>1. Environmental Department (Industrial)</p> <p>2. Environmental Department (Industrial) and Sustainability Department</p>	<p>1. 3 months</p> <p>2. 9 - 12 months</p>

Infra/ Plant	Nº	Item / Issue	Recommendations	Action Plan/ Indicators	Target related to IFC PS	Responsibility	Time frame for completion
Plant	30A and 30B	Waste/air emissions	Develop, based on the inventory performed for <i>Cidelândia</i> , an estimate for waste comprising all the forestry areas is developed. For emissions refer to item 8A.	Expand estimates of waste from <i>Cidelândia</i> to the areas of <i>Porto Franco</i> , using the same methodology adopted for <i>Cidelândia</i> .	PS 3 paragraph 12	Environmental Department (Forestry)	3 months
PS4: Community Health Safety and Security							
Plant	36A	Community exposures to diseases	Include questions related to potential for community exposure to diseases into the social and environmental impact evaluation and baseline.impact matrix.	Updated social and environmental baseline and impact questionnaire with questions on poetential for community exposure to diseases.	PS 04 paragraphs 9 and 10	Social and Environmental Department	3 months
PS5: Land Acquisition and Involuntary Resettlement							
Infra	7B, 11A, 11B, 25A, 15A and 16A	<i>Bacaba</i> Community / SEP - Stakeholder Engagement Plan	Provide periodic update and evidences of the relocation activities of the <i>Bacaba</i> Community described in the document "Check List Atividades Relocação <i>Bacaba</i> ".	Updated version of the "Check List Atividades Relocação <i>Bacaba</i> " document and related evidences.	PS 05 paragraphs 9 to 15	Social Department	6 months
PS6: Biodiversity Conservation and Sustainable Management of Living Nature Resources							
Infra	19A	Critical Habitat	Suzano should include in the map showing the high conservation areas (Location Map - Forestry Unit of <i>Maranhão</i> developed in May 8th, 2012 / Mapa de Localização - Unidade Florestal do <i>Maranhão</i>), the railway, road and transmission line routes.	Insert the routes of railway, road and transmission line in the existing map of high conservation areas. Determine action if these routes are interfering in the high conservation areas.	PS 06 paragraphs 16 and 17	Environmental Department (Industrial)	3 months

Infra/ Plant	Nº	Item / Issue	Recommendations	Action Plan/ Indicators	Target related to IFC PS	Responsibility	Time frame for completion
Infra	21A, 23A and 23B	Biodiversity Monitoring and Review to identify priority ecosystem services	The existing tools mentioned on the recommendations section of this gap are able to identify ecosystem services. Therefore, it is recommended that they are continuously applied for the infrastructure areas, ensuring that priority ecosystems services impacts are evaluated and included in the assessment, as long as the project is implemented including, road, railway , transmission lines and warehouse at the port. Some of these tools are Social Dialogues, Positive Agenda, questionnaire for identification of high conservation areas, among others. Provide evidence (minutes of meetings, fulfilled questionnaires) that the tools are being implemented according schedule and that are indeed identifying ecosystem services impacts.	A schedule and evidence (minutes of meetings, fulfilled questionnaires) that the tools are being implemented according schedule.	PS 06 paragraphs 24 and 25	Social Department	6 months

Annex B: Due Diligence Findings (Excel Spread Sheet)

Infra/Plant	N°	Item/Issue	Requirements
Infra	1A	Itaqui Port	Environmental Control Plan
Infra	1B	Itaqui Port	Forestry Inventory with all the information about the Itaqui area to support the requirement of suppression
Infra	1C	Itaqui Port	Description of the relocation issues, company's influence, n° of families, provide a document verifying that the relocation will be managed by the authorities and that it has been considered before Suzano's intervention, timeframe
Infra	1D	Itaqui Port	Questions marks on the berth expansion in the harbour, e.g. could the expansion be considered as an "associated infrastructure"? Will Suzano's part on an already existing berth or will it be constructed in the future? Will the Suzano loading area be on the existing berth? How big share will Suzano's part of the berth take in percentages from the total?
Infra	2A	Spoil material & Energy	Info about: construction materials, earthmoving, energy sources for the projects, calculation methodology
Infra	3A	Waste/air emissions	Quantify the air/waste emissions
Infra	3B	Waste/air emissions	Solid Waste Management Plan
Infra	4A	Cumulative Impacts - Health& Safety	Assessment of risks and hazards - complement the existing Assessment
Infra	4B	Cumulative Impacts - Health& Safety	Cumulative impact analysis
Infra	5A	Public Consultations	Info about the Public hearings that were conducted in April (Road / Transmission Line) and May, 2011(railway): stakeholders mailing, the invitations, minute of the Public Hearings, book from Clara Consulting
Infra	5B	Public Consultations	Info about the ongoing meetings with the communities and the main stakeholders: Who is invited? How are the community and the stakeholders invited? How are the community and the stakeholders able to communicate their thoughts? In what way are the comments taken in consideration for the project development?
Infra	5C	Public Consultations	Documentations from the meetings. What has been the output of the public hearings that have taken place?
Infra	6A	ESMS - E&S Assessment & Management System	Develop an ESMS: join all doc into na ESMS (see requirements)
Infra	6B	ESMS - E&S Assessment & Management System	Provide a general organizational chart that explains how environmental and social management systems are integrated
Infra	6C	ESMS - E&S Assessment & Management System	Describe how the environmental and social strategy fits into the company's overall strategies
Infra	6D	ESMS - E&S Assessment & Management System	Confirm to us that your policy documents/ management systems are supported by the management.
Infra	7A	SEP - Stakeholder Engagement Plan	Provide ppt regarding the Stakeholder Engagement Plan, including public consultations, grievance mechanisms for affected communities
Infra	7B	Bacaba Community / SEP - Stakeholder Engagement Plan	Specific schedule for the relocation of the Bacaba community
Infra	8A	GHG emissions	Provide a plan for implementation of estimation of GHG emissions for the mill's first five years of operation at full capacity - comparison with the emission monitored nowadays
Infra	9A	Cumulative impacts: at least flood risk, eletromagnetic radiation, noise from road	Provide a plan for implementing a risk analysis/ managements of these risks; details about the consultant that will be hired in 2012.
Infra	10A	Public consultation for transmission lines	Provide a map of the planned localization for the transmissions lines (1 só ou mais?)
Infra	10B	Public consultation for transmission lines	Provide a description of the associated Environment & Social impacts AIA da LT?
Infra	10C	Public consultation for transmission lines	Evidences of the public hearing for transmission lines. Não aconteceu AP para LT
Infra	11A	Bacaba community	Report about the community expectations, social environmental inventory, plan for relocation, timeframe, description of the whole relocation process, its current stage, clarification of who is responsible for what.
Infra	11B	Bacaba community	Presentations about Bacaba community.
Infra	12A	Assessment of adverse impacts	Assessment of adverse impacts associated with particular ambient conditions, impacts from construction and operation of each infrastructure component
Infra	13A	Resources use and efficiency	EIA for infrastructure components should incorporate total use and efficiency of resources, environmentally sensitive receptors, project demand for water, etc.
Infra	14A	Potential risks for local communities	Evaluation of the risks and impacts to the health and safety of the affected communities, specify preventive and control measures. Include in the Risk Analysis all the other projects/issues
Infra	15A	Bacaba community - Compensation and benefits to displaced people.	Evidences of the public hearing for transmission lines. Não aconteceu AP para LT
Infra	16A	Bacaba community - Resettlement action plan	Evidences of the public hearing for transmission lines. Não aconteceu AP para LT
Infra	17A	Bacaba community - babaçu gatherers	Report of the Bacaba inventory, description of how it was conducted.
Infra	18A	Bacaba community - environmental feasibility and analysis of alternatives.	Evidences of the public hearing for transmission lines. Não aconteceu AP para LT
Infra	19A	Critical habitat	Provide a map of the identified areas of high conservation value
Infra	19B	Critical habitat	Provide an analysis of the identified impacts on na APP and more details about the marginal areas that are impacted.
Infra	20A	Impacts on biodiversity	Provide an analysis of the identified impacts on na APP and more details about the marginal areas that are impacted.
Infra	21A	Biodiversity Monitoring	Provide the document regarding flora and plan to recovery degraded areas - PRAD
Infra	21B	Biodiversity Monitoring	Provide details about the fauna monitoring and the frequency of the monitoring.
Infra	22A	IFC PS6. APP Crossing	Provide info about the Barra Grande topography and bathymetry to finish the bridge project.
Infra	22B	IFC PS6. APP Crossing	Inform that it was not reviewed by the consultants
Infra	23A	Review to identify priority ecosystem services	Provide forestry inventory for the suppression phase and the PRAD
Infra	23B	Review to identify priority ecosystem services	Explain how these documents fulfill international standards
Infra	24A	Quilombola people - Public consultation	Gap considered as fulfilled
Infra	25A	Bacaba community	Describe how the Bacaba community was involved in the consultation process
Infra	26A	Bacaba community - cemetery	How consideration has been taken to Bacaba, that the access to the cemetery will be good also during construction and how they were involved in the consultation process
Infra	27A	Bacaba community - cemetery	How consideration has been taken to Bacaba, that the access to the cemetery will be good also during construction and how they were involved in the consultation process
Plant	28A	Land use	Send relevant maps, the table showing proportion of own plantations and plantations bought from Vale
Plant	28B	Land use	Provide info about the progress on FSC-certification that needs to be included in the report to the ECA's
Plant	29A	Energy/Materials to forestry project	Provide the Complementary Assessment for the Porto Franco EIA to present info about emergency environment procedure
Plant	29B	Energy/Materials to forestry project	Confirm that the same regulation is valid in Tocantins (qual regulação?) Um EIA com inventário químico e biológico?
Plant	30A	Waste/air emissions	Provide the Solid Waste Management Program to present identification of all types of waste/emissions generated during all project phases
Plant	30B	Waste/air emissions	Provide estimations of these waste/emissions
Plant	31A	Analysis of alternative locations	Provide the analysis about the licensing process difficult levels, presence of environmental/social conflicts, manpower availability for the areas for MA/TO.
Plant	31B	Analysis of alternative locations	Provide assessment to identify the priority areas for biodiversity, areas not included in buffer zones, indigenous lands, parks and biological reserves
Plant	31C	Analysis of alternative locations	Provide analysis about the manpower origin
Plant	31D	Analysis of alternative locations	Provide info about social criteria for area selection for Tocantins (their main concern is the lack of social criteria in the TO EIA.
Plant	32A	Impacts interrelationship matrix for MA	The annex 7.01 and item 7.2 of the Porto Franco EIA doesn't show the interrelationship between legal, environmental, social and operational impacts of the project. Suzano mention a land use and occupational map that identifies the preservation, plantation and infrastructure areas (micro planning and PLIMA)
Plant	33A	Cumulative impacts	Provides info about additional risks for local population (as risks derived from transportation of timber and transport of dangerous goods in major), other potentially significant risks, and a matrix that describes inter-related impacts that is presented in the EIA and the Complementary Assessment
Plant	34A	Hydrological models, quantification/forecast of waste and emissions	Provide the Hydrologic Monitoring Program
Plant	34B	Hydrological models, quantification/forecast of waste and emissions	Provide estimations regarding water and estimation of waste

Infra/Plant	N°	Item/Issue	Requirements
Plant	35A	Public consultations	Provide evidences of the consultation process, how the comments have been addressed, show a formalised periodic reporting to the affected communities, show a proactive reporting of the project
Plant	35B	Public consultations	Communication Program
Plant	36A	Community exposures to diseases	Provides the identification of all potential risks to community, suggestion of measures to adrest the risks identified earlier, a dtailed plan on how to implement such measures, a monitoring program
Plant	36B	Community exposures to diseases	Provide the Hydrus Water monitoring program, PLIMA and other documents that provides these info.
Plant	37A	Water consumption	Provide the water demand estimate and integrated calculations for water use
Plant	38A	IPM - Integrated Pest Management	Due to the fact that there are documents that complement the IPM, check with Environ if this point is fulfilled. This documens must justify the pest management measures selected based on the environmental/ecological criteria.
Plant	38B	IPM - Integrated Pest Management	Confirm classification of pesticides to ECA'; the EIA should demonstrate how the selected pest management products are less hazardous than others products.
Plant	39A	Agrochemical products and training requirements	Provide MO 06.00002 and MO 06.00006 about the procedures for pesticides application
Plant	39B	Agrochemical products and training requirements	Provide item 3.5 of the EIA that mention appropriated handling plan
Plant	39C	Agrochemical products and training requirements	Provide internal procedure of solid waste that mention thee access to pesticiedes (soterage, handling and disposal)
Plant	39D	Agrochemical products and training requirements	Describe potential deviations from FSC's requirement on training
Plant	40A	Community engagement	Provide evidences of the public consultation with the communities and present them to the consultant
Plant	40B	Community engagement	Provide specific procedure for land purchase (PR 13.00004) for the consultant review
Plant	41A	Public consultation / Methodology of a screening formal procedure to establish if compensation at full replacement cost is necessary	Provide specific procedure for land purchase (PR 13.00004) for the consultant review
Plant	42A	Babaçú gatherers.	Provide evidences of a process used to identify vulnerable groups and, in case of loss or reduction of access to any natural resources is involved, provide the compensation schemes.
Plant	42B	Babaçú gatherers.	Confirm in a documented way that will be affected by the plantations.
Plant	43A	Cutural Heritage	Please show your Statement of Commitment to IPHAN to let the consultant confirm compliance with the principle.
Plant	43B	Cutural Heritage	Clarification on methods to promote public participation in the Programme for Maranhao. Ensure active and informed public consultation and participation as part of the cultural, historic and archaeological reserarch, along with identification and protection programs for both plantations.
Plant	44A	Participation and consent	Please let the consultant review records from FUNAI that confirm that no indigenous people will be affected.
Extras	45A	Site visit meetings	Names and titles of all present in the meeting at imperatriz city hall and SEMA
Extras	45B	ISSO / OHAS 8000	Which accredited certification firm we use for relevant ISSO-certifications and OHAS 8000
Extras	45C	Communication issues	Provide clarification about the gaps between Suzano's presentations of how stakeholdes communication takes place and the stakeholders own understandin of the situation. Ex: relocation of Bacaba and understanding of options to join trade unions on site
Extras	45D	Trade unions	Confirm that the workers are indeed free to join to trade unions
Extras	45E	Project impact in TO and PA	The project influences/is influenced by 3 states' system. Describe what impacts this may have and how it is adressed by Suzano in these 2 states (TO and PA) ?
Extras	45F	Corruption	What are Suzano's anti-corruption measures in relation to agencies/authorities
Ind	46A	ESMS	Provide an ESMP covering the whole project
Ind	47A	Transmission line	Description of the transmission line construction in detail
Ind	47B	Transmission line	E&S impacts for transmission line
Ind	48A	SEP - Stakeholder Engagement Plan	Provide na SEP for industrial site

Nº	Item/Issue	ENVIRON first findings	Suzano's comments on Draft report/presentation	Conclusions	ECA comments	Suzano's comments	ECA comments June 1, 2012
INFRASTRUCTURE							
1	Itaqui Port	Port – a new terminal for storage and dispatching. Location: Itaqui? Other?	Suzano will have a new storage located in Itaqui Port which is in operation since 1974 and it's located in São Luis city, 600km far from Imperatriz. Suzano's own Port Project is in hold. It's relevant to inform that Itaqui Port has all operation licenses	ENVIRON understand that the project will require a new storage terminal only, in the existing Itaqui Por. It is also noted that the Itaqui Port is likely to have all national operational licences in place. Based on these facts, Suzano came to a conclusion that an EIA/ESIA will not be required. However, based on international standards, full EIA/ESIA is required even for minor developments in ports, so a Scoping Study done to international standards is recommended to investigate a scope of work for future ESIA. There appears to be a belief that if the port is located 600 km from the Imperatriz location, then it is not covered by the project. Based on international standards, the Itaqui Port is included in the area of project influence because the terminal construction (however small one) is required for the project, and therefore falls into the area of the influence of the project.	At least a Scoping study to be undertaken as a first step to assess what are the issues that might need to be considered in the Port ESIA at a later stage.	Suzano will provide an Environmental Control Plan that is na environmental impact assessment of intermediated complexity, and a forestry inventory with all the informations about the Itaqui area to support the requirement of suppression. Obs.: both documents are in portuguese	In order to make sure that the documents you are referring to could compensate for an EIA, we kindly ask you to translate the Environmental Control Plan and the Forestry inventory into an executive summary.
2	EU EIA Directive	Information on spoil material storage & disposal during construction, construction materials and energy are limited, as well as information on their quantity and transportation	The volume generated during earthwork was quantified in the characterization of Railway, Road Access and Power Transmission Line (volume I of EIA) and the exact local of disposal will be set during the Installation Permit Process and it will be located inside of Suzano's land close to the construction area.	Whilst there is some information in the original EIAs on the volumes of spoil material to be generated, this information is very limited. The calculation methodology is not identified or explained. Spoils generated as a result of cut & fill practices will be stored in dedicated areas along the infrastructure; the use of these spoil storage areas will reportedly be regulated by SEMA, but no information is provided on their extension and characteristics. Mitigation measures (i.e. sediment retention devices, temporary drainage during construction works, slope protection and 'adequate transportation') are identified but not described further in the risk assessment or PBA (e.g. no erosion and sediment control plan, no transportation requirements described to define what is considered to be adequate). ENVIRON appreciates that earlier EIAs were prepared on the basis of the Brazilian legislation ONLY. However, based on international standards, the need for the land to store the refuse should be analyzed and quantified, and the scope of the EIA should be expanded as necessary to identify impacts and the need for additional mitigation measures. Information on construction materials and energy sources should be added to the original EIAs to allow for the assessment of potential additional impacts.	Additional information on construction materials and energy sources needed.	Suzano will provide detailed information about construction materials, earthmoving and energy sources for the projects, however more detailed informations (description of calculation methodology) will be in portuguese as they are within the basic design or detailed design for each one of the projects. During the EIAs development the quantifications were determined by a preliminary topography survey and the use of secondary datas.	We will need a translated report on these matters before internal decisions.
3		-Waste/air emissions generated during construction have not been quantified or estimated. Estimates of cumulative effect from increased traffic, all three infrastructure components and existing infrastructures present in the area need to be added (Annex IV.1)	WASTE: Suzano has planned the Solid Waste Management System for the Pulp Mill project to cover Railroad, Road and Power Transmission Line Installation. I.e. Civil waste landfill and Central of waste storage. The estimated and detailed information for Railroad, Road and Power Transmission Line will be provide during the Installation Permit Process. However it's already defined that all waste, that will be generated during construction and operation, will be disposed and treated inside of Pulp Mill area. AIR EMISSIONS: air emissions are not going to be relevant, that's why it wasn't quantified. i.e. the main emission during construction and implementation of the 3 projects is dust, which will be reduced by wetting the floor and around construction area. Before implantation of the factory has started, Suzano assessed air quality. And during the operation phase, monitoring and control of air quality will be done frequently. Air quality is not going to change because of Suzano's infrastructure implantation and operation. TRAFFIC: Suzano has already sent a traffic study which shows the impacts the whole enterprise will bring to the region. The study shows that roads located in the region would support the traffic even after Suzano's new Pulp Mill be installed without Suzano's own Railroad and Road. The railroad and the road will minimize the impacts that can appear later on though.	ENVIRON appreciates that earlier EIAs were prepared on the basis of the Brazilian legislation ONLY which allows detailed information on wastes and air emissions to be prepared at a later (construction) stage of the project. It is acknowledge that a waste management plan is present in PBA. However, please note that wastes and/or emissions generated during construction and operational phases have not been fully quantified and the methods to estimate these quantities were not provided. No modelling has been conducted to estimate cumulative effects (e.g. greenhouse gas emissions derived from increased traffic on the road or noise emissions from the three infrastructure components) to determine the need for abatement. Based on international standards, the quantities, types and, when applicable, toxicity of wastes and air emissions (i.e. gaseous, particulates, noise and electromagnetic radiation) emissions should be clearly identified. Methods used to estimate the quantities and uncertainties attached to this estimates should be clearly stated. Cumulative greenhouse gas emissions resulting from the three infrastructure components should be considered in these calculations.	Additional detailed quantified information on wastes and air emissions needed.	Suzano has a Solid Waste Management Plan that will be implemented during the construction phase; this Plan's main objective is to guarantee that all the solid waste generate at construction site will be trated according to its characteristics. The types and the classification (according to Brazilian regulation that includes toxicity identification) of the solid wastes are presented at the EIAs. The largest volume of solid waste to be generated during the construction will be due to earthmoving activities, this quantification is determined within the basic design and detailed desing for all the projects. The air emissions weren't quantified because the EIAs identified that they would be insignificant for the Road, Railway and Transmission Line. It is importante to highlight that during the construction the main air emission are dust and black smoke, for both of them Suzano has a existent Plan: wetting floor and Vehicles and Equipments Maintenance Plan.	We still think it is important to quantify the wastes and air emissions.
4		Analysis of impacts - identification of risks in the original EIAs should be extended to cumulative impacts, risks to workers and health & safety hazards to local population for all three infrastructure components (Annex IV.5)	-The cumulative impacts analysis is not required by Brazilian law. In Brazil the Occupational Health and Safety is regulated by Regulatory Norms approved by the Ministry of Labor and Employment. And Suzano applies them all, regarding preventing accidents, injury, and disease by minimizing the causes of hazards and training. The health & safety hazards to local population was not studied because this scope is not required by Brazilian law in the EIAs.	Whils we acknowledge that cc and health and safety hazards assessment are not required by the Brazilian standards, ENVIRON was asked to evaluate the original EIAs on the basis of the Brazilian and international requirements. International standards require an analysis of cumulative impacts caused by the project together with other existing or planned developments in the area (which includes the cumulative impacts of all three infrastructure projects which will take place in that area). It is also acknowledged that Suzano has good occupational health and safety standards in place and is OHSAS 18001/2007 certified. It was noted however that the assessment of risks and hazards in the EIA appears to be focused mainly on the increased risks of traffic accidents and animal collisions derived from increased traffic. Based on international standards, additional risks (e.g. derived from handling of hazardous materials, spills, fire, explosion, and project exposure to natural disasters, working at height, live power lines, electric and electromagnetic fields) for workers and local population need to be considered in EIAs, to be able to identify mitigation measures at an early stage. An impact relationship matrix has not been included to show interrelation between the different impacts identified. Moreover, some potentially significant risks (e.g. impact on population due to electromagnetic radiation from transmission line, particularly due to potential cumulative impacts from existing lines, noise nuisance from the three infrastructure components, greenhouse gas emissions derived from road and railway line, mitigation of flooding risk due to pick run-off from the road, impact of right-of-way construction and maintenance activities) do not appear to have been assessed and modelled and preventive/mitigation measures for certain risks have not been identified (e.g. in relation to bird accidents, nuisance due to noise or electromagnetic field, wildlife crossing and passage measures, fire prevention and fire control, schedule activities to avoid wet season or breeding and nesting seasons for endangered species). As an example, please note that the EIA indicates the presence of two additional transmission lines in the region, and concludes that Suzano's transmission line will not significantly affect the environmental and life quality of the population as "local people are already adapted to the presence of this infrastructure". International standards require cumulative effects derived from the presence of three transmission lines in the area to be fully analyzed, to include total combined electromagnetic radiation and noise levels to which local population will be exposed as result of the project.	Additional information and analysis of cumulative and social impacts needed.		Please conduct an analysis of cumulative impacts.
5		Public Consultations - the minutes of the meeting are available but comments and views of consultees and how those have been dealt with by the project could not be found in the EIAs. Scoping consultations appear to be limited to relevant authorities only (Articles 6.2-6.5)	-Public Hearing happens after EIA is filed (it takes about 60 days). If some question is made and Suzano doesn't know how to answer, Suzano has to do a complementation of EIA that wasn't necessary in this case. Suzano made available transportation for local people, in order to allow them to attend the Public Hearing, previous meeting were done with the communities and none manifestation were done by stakeholders in general.	It is acknowledged that public hearings are in compliance with the Brazilian legislation. Moreover, preliminary licenses for the three infrastructure components were already issued by SEMA in January 2012 (railway line) and November 2011 (road and transmission line), after the public hearings. However, based on international standards, this one-off public hearing is not considered to be enough for fully effective means of two-way communication. The limitations refer to the timescales and availability of information. Based on international standards, insufficient notice was provided to stakeholders to effectively participate in the public hearing (advertisement and invitations to public hearings were issued with approximately 1 week notice and a time limit of 5 days was given to provide additional information or comments to SEMA). Based on international standards, it is a usual practice to give a 60 days notice for private investments projects . No records of previous meetings were available. Minutes of the public hearing are presented in the public hearing reports. However, comments and views of consultees, and any subsequent actions and corrective measures implemented by Suzano or reasons for not incorporating the comments into the EIA, were not available. Comparing EIA scoping consultations with International standards, the consultations were limited to relevant authorities only and were not extended to include the public (i.e. no full consultation with international standards). Public participation should be proactive, as opposed to a reactive approach. Consultation should be conducted as part of an overarching stakeholder engagement program that enables informed consultation and participation of affected people throughout the project life cycle (i.e. design, construction, operation, etc). International standards require that affected communities and stakeholders are consulted on project alternatives and periodically informed on the status of the projects and mitigation measures and monitoring results. This could be done through the periodic release of non-technical updates on the projects. The public concerned shall be given sufficient time to prepare and participate effectively in the process. It is also acknowledged that Brazilian regulations do not require public hearing for the transmission line as it is subject to Simplified Environmental Assessment. Based on international standards, public consultation for the transmission line need to be organised to inform the affected people about the positive and negative impacts associated with the project and the mitigation measures implemented.	Additional information on the consultation process and public hearing needed.	The EIAs for Road and Transmission Line were submitted to SEMA in April 2011 and the Railway EIA in May, 2011 together with the requirement for Preliminary License, after this, Suzano made few meetings with SEMA team to define the structure of the Public Hearings and the stakeholders. The stakeholders invitation procedure was also aligned with SEMA, for some governments representatives, Suzano's team went to deliver the invitation and a RIMA copy and to make a previous presentation about the project. The advertisements and invitations to Public Hearings at the communications channels (TV, radio, newspaper, banners, etc) started 1 week before the event in according to SEMA orientation, also the Stakeholders Mailing was approved by SEMA. Considering this, Suzano can assure that all the stakeholders were able to participate the Public Hearings. Although it has not happen the Public Hearing for the Transmission Line, Suzano is developing a consultation process with the community and the main stakeholders. There are meetings with the community to present the project evolution with time for questions and opinions, all those meetings are registered and the comments are taken in consideration for the project development.	Please provide us with information about the Public hearings that were conducted in April and May, 2011. Who were the stakeholders invited? Please provide us with information about the ongoing meetings with the communities and the main stakeholders: Who is invited? How are the community and the stakeholders invited? How are the community and the stakeholders able to communicate their thoughts? In what way are the comments taken in consideration for the project development? Please, provide us with documentations from the meetings. What has been the output of the public hearings that have taken place?
6	IFC PSI, E&S Assessment & Management System	No ESMS appropriate for the nature and scale of the project appear to be in place (Clause 5)	There is an Action Plan called Environmental Management Global Program that will guarantee that all Action Plans will be accomplished, covering all environmental and social issues. And also there is a detailed environmental schedule that has all action of all monitoring programs.	ENVIRON noted the Environmental Management Global Program and an environmental schedule were included in the original EIAs. However, these two documents do not substitute an Environmental and Social Management System (ESMS) required by international standards. Based on international standards, the client, in coordination with other responsible government agencies and third parties, will need to establish and maintain an ESMS appropriate to the nature and scale of the project and commensurate with the level of its environmental and social risks and impacts. The ESMS will need to incorporate the following elements: (i) policy; (ii) process of identification of risks and impacts; (iii) management programs; (iv) organizational capacity and resources to implement ESMS; (v) emergency preparedness and response; (vi) stakeholder engagement; and (vii) monitoring and review. ENVIRON believe that Suzano already has most of the materials/documents which will form part of the ESMS system, and Suzano can put all of them together as one combined document and begin to implement the system for the project.	ESMS and an Action plan for implementing ESMS needed.	Suzano didn't develop this specific Program because it wasn't exiged during the definition phase of the Social and Environmental Programs with SEMA, however, all the actions predicted for the SEP are covered by other Communication Programs: Building Communication Plan, Social Communication Plan,	Please put together a combined document based on the elements that Environ has communicated, referring to the different documents that totally meet the requirements for an ESMS.
7	IFC PSI, E&S Assessment & Management System	SEP - a SEP which includes differentiated tailored measures to allow the effective participation of all segments of the affected communities, including of those identified as disadvantaged or vulnerable (Clause 26)	Suzano did the Public Hearing, made available transportation for local people, in order to allow them to attend the Public Hearing, Suzano monitors the communities with meetings (Social Communication Program), provides free communication between Suzano and Communities through 0800 telephone number.	Public Hearing is only one of the elements of a Stakeholder Engagement Plan . Based on international standards, the original EIAs should have identified the range of stakeholders that may be interested in Suzano projects and consider how external communications might facilitate a dialogue with all stakeholders. International standards require Suzano (or any other project developer) to develop and implement a Stakeholder Engagement Plan that is scaled to the project risks and impacts and development stage. Where applicable, the Stakeholder Engagement Plan will need to include differentiated measures to allow the effective participation of those identified as disadvantaged or vulnerable. The original EIAs based on the Brazilian legislation do not include a SEP required by international standards.	A Stakeholder Engagement Plan needed.	Suzano has few different projects to guarantee the engagement with the stakeholders, it doesn't exist a SEP because this plan wasn't exiged during the definition of the Social and Environmental Programs with SEMA, however, all the actions predicted for the SEP are covered by other Communication Programs: Building Communication Plan, Social Communication Plan,	If Environ has reviewed the documents you are referring to, Environ has apparently not assessed them as satisfying. Please describe for us how the different plans should meet the requirements on a SEP. If Environ has not reviewed the documents we would kindly ask you to translate the plans into an executive summary.

Nº	Item/Issue	ENVIRON first findings	Suzano's comments on Draft report/presentation	Conclusions	ECA comments	Suzano's comments	ECA comments June 1, 2012
INFRASTRUCTURE							
8	IFC PSI, E&S Assessment & Management System	EIAs should be extended to include analysis of GHG emissions. GHG can be offset by plantations, but there appears to be no quantification or methodology for analysis of the offsets (Clause 7)	Suzano will start to measure GHG emissions after operation has started, which means in 2014	ENVIRON noted that Suzano will start measuring GHG in the future, however, based on international standards, the risks and impacts identification process (including the emissions of greenhouse gases) should be included in the EIAs/ESIAs (i.e. PRIOR to construction, and not during or after the construction process).	Additional information/analysis on GHG emissions needed.	Suzano will start to measure the GHG emission only after the mill start up in 2014. It is possible to identify without quantification the GHG emission during the construction.	Please provide us with estimated GHG emissions during construction.
9	IFC PSI, E&S Assessment & Management System	EIAs should be extended to allow an analysis of, e.g., cumulative electromagnetic radiation on population, increased flood risk, cumulative impacts and noise from road and railway components, risks of birds accidents and wildlife crossings (Clause 8)	The electromagnetic radiation on population was considered in Impact Assessment of Transmission Line (Volume III - page 62) and the conclusion was that people will not be affected by electromagnetic radiation because emissions levels will be according to the law. All infrastructure will have drainage system, so that the flood risk is insignificant. The risks of birds accidents was considered Impact Assessment of Transmission Line (Volume III). The risks of wildlife crossings was considered Impact Assessment of Railway and Road (Volume III).	ENVIRON noted that the electromagnetic levels will be within the Brazilian legislation, but international standards are very different from the Brazilian laws. It is not enough to claim that the flood risk is not relevant because a drainage system will be provided . Based on international standards, the EIA/ESIA should include an analysis of all potential risks (including cumulative electromagnetic radiation on population, increased flood risk, cumulative impacts and noise from road and railway components), and such analysis was not included in the original EIAs prepared to the Brazilian standards. ENVIRON noted that the EIA commits to maintain electromagnetic levels in compliance with the Brazilian legislation, however, cumulative impacts from existing transmission lines have not been analyzed and thus, potential cumulative levels to which local population could be exposed have not been adequately assessed. As noted above, the EIA indicates the presence of two additional transmission lines in the region, and concludes that Suzano's transmission line will not significantly affect the environmental and life quality of the population as "local people are already adapted to the presence of this infrastructure" . The EIA also notes that local populations are unlikely to have interference in their TV and radio signals and are unlikely to 'notice' noise from the transmission line, however no calculations are presented to support this assumption, and thus, the need for mitigation measures has not been properly assessed. International standards require cumulative effects derived from the presence of three transmission lines in the area to be analyzed, to include total combined electromagnetic radiation and noise levels to which local population will be exposed as result of additional impacts from the project. Increased flooding during construction and operation (i.e. risk due to run-off from the road) has not been described, quantified and analyzed in detail. Drainage needs have not been determined and calculation methodology was not explained. Based on international standards, the scope of the EIA should be extended to identify direct impacts of the infrastructure projects that may result in adverse health and safety risks and impacts to local communities, such as increased risk of flooding due to the loss of natural buffer areas and the increase of pick run-off from the road, or adverse impacts on the quality, quantity and availability of water. The potential for climate change to exacerbate these effects should be covered as part of the assessment. While impacts on fauna (including birds) were identified, the EIA for the transmission line does not provide any mitigation measure which are required by international standards (e.g. scheduling construction activities during periods of least impact to wildlife - avoiding for example nesting seasons; installation of warning or frightening devices on wires; design of the power line route to consider predominant lines of flight, existing infrastructures, or other natural barriers). No mitigation measures appear to have been identified in the EIA to minimize barriers to wildlife, such as maximizing the availability of animal crossings (e.g. bridges, culverts and over-crossings) or provision of jointing chambers to allow small animals a means of escape from the railway. It should also be noted that no mitigation measures appear to have been considered to reduce visual impacts of the three infrastructure components at the planning stage.	Additional risk analysis needed.	The Drainage Design is determined within the Detailed Design, for the Railway this design is consolidated, but for Transmission Line and Access Road the Detailed Design is still in development. Anyway during the construction all the measures determined in the drainage design to minimize the increasing risks of flooding, erosion and sediments carrying will be implemented.	Please provide us with a risk analysis.
10		Disclosure of Information, Consultations and Reporting to Community - the transmission line should be subject to public consultation, EIAs should be supplemented with a programme of community updates on infrastructure projects progress (Clauses 29 & 30)	Suzano does meeting with the community constantly. The subjects that are discussed during these meetings in summary are the impacts Suzano can cause, either positive or negatives ones. According to Brazilian Legislation, neither a Public Consultation nor a EIA is necessary for Power Transmission Line until 230kV. It is required only the Simplified Environmental Report.	The meetings with the communities are only one of the elements of the disclosure of information and consultation process. ENVIRON understands that neither a Public Consultation nor an EIA is required based on the Brazilian legislation for the transmission line (but all these requirements are STILL relevant to a railway and a road covered by the project). However, international standards require that disclosure of relevant project information needs to be included in EIAs/ESIAs to help people affected by the project (these include: those who live within the project area of influence which covers both direct and indirect impacts, as well as communities who currently use or will use the transportation routes covered by the project) to understand the risks, impacts and opportunities of the project.	Additional information/analysis needed.	Despite the non obligation of realizing a public hearing, Suzano has informed the community affected by the transmission line about the project, few meetings has already happened in order to provide a channel of communication between the company and the population. There is a planned agenda organized by Suzano's team to keep in touch with the affected communities. Suzano can provide the evidences of those meetings	Please provide us with information about the Public hearings that were conducted in April and May, 2011. Who were the stakeholders invited? Please provide us with information about the ongoing meetings with the communities and the main stakeholders: Who is invited? How are the community and the stakeholders invited? How are the community and the stakeholders able to communicate their thoughts? In what way are the comments taken in consideration for the project development? Please, provide us with documentations from the meetings. What has been the output of the public hearings that have taken place?
11		Informed Consultations & Participation process (ICP) - more needs to be done on the engagement of the Bacaba Community, exact number of public meeting participants could not be confirmed, detailed inventory of assets could not be provided (Clause 31)	There is a possibility to relocate Bacaba Community. But the public agency is not demanding a relocation of them. And also Suzano's Board hasn't made a clear decision about it yet.	According to the principles of international projects, because the Bacaba Community (BC) is located in the close proximity to the road and the pulp and paper plant site (approximately 800 meters) and infrastructure components (less than 200 m to the transmission line, and around 350m to 400m from the railway line), the Bacaba Community will be affected by the project and the construction process , even if Suzano does not relocate the BC. Based on international standards, for projects with potentially significant adverse impacts on affected communities (in this case, the Bacaba Community), Suzano will need to conduct an Informed Consultation and Participation (ICP) process that will result in the affected community's informed participation. ICP involves a more in-depth exchange of views and information, and an organized and iterative consultation, so that Suzano could incorporate into their decision-making process the views of the affected community on matters that affect such community, such as the proposed mitigation measures, the sharing of development benefits and opportunities, and implementation issues. The consultation process should (i) capture both men's and women's views, if necessary through separate forums or engagements, and (ii) reflect men's and women's different concerns and priorities about impacts, mitigation mechanisms, and benefits, where appropriate . International standards require Suzano to document the process , in particular the measures taken to avoid or minimize risks to and adverse impacts on the affected community, and to inform those affected about how their concerns have been considered.	Clarification needed regarding the process and decision on relocation.	It has been done a report to understand the community expectations about the resettlement and a social environmental inventory that contemplates the community origin, income source, local food supply, local infrastructure, house's infrastructure, manpower qualification, cultural heritage, community organization and water availability. Every family from the community was listened and interviewed. The report is being evaluated by Suzano's team, after its approval it will be presented to the community for validation. There are periodic meetings for updating and information exchange between Suzano and Bacaba. Next steps: 1. Validate the families' registry; 2. Validate the detailed design; 3. Validate the land use (house and street planning, living area, etc); 4. Validate the disponibility for schools, health care center, transportations, infrastructure, etc); 5. Field visiting (one representative of each family) at the area; 6. Reporting the consolidated informations to the government	Please tell us about the report and the conclusions so far as well as time frame for the next steps and how the results will be applied on the project.
12	IFC PS3, Resource Efficiency & Pollution Prevention	NC: The EIAs need to be extended to include an assessment of adverse impacts associated with particular ambient conditions and cumulative impacts from construction and operation of each infrastructure component (Clause 11)	The cumulative impacts analysis is not required by Brazilian law. Suzano is available to improve the impacts material though. The material will be more detailed to require the Installation Permit anyway.	See previous comment on cumulative impacts. To address potential adverse project impacts on existing ambient conditions (such as air, surface and groundwater, and soils), international standards require consideration of relevant factors, including, for example (i) existing ambient conditions; (ii) the finite assimilative capacity of the environment (the capacity of the environment for absorbing an incremental load of pollutants while remaining below a threshold of unacceptable risk to human health and the environment); (iii) existing and future land use; (iv) the project's proximity to biodiversity areas or protected areas; and (v) the potential for cumulative impacts with uncertain and/or irreversible consequences.	Additional information/analysis needed.		See previous comment in this regard
13	IFC PS3, Resource Efficiency & Pollution Prevention	PC - Pollution prevention is discussed in the Action Plan (PBA), however resource efficiency has not been assessed as part of EIAs for infrastructure components. (Clause 4)	The efficiency will be high as possible at least meeting the environmental law.	The scope of the EIA should be extended to assess and incorporate additional aspects such as total use and efficiency of resources, during the design phase (including project design and site selection alternatives). Considerations should include background ambient conditions (that may occur due to natural and/or anthropogenic causes not related to the project), environmentally sensitive receptors (such as potable water supplies or protected areas), the expected project demands for water, and the availability of waste disposal facilities. Potential for cumulative impacts should also be reviewed.	Additional information/analysis needed.	The background values were measured and presented at the EIAs. For the basic design there were defined the total use and efficiency of resources (as water and energy demand, availability of waste disposal from earthmoving activities)	Please present how the data has been used to assess resource efficiency.
13	IFC PS4, Community H&S and Security	NC: Ecosystem Services (ES) - the original EIAs need to be extended to include a comprehensive assessment of ES and the associated impacts from the infrastructure projects (Clause 8)	The environmental impact assessment is fundamentally based on local environmental diagnosis and its local condition. The environment presented was mainly focused on the main aspects that compounds the ecosystem services therein included fauna, flora, water resources, conservations areas etc. And the environmental assessment covers these aspects which had been already altered by human activities in the neighbourhood. Therefore, ecosystem services already transformed comprehend an important assumption to install the entrepreneurship. It's relevant to inform that the assessment shows the scenario after implantation of the projects (Avaliação de Impactos de EIA) and the alterations will be minimized with Suzano actions. i.e.: Suzano will recover the APP area where the Railroad will cross even though this area was heavily impacted by human activities in the past.	AGREED to remove NC based on new documents and explanations from Suzano			Remove NC
13	IFC PS4, Community H&S and Security	NC: Community exposure to diseases - workers reportedly will be briefed on their conduct towards local communities, but potential exposure of local communities to diseases associated with the influx of project labour was not identified as a potential impact in the EIAs. No documented evidence of prevention of community exposure (Clauses 9 & 10). Other hazards and risks to off-site communities related to infrastructure construction and operation should be identified in greater detail and accompanied by appropriate mitigation strategies	One of the main assumptions that made entrepreneur decide to install the mill in this region is mainly the local man power availability. This aspect has an important and positive result for community: to avoid migration from other cities and bay consequence avoid extra pressure on local infrastructure. So, besides this consequences over the environment, of course there's the human factor: local community that shall not suffer any exposition to diseases due to the entrepreneurship and its workers, considering it shall be used mostly the local and regional man power. However, Suzano's workers who come from other places must take all necessary vaccination and respect Suzano's Healthy & Safety Policy. Also some vaccination internal campaigns (STD, sexuality, Pandemic and Endemic Diseases) are made to avoid community exposure to diseases. However it's relevant to stress that the workers who come from other places are more exposed to the local diseases than the local community due the region is well served by local healthy system.	AGREED to remove NC based on the new documents sent by Suzano			Remove NC

Nº	Item/Issue	ENVIRON first findings	Suzano's comments on Draft report/presentation	Conclusions	ECA comments	Suzano's comments	ECA comments June 1, 2012
INFRASTRUCTURE							
14	IFC PS4, Community H&S and Security	PC: The EIAs should be extended to include a detailed analysis of potential risks to local communities resulting from the infrastructure projects and associated mitigation measures (Clause 5)	Suzano has a risk analysis for the mill, which will be sent to ENVIRON, and it will be prepared soon for infrastructure projects. (Attached document - Volume IV Pulp Mill EIA - First Subject)	The original EIAs need to demonstrate evaluation of the risks and impacts to the health and safety of the affected communities (people who live in the close proximity to the infrastructure components and can see them from their houses, plus all people who will be affected by dust, noise, etc from construction or would be exposed to risks due to the operation of the infrastructures) during the whole project life-cycle and will need to specify preventive and control measures consistent with good international industry practice, such as in the World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines) or other internationally recognized sources. It is acknowledged that Suzano has good occupational health and safety standards in place and is OHSAS 18001/2007 certified. It was noted however that the assessment of risks and hazards in the EIA appears to be focused mainly on the increased risks of traffic accidents and animal collisions derived from increased traffic. Additional risks (e.g. derived from handling of hazardous materials, spills, fire, explosion, and project exposure to natural disasters, working at height, live power lines, electric and electromagnetic fields) for workers and local population have not been considered in the original EIA. These risks should be analysed as part of the EIA in order to identify mitigation measures at an early stage.	Additional information/analysis needed.		Please describe for us how the outstanding issues/additional risks (e.g. derived from handling of hazardous materials, spills, fire, explosion, and project exposure to natural disasters, working at height, live power lines, electric and electromagnetic fields) have been integrated into a risk analysis
15	IFC PS5, Land Acquisition & Invol. Resettlement	NC: Compensation and benefits to displaced people (Bacaba Community = BC). No specific provisions for compensation at full replacement cost. The existing socio-economic inventory does not provide sufficient details (Clause 9)	There is a possibility to relocate Bacaba Community. Suzano's Board hasn't made a clear decision about it yet. It's relevant stress that if Suzano relocates Bacaba Community, it won't be done because it's an obligation or a Public agency demand.	When ENVIRON team visited the Bacaba Community in Feb 2012, Suzano staff advised that the relocation was likely to take place. ENVIRON understands that by March 2012 Suzano is yet to make a final decision as to whether the community will be relocated. Suzano is fully aware how important the Bacaba Community issue is to the entire project - if Suzano takes the decision not to relocate the Bacaba Community, then the significant negative impacts on the community still remain (because of their close proximity to the Plant site and the infrastructure sites). These negative impacts will need to be thoroughly addressed: evaluated, mitigated or avoided. ENVIRON will move this item from Non-Compliant (NC) to Hold (H) until the time when Suzano makes their final decision on this important matter.	Additional information/analysis needed.	Suzano decided for the resettlement, so it has been done the first steps : Environmental Feasibility Assessment for location alternatives and Report of social and environmental and community expectations. Suzano is making a project to reform and expand a school that will receive the kids from Bacaba Community after the resettlement.	Please provide us with more information about the relocation and compensation plan for Bacaba.
16	IFC PS5, Land Acquisition & Invol. Resettlement	NC: Resettlement Action Plan (RAP) - no RAP is in place. Sensitivity - BC has no recognised title to land (Clause 14)	There is a possibility to relocate Bacaba Community. Suzano's Board hasn't made a clear decision about it yet. It's relevant stress that if Suzano relocates Bacaba Community, it won't be done because it's an obligation or a Public agency demand.	When ENVIRON team visited the Bacaba Community in Feb 2012, Suzano staff advised that the relocation was likely to take place. ENVIRON understands that by March 2012 Suzano is yet to make a final decision as to whether the community will be relocated. Suzano is fully aware how important the Bacaba Community issue is to the entire project - if Suzano takes the decision not to relocate the Bacaba Community, then the significant negative impacts on the community still remain (because of their close proximity to the Plant site and the infrastructure sites). These negative impacts will need to be thoroughly addressed: evaluated, mitigated or avoided. ENVIRON will move this item from Non-Compliant (NC) to Hold (H) until the time when Suzano makes their final decision on this important matter.	Additional information/analysis needed.	Suzano decided for the resettlement, so it has been done the first steps : Environmental Feasibility Assessment for location alternatives and Report of social and environmental and community expectations. Suzano is making a project to reform and expand a school that will receive the kids from Bacaba Community after the resettlement.	Please provide us with more information about the relocation and compensation plan for Bacaba.
17	IFC PS5, Land Acquisition & Invol. Resettlement	Economic displacement - i.e. Babasu trees as access to traditional livelihood (Clause 17)	Bacaba community economic activities won't change. i.e. a community teacher will stay as community teacher, a person who works at the church will stay working at the church and a person who works in the city will stay with the same job in the city.	The socioeconomic questionnaire for the Bacaba community identifies Babacu as a non-wood forest product extracted locally by the Bacaba community. The original EIAs do not have a full socio-economic census which would have been done by international standards, as the discussions took place not with every member of the community (as it is required by international standards) but with ONE representative of the community. Therefore as there is no socio-economic baseline or other similar documented records, it is difficult to prove how many Bacaba Community members could be potentially Babacu fruit gatherers.	Additional information/analysis needed.	Every community within the Area Influenced Directly (AID) of all the Suzano's projects (infrastructures, plantations and mill) are mapped through a social, environmental, economic diagnosis that allows the knowledge of the reality of the communities in the aspects of land use, existent infrastructure, and the expectations with the arrival of the Suzano in the region. At the Bacaba Inventory, the vegetal extractivism, mainly for babassu coconuts were identified only for their own consumption	Please provide us with a translated executive summary of the Bacaba inventory and tell us more about how this was conducted.
18	IFC PS5, Land Acquisition & Invol. Resettlement	Physical displacement: the Environmental Feasibility and Analysis of Alternatives exist, but the study is not focused on managing the community resettlement process or transition/relocation support and restoration of livelihoods (Clause 19)	In summary, as shown in project characterization (Volume I), other important assumption to install the project in this region was the no need of resettle any local community. The social and economic diagnosis presented the real situation of local communities and the conclusion was that none vulnerable group would be affected, and this decision was confirmed by the local environmental agency (SEMA, state body in charge for the environmental and social license procedure).	ENVIRON appreciates the the Brazilian SEMA accepted a preliminary socio-economic assessment provided in the original EIAs. However, SEMA obviously operates on the basis which is not the same as international standards. At the same time, this issue depends on Suzano's final decision to relocate (or not to relocate) the Bacaba Community. Therefore, this issue will be put on hold (H) until Suzano makes a final decision about the Bacaba Community. If the Community will be relocated, then Suzano will need to prepare the detailed census, RAP, compensation framework, and provide relocation support.	Additional information/analysis needed.	Suzano decided for the resettlement, so it has been done the first steps : Environmental Feasibility Assessment for location alternatives and Report of social and environmental and community expectations. Suzano is making a project to reform and expand a school that will receive the kids from Bacaba Community after the resettlement.	Please provide us with more information about the relocation and compensation plan for Bacaba.
19	IFC PS6, BD Conservation & Sustain. Management of living NR	PC: Critical Habitat - need to add an assessment of protected/endangered species, analysis based on the avoidance, minimisation, restoration, offset hierarchy (Clause 16)	The environmental diagnosis was performed under Brazilian legislation and covered endangered species, protected areas, conservation areas (parks and reserves), considering the feasibility of the area due to the environmental conditions of the region. Besides Fauna Protection and Monitoring Program, which is described in PBA document, will be established during the implantation phase of the infrastructure projects.	The area of influence of the Suzano project is located in a Priority Area of the Amazonian Bioma (Meso Regiao Imperatriz, ref. Am 143), classified as 'high ecological importance' and 'extremely high priority'. Whilst it is noted that no issues have been identified by SEMA and preliminary licenses have been granted for the three infrastructures, it should be noted that the road and railway line cross a Permanent Protection Area (APP) with vegetation of amazonian influence. Also, the EIA for the transmission line does not identify impacts on an APP, however the land use plan provided by Suzano shows the APP to be traversed by the current route of the transmission line. It should be noted that justification has not been provided in the EIA on the overall need of the project to be located in an APP. Moreover, the reasons for that area to be designated as "a protected zone" (APP) has not been described in the EIA; this criteria should be taken into account during the design of the additional studies and the offsetting program. Whilst ENVIRON agrees that the original EIAs covered the necessary baseline analysis of regional flora and fauna has been conducted, further detailed floristic/phytosociologic and faunal inventories are necessary in order to obtain the vegetation suppression authorization and to determine the flora and fauna species that will be affected. A clear identification of species present in the area of influence of the project (not just the regional level) is necessary in order to define and implement adequate mitigation measures and to design an effective monitoring program.	Additional information/analysis needed.	The term "Area of Permanent Preservation" includes some areas with certain types of vegetal formation that should be preserved, for Suzano's projects, the APP are related to marginal areas to water course, in EU those areas are called "riparian areas" or "riparian corridors". Considering the region where the projects are located and its extension would be impossible to implement them without crossing AAPs. Brazilian legislation has a federal resolution (CONAMA 369/2006) that authorizes vegetal removal in APP since there is no other alternative location. It is very important to note that the projects locations sought to avoid crossing APPs, but there are no alternatives locations to build the projects without passing through APPs. Although the Brazilian legislation to provide authorization for suppression on APPs, the entrepreneur has the obligation to perform environmental compensation through restoration of other areas (determined by the Environmental Agency). It is importante to note that there is also other kinds of protected areas under Brazilian law that are untouchable, i.e., if the any of the projects were crossing those areas (for example Conservation Units) they would be rejected by Suzano. For transmission line, there wasn't considered interferences on an APP because the vegetal suppression to locate the basis for the towers won't be within an APP, however, the Supression Project considers all the APPs in this project to realize compensation if necessary.	Please provide an analysis what impacts on an APP that have been identified and more details about the marginal areas that are impacted.
20		Two infrastructure components will cross Permanent Protection Area (APP) and EIAs need to be extended to demonstrate no measurable adverse impacts on biodiversity values (Clause 17)	Most part of area affected by infrastructure is located in altered and transformed areas, where are present human activities such as agriculture and cattle raising. In case of harvesting and removal of any flora in APP, it shall be required a Permit Removal Vegetation which will present the compensation/authorisation to cross Permanent Protection Areas (APPs) due to Brazilian Legislation.	Whilst it is acknowledge that the EIA is compliant with the Brazilian regulations and that preliminary licenses were granted for the three infrastructure projects, the objective of this review is to verify compliance with not only the Brazilian legislation, but also with international standards . These standards prohibit the implementation of any project activities in critical habitats unless (i) no other viable alternatives within the region exist for development of the project on modified or natural habitats which are not critical, (ii) there is no measurable adverse impacts on those biodiversity values for which the critical habitat was designated, and on the ecological processes supporting them, (iii) there is no net reduction in the global and/or national/regional populations of any critically/endangered species over a period of reasonable time, and (iv) a robust monitoring program is integrated into the program. As a result of existing predetermined start and end points for the three infrastructure projects, and considering that the pulp and paper mill site will be within an APP area, at least two of the infrastructure components will affect an APP. Whilst a preliminary authorization has been granted by SEMA, further flora and fauna studies are necessary in order to obtain the vegetation suppression authorization and to determine the flora and fauna species that will be affected. It should be noted that justification has not been provided in the EIA on the overall need of the project to be located in an APP. Moreover, the reasons for that area to be designated as "a protected zone" (APP) has not been described in the EIA; this criteria should be taken into account during the design of the additional studies and the offsetting program.	Additional information/analysis needed.	The term "Area of Permanent Preservation" includes some areas with certain types of vegetal formation that should be preserved, for Suzano's projects, the APP are related to marginal areas to water course, in EU those areas are called "riparian areas" or "riparian corridors". Considering the region where the projects are located and its extension would be impossible to implement them without crossing AAPs. Brazilian legislation has a federal resolution (CONAMA 369/2006) that authorizes vegetal removal in APP since there is no other alternative location. It is very important to note that the projects locations sought to avoid crossing APPs, but there are no alternatives locations to build the projects without passing through APPs. Although the Brazilian legislation to provide authorization for suppression on APPs, the entrepreneur has the obligation to perform environmental compensation through restoration of other areas (determined by the Environmental Agency). It is importante to note that there is also other kinds of protected areas under Brazilian law that are untouchable, i.e., if the any of the projects were crossing those areas (for example Conservation Units) they would be rejected by Suzano. For transmission line, there wasn't considered interferences on an APP because the vegetal suppression to locate the basis for the towers won't be within an APP, however, the Supression Project considers all the APPs in this project to realize compensation if necessary.	Please provide an analysis what impacts on an APP that have been identified and more details about the marginal areas that are impacted.
21		Long-term Biodiversity Monitoring and Evaluation program needs to be prepared (Clause 17)	In the preliminary phase the environmental agency received all the relevant information prepared by technical team. Therefore, all the information covers Plan of Fauna Protection and Monitoring Program which considers the environmental diagnosis, its assessment and the conclusions of the EIA. Moreover, it's relevant to bring up to date that environmental agency has already issued the Previous License (LP) which shows to be in agreement with provided biodiversity plans. In conclusion, it's relevant to inform that in case of need any long term biodiversity plan, it will be present in the Operation License (LO).	ENVIRON appreciates that the Brazilian Environmental Agency already issued an LP, however this project was assessed also on the basis of international standards. Further flora and fauna studies are necessary in order to obtain the vegetation suppression authorization and to determine the flora and fauna species that will be affected. It should be noted that justification has not been provided in the EIA on the overall need of the project to be located in an AAP. Moreover, the reasons for that area to be designated as "a protected zone" (APP) has not been mentioned in the EIA; this criteria should be taken into account during the design of the additional studies and the offsetting program.	Additional information/analysis needed.	For the suppression phase it is been developed a document with major informations about the flora, it will also be developed a Plan to recover the degraded areas, however it won't be ready until the site visit, but it is possible to send it later. It will also happen a fauna monitoring this year in the dry season and early 2013 during the rainy season. This program will happen again every three years. About the definition of APP, consider the explanation above	Please provide us with more information about the Plan and provide us with the Plan/report later. Three years might not be frequent enough. Please tell us about the time frame.
22		APP crossings - the EIAs need to be extended to include consultations with protected area managers, Affected Communities and other stakeholders (Clause 20)	This issue was fully shown at Public Hearing to all interested people of influence area. Besides the APP interference which will be no significant, the environmental agency understood that there isn't any traditional people or affected communities specifically in this protected areas. But, to comply with all the international standards, the project considered also the people of Bacaba and other villages, and the conclusion was about no impacts over these people.	Whilst the Public Consultations did take place, the fact that APPs (protected areas) will be crossed by the infrastructure components of the project, was not sufficiently covered and evaluated in the original EIAs. By international standards, other stakeholders who should participate in public consultations, include national and local authorities, other companies developing their own projects in that province/area, and/or nongovernmental organizations, etc. All such stakeholders should also be part of the Public Consultations process. The evaluation of APP crossings should not only cover an analysis, but by international standards, should also include a robust, appropriately designed, and long-term biodiversity monitoring and evaluation program which is integrated into Suzano's management program. Also, the project's mitigation strategy will need to be described in a Biodiversity Action Plan and will be designed to achieve net gains of those biodiversity values for which the critical habitat was designated. Net gains are additional conservation outcomes that can be achieved for the biodiversity values through which the critical habitat was designated. Net gains may be achieved through the development of a biodiversity offset and/or, the client should achieve net gains through the implementation of programs that could be implemented in situ (on-the-ground) to enhance habitat, and protect and conserve biodiversity.	Additional information/analysis needed.	During the Public Consultations it was informed that the railway and the access road would cross the Barra Grande River through a bridge (one for each project). The bridge detailed project for the railway is ready and was determined considering a specific study of topography and bathymetry. Suzano has a Degraded Areas Recovery Plan that contemplates a long-term monitoring of flora including recovery of APP and the plantation of a green belt around the mill. About the fauna monitoring, it will happen every three years during the dry and the rainy season.	Please tell us more about the Barra Grande River. Was this reviewed by the consultants?

Nº	Item/Issue	ENVIRON first findings	Suzano's comments on Draft report/presentation	Conclusions	ECA comments	Suzano's comments	ECA comments June 1, 2012
INFRASTRUCTURE							
23		A systematic review to identify priority ecosystem services will need to be conducted, different values attached to biodiversity by different stakeholders (Clause 24)	It will be established a Action Plan called Fauna Protection and Monitoring Program, by that systematic review to identify priority ecosystem services will be conducted. Therefore, the entrepreneur shall continue to perform its social communication plan that will identify any case of value attribution to biodiversity by any stakeholder.	ENVIRON accepts that following the Brazilian legislation requirement, a Fauna and Flora Protection and Monitoring Programme is not required at this stage of the project. However, based on international standards, where a project is likely to adversely impact ecosystem services, the original EIAs should have included details of a Systematic review which identifies priority ecosystem services. Priority ecosystem services are two-fold: (i) those services on which project operations are most likely to have an impact and, therefore, which result in adverse impacts to Affected Communities; and/or (ii) those services on which the project is directly dependent for its operations (e.g., water). The key word here is "systematic" - i.e. implying that not only such review should be used for the duration of the project, but it should be prepared at the EIAs stage.	Additional information/analysis needed.	It was developed a forestry inventory for the suppression phase and a PRAD (Plan for recovery of degraded areas) will be developed after the suppression authorization with considerations of the Environmental Agency	Please describe for us how the forestry inventory and a PRAD will be developed and how these documents fulfill international standards.
24	IFC PS7, Indigenous People	NC: Participation and Consent -No evidence of Informed Consultations and Participation (ICP) with Quilombo descendants that have a special title to land or traditional gatherers of Babaçu trees fruit (Clauses 9 & 10)	There are no traditional communities in the whole influence area of the three projects. (the nearest traditional/indigenous area is about 50km from Road, Railroad and Power Transmission Line). Besides the stakeholders were present in the public hearing and made no objections to Suzano's entrepreneur, considering how far the infrastructure is located from these traditional people.	Please note that ENVIRON's comments did not refer to the Bacaba Community, but to the Quilombo descendants. Based on their highly protected status, if members of this community decide to proclaim themselves as Quilombo descendants, then they have a legal right to claim certain part of the land. For the project to avoid such potential risks, Suzano should consider how to involve the Quilombo descendants into the participation and consent process. Also, please add to the EIAs that the traditional Babaçu tree fruit gatherers will continue to have an unrestricted access to the trees which Suzano will aim to protect. Referring to the Bacaba Community - based on the minutes of the meeting, the people of the Bacaba Community expressed their concerns about the project affecting their future. The original EIAs do not provide clarification on this issue and simply indicate that it will be a joint decision in which the Bacaba Community will participate, but the Community is already uncertain about their future and asked for more information. These might not be strong concerns or objections, but certainly such comments and concerns still need to be addressed in the EIAs.	Additional information/analysis needed.	Before taking any decisions to buy a property Suzano does a survey at the region to identify the non presence of traditional communities at the potential areas to receive the projects to eliminate this risk. Even after this survey, Suzano has an inventory with a social history of this community and no trace of "quilomboalás" decedents was identified. If necessary, this subject will be trated by the Social Responsibility Department	Please describe for us how these people have been involved in the public consultation process.
25	IFC PS8, Cultural Heritage	NC: Consultation- The Bacaba community's preferences in relation to their spiritual heritage (cemetery) have to be examined in detail as part of the resettlement consultations (Clause 9)	Bacaba's community cemetery is untouchable and with free access to the community. The land, where the cemetery is located, is not Suzano's.	This issue clearly depends on Suzano's decision about the Bacaba Community. Based on the latest information from Suzano that the Board is yet to decide about potential relocation of the Community - until this final decision has been reached, the verdict on compliance for this issue also cannot be finalised and therefore has been put as - Hold (H)	Additional information/analysis needed.	Suzano decided for the resettlement, so it has been done the firts steps : Environmental Feasibility Assessment for location alternatives and Report of social and environmental and community expectations. Suzano is making a project to reform and expand a school that will receive the kids from Bacaba Community after the resettlement.	Please tell us how consideration has been taken to Bacaba and how these people has been involved in the consultation process.
26	IFC PS8, Cultural Heritage	PC: Community Access - It is not clear at this stage whether arrangements will be made to ensure continued access to the existing cultural heritage or places of cultural/spiritual significance (including cemetery) for the affected communities, including those subject to relocation (Clause 10)	Bacaba's community cemetery is untouchable and with free access to the community. The land, where the cemetery is located, is not Suzano's.	This issue clearly depends on Suzano's decision about the Bacaba Community. Based on the latest information from Suzano that the Boardis yet to decide about potential relocation of the Community - until this final decision has been reached, the verdict on compliance for this issue also cannot be finalised and therefore has been put as - Hold (H).	Additional information/analysis needed.	Suzano decided for the resettlement, so it has been done the firts steps : Environmental Feasibility Assessment for location alternatives and Report of social and environmental and community expectations. Suzano is making a project to reform and expand a school that will receive the kids from Bacaba Community after the resettlement.	Please tell us how consideration has been taken to Bacaba, the access to the cemetery and how these people has been involved in the consultation process.
27	IFC PS8, Cultural Heritage	Critical Cultural Heritage - Bacaba cemetery: the EIAs will need to be extended to include special protection measures to be developed and implemented in relation to the cemetery. Evidence needs to be provided to demonstrate that BC is content with any decisions taken in connection to the cemetery (Clause 16)	Bacaba's community cemetery is untouchable and with free access to the community. The land, where the cemetery is located, is not Suzano's.	Even if the Bacaba Community will not be relocated, their close proximity to the project sites and potential temporary loss of access to their cemetery (during the construction) will affect their lives, regardless whether the cemetery land belongs to Suzano or not. However, this issue clearly depends on Suzano's decision about the Bacaba Community. Based on the latest information from Suzano that the Board is yet to decide about potential relocation of the Community - until this final decision has been reached, the verdict on compliance for this issue also cannot be finalised and therefore has been put as - Hold (H).	Additional information/analysis needed.	Suzano decided for the resettlement, so it has been done the firts steps : Environmental Feasibility Assessment for location alternatives and Report of social and environmental and community expectations. Suzano is making a project to reform and expand a school that will receive the kids from Bacaba Community after the resettlement. The community agreed that it won't be necessary to relocate the cemetery since Suzano guarantees its preservation and access at the local.	Please tell us how consideration has been taken to Bacaba, the access to the cemetery and how these people has been involved in the consultation process. Please confirm that the access will be good also during construction.

N°	Item/Issue	ENVIRON first findings	Suzano's comments on Draft report/presentation	Conclusions	ECA Comments	Suzano's comments	ECA comments 2011-05
PLANTATIONS							
28	EU EIA Directive	Description of land use for all stages of the project: land to be	Item attended by environmental zoning of the properties, v	<p>It is acknowledged that a procedure is in place to assist with the planning of the land use for each plot (i.e. definition of operational units – plantation areas and roads, legal reserves and permanently protected areas – riparian management zones of APPs, and special interest areas – including fauna corridors, fauna refuges or any other special area). However, estimated total land use requirements during all stages of the project are not clearly defined in the original EIAs.</p> <p>Of a total project area of 2,703,994.4177 ha, the Tocantins project covers the area of 60.000 ha of eucalyptus plantations, of which 50.000 ha will be acquired by Suzano whilst the remaining 10.000 ha will be provided by third parties through a program for the promotion of eucalyptus plantations among neighbouring land owners. The plantations will be distributed across 20 municipalities. Additional land will be acquired as part of the project for conservation purposes (for legal reserves and permanently protected areas), as well as for additional infrastructure and support areas (e.g. storage of equipment, fertilizers, etc). However, these areas are not quantified, and total land requirements are not clearly stated.</p> <p>The Maranhao project covers the area of 60.000ha of eucalyptus plantations, distributed across 21 municipalities in the vicinity of Porto Franco. Considering a 50% land use rate, a total area of over 120.000 ha will be required for the project. However, as in the Tocantins report, additional conservation, infrastructure and support areas are not clearly quantified.</p>	Clarification on estimated total land use requirements. Confirmation on whether FSC or other certification will be applied on 100% of the wood supply.	The plantations projects preview the platation of 60.000ha at Maranhão and 60.000 ha at Tocantins, the area of legal reserve required by the legislation in the area covered by the project on each property is 35% of the total area as they are within the Cerrado at Legal Amazon. It is necessary to acquire/lease to reach the target of 60.000ha of plating may vary from 95.000 to 120.000 ha, depending of the existence of APPs, the percentage used for infrastructure, and utilization rate of the soil. The percentage of land use to plantation project in relation to the total area of the municipalities that compose the EIA refers respectively to 1% in MA, and 4% in TO. For every property that compose the project until now, there is a zone map validated by the environmental agencies that identifies the protected areas, infrastructure areas, and plantation. The certification process started 4 months ago and with conclusion expectation for the first block (Cidelância Nucleos) in August 2013 for FSC and CERFLOR, for P'Orto Franco Nucleos the expectation if August 2014. Suzano already has CERFLOR certification at the Bacabinha Farm, Estreito, MA.	Please confirm to us the percentage of total plantations that will be FSC-certified. Please present relevant maps during the site visit.
29		Description of energy or materials to be used and estimated q	The description of the activities related to forestry project is	<p>The Porto Franco (Maranhao) EIA provides an inventory of chemical and biological products that will be used during the different phases of the plantations project, along with their manufacturer and toxicological and environmental classification and handling and storage requirements. However, no estimates are provided for energy use or chemical and biological products requirements for different stages of the project. It should also be noted that procedures to prevent spills of fuels and lubricants have been defined for Tocantins, however no documented procedure appears to be in place for Maranhao.</p> <p>Information on materials and energy needs for the Tocantins project is very limited and does not include detailed data related to their nature or estimated quantities necessary.</p> <p>Neither report provides information on materials sourcing or other environmental implications, such as transportation to the project sites.</p>	Additional information on materials sourcing and energy needs needed.	In the State of Maranhão is not performed equipment maintenance within their farms, ie, there is no handling of chemicals or fuels within the properties, there are support bases of the companies contracted near the plantations where these works happen. Anyway, there is a procedure in the EIA Maranhão that shows a procedure for emergency environment (as oil spill, etc.), this procedure can be found in Complementary Assessment.	Please provide us with the Complementary Assessment, at least an executive summary.
30		Waste and emissions generated during the project need to be	The generated waste and emissions are mainly timber that	<p>It is acknowledged that relatively limited amounts of waste and air emission will be generated by the plantation projects. Nevertheless, based on international standards, the scope of the EIAs should be extended to provide a clear identification of all types of waste and emissions generated during all project phases (i.e. used oils from machinery and vehicles, empty pesticide, oil and lubricant containers, hazardous effluents generated from cleaning spent agrochemical containers prior to disposal, organic waste from vegetation removal, used tyres, general waste, etc). Quantification/modelling of foreseen waste types and emissions should be conducted as necessary in order to ascertain the need for mitigation measures at the planning stage. It should be noted that whereas instruction for cleaning the containers for spent agrochemicals prior to disposal were prepared, no instructions were provided on the management of hazardous effluents generated from cleaning of spent agrochemical containers.</p>	Clarification/identification of all types of waste and emissions generated during all project phases needed.	Suzano has a Solid Waste Management Program that identifies and classifies every solid wastes that can be generate with the plantation areas. all pesticides and fertilizers containers are transported to a receiving site at Imperatriz that realizes correct disposal of such wastes. Waste from equipment (oil, tires, lubricants, etc.) are responsibility of the contracted to operation services, Suzano controls this destination by receiving the treatment certificates submitted by those companies. About the contaminated effluent, the packages are washed into the spray compartment of the truck, so the effluent and is reused at the plantations field. Suzano has a control generation of waste which may be provided if necessary. Regarding emissions, there is monitoring of black smoke for diesel vehicles and dust control by wetting access and internal roads and by installation of speed bumps. It is performed a periodicity revision/control of every equipment through a machine maintenance plan.	Please provide us with estimations that have been asked for.
31		Analysis of alternatives : detailed comparisons of alternative l	The comparison of alternative locations was done (item 3.8	<p>It is acknowledged that both EIAs include a limited analysis of alternatives, however the scope of this analysis is considered insufficient.</p> <p><u>Tocantins:</u> the EIA describes geographical, technological, economic and environmental criteria to justify the eucalyptus plantation and the selection of the project area, as compared to a no-go scenario. However, a detailed comparison of alternative locations required by international standards, will need to be created and added to the original EIA. Additionally, social criteria do not appear to have been considered during the selection of the location, or properly documented in the EIA.</p> <p><u>Maranhão:</u> the EIA describes geographical, technological, economic, social and environmental criteria to justify the eucalyptus plantation and the selection of project area. A comparison is provided for the selected location against relocation to a different area (which is not specified), however the discussion mainly focuses on economic criteria. It appears that the selection of alternatives was not considered at the beginning of the process, as the EIA notes that relocation of the project would imply the disruption of the economic activity already promoted. At the same time, an economic analysis of alternative activities in the region was conducted.</p> <p>For the above reasons, based on international standards, neither assessment appears to provide a comprehensive comparison of actual viable alternatives. Such comparison can be easily added to the original EIAs and based on this reason, the compliance on this issue was put as Partial Compliance (PC).</p>	Additional information on comparison of alternative locations, including social impacts needed.	Besides the analysis of licensing process difficult levels (land use conversion), the presence of environmental and social conflicts and manpower availability, it has been made additional assessments to identify the priority areas for biodiversity, areas not included in buffer zones of extractive reserves, indigenous lands, parks and biological reserves, . About the manpower origin (local), it has been made an analysis about the land ownership situation (in order to avoid agrarian conflict) with potential for Fomento Program for small/medium/large properties.	Please provide us with the additional assessments, at least executive summary.
32		Description of aspects likely to be significantly affected by the project - legal, environmental, social and operational issues: an interrelationship matrix exists for Tocantins but not for the Maranhao sites	The interaction matrix that identify the impacts is presented in Porto Franco EIA (Anexo 7.01) and the impacts description is presented in the item 7.2 – Descrição dos Impactos of Porto Franco EIA.	It is acknowledged that an impact matrix has been prepared for Porto Franco, however this matrix does not show the interrelationship between the different aspects affected by the project. The description of the aspects of the environment (physical, biological and socioeconomic) is likely to be significantly affected by the project, and for this reason the description of the aspects of the environment should be extended to include an analysis of the inter-relationship between all the different factors.	Additional impact analysis needed.	for areas already acquired, there is a land use and occupational map that identifies the preservation, plantation and infrastructure areas (micro planning and PLIMA - integrated environmental plan)	Please describe further how this matter has been managed.
33		the EIAs need to be extended to include cumulative impacts a	The assessment of synergy and cumulative impacts is in It	<p>The original EIA reports do not appear to analyse cumulative impacts. As the individual plots are subject to case-by-case environmental diagnosis, cumulative impacts of the plantation projects as a whole do not appear to be covered as part of the environmental diagnosis procedure. Cumulative impacts should be identified at an early stage in order to determine the need for mitigation measures.</p> <p>The assessment of risks and hazards as part of the EIAs appears to be focused mainly on occupational health of plantation workers, which was identified through an occupational risk assessment required by the action plan (PBA). Additional risks for local population (e.g. risks derived from transportation of timber and transport of dangerous goods in major and minor roads that pass through local communities) and other potentially significant risks (e.g. impact of harvesting activities) do not appear to have been assessed and preventive/mitigation measures for certain risks have not been identified (e.g. schedule harvesting activities to avoid wet season or breeding and nesting seasons for endangered species, justification of the choice of logging system to minimize soil disturbance, planning and design of roads to prevent and control impacts).</p> <p>A matrix which describes inter-related impacts was included in the Tocantins EIA but does not appear to have been conducted for the Maranhão project.</p>	Additional cumulative impact analysis needed.	Suzano understands that the analysis of cumulative impacts required in this item is already contemplated in the original EIA as it considers all the areas in each state that might be used as plantation, so the cumulative impact considering the plantations areas is already provided. At the Complementary Assessment it is made a comparison with different kinds of enterprises as there is no other similar enterprises at the region.	Please provide us with the additional assessments, at least executive summary.
34		Forecasting methods used to assess effects on the environmen	The methodology of impact assessment took into considera	<p>The criteria for the classification of impacts is defined. However, no modeling was conducted as part of the EIA. Based on international standards, hydrological models should be used to estimate impacts on water streams as part of the environmental diagnosis procedure in order to define plantation design. Quantification/modelling of foreseen types of waste and emissions should be added to the original EIAs in order to ascertain the need for any mitigation measures at the planning stage.</p>	Additional quantification/modelling analysis of foreseen types of waste and emissions needed.	There is a Hydrologic Monitoring Program which evaluates dynamic watershed (estimated flow), conducts climate prediction for the periods, the estimated water consumption and the activity of the watershed, and provides monitoring of water quality (parameters: turbidity, PH, dissolved oxygen, phosphorus, potassium, nitrogen, pesticides).	Please provide us with estimations regarding water and tell us about the estimated waste.

N°	Item/Issue	ENVIRON first findings	Suzano's comments on Draft report/presentation	Conclusions	ECA Comments	Suzano's comments	ECA comments 2011-05
PLANTATIONS							
35		Public consultations: documented evidence of public hearing	In addition to Public Hearings it was held workshops in 21	It is noted that public hearings have been planned and conducted for both projects. However, the documented evidence was not available for review to analyse the consultation process (public hearings is only part of a consultation process) and how the comments have been addressed. Whilst it is acknowledged that public consultation procedures comply with the Brazilian requirements, these procedures do not comply with international standards; as the Brazilian regulatory requirements on public consultation are significantly less stringent than international ones. It is also acknowledged that a public communication program is in place, however a formalised periodic reporting to the affected communities which is required by international standards, does not appear to have been implemented. The existing public feedback collection procedure (mainly Suzano Responde via e-mail or telephone, or Suzano en Campo - a logbook where complaints are registered) - is mainly aimed at recording community concerns, rather than at proactive reporting of the Project status to the communities. Public participation should be proactive, as opposed to a reactive participation. Consultations for the plantation projects should be conducted as part of an overarching stakeholder engagement program that ensures informed consultation and participation of affected people throughout the project life cycle (i.e. all stages of the project, not at the EIA stage only). Affected communities and stakeholders should be consulted on the project alternatives and periodically informed on the status of the projects and mitigation measures/monitoring results. This could be done through the periodic release of non-technical updates on the project progress. The public concerned should be given sufficient time to prepare and participate effectively in the process.	Information on establishment of a consultation process needed.	The Communication Program is realized in various phases of the projects and for many purposes as: social, economic and cultural survey in order to map the communities and neighborhood, a social inventory to determine the families profiles, Positive Agenda that is a program to present the company and its projects for the stakeholders; conversation wheels before, during and after the project steps (themes as surveys, roads preparation, soil preparation, plantation starts, water using, harvesting, etc). All those actions are in order to keep an open relationship with communities and neighborhood. The other communication tools as Suzano in Field Book and Suzano Responde are still being used as Suzano doesn't see it as a "reactive" tool, it is been evaluated the possibility of placing mailboxes at the more distant communities.	See our previous comments regarding consultation.
35	IFC PS1, E&S Assessment & Management System	Management programmes to define desired outcomes with pe	Indicators, targets and estimated resources and responsabi	AGREED to remove NC; it is accepted that objectives and actions are presented in the PBA, as part of control and mitigation and monitoring programs, which constitute measureable events or acceptance criteria.			Agreed
36	IFC PS4, Community Health, Safety and Security	Community exposure to diseases – demonstrate measures tak	There is a monitoring program Hydrus water (flow rate, qu	It has been noted that the company complies with the Brazilian legislation, however, the original EIAs were assessed also on the basis of international standards, which are very different from the Brazilian requirements. The monitoring program to which Suzano refers only MONITORS the situation, as opposed to (1) identification of all potential risks to community which might be caused by the project and its development activities, (2) suggestion of measures to address the risks identified earlier, (3) a detailed plan on how to implement such measures and only then (4) monitoring of the implementation of the measures	Additional information needed according to Environ's conclusion.	The Project comprises that the environmental balance is balanced considering that the potential impacts / risks (direct / indiretos) are indicated actions and preventive measures mainly to be implemented in a timely manner. For example: Environmental Zoning - PLIMA, erosion control, protection of slopes and APPs, collection and proper disposal of waste, recovery of degraded areas, control over the use of pesticides and fertilizers, monitoring of watershed and water bodies quality. Nevertheless, we recognize that intervention on the soil may have adverse effects, especially the water component, and the scope of the updated program Hydrus with inclusion of plan recognition and treatment / contingency (in cases of environmental occurrences), keeping the Communication Program as a monitoring tool and indicator of impacts.	Please tell us more how Environ's recommendations are met.
37	IFC PS3, Resource Efficiency & Pollution Prevention	Water Consumption: extend the scope of EIAs to provide a co	The hydric needs for plantations are described in Item 3.4.5	The referenced section provides a general analysis of water needs and water efficiencies of different types of forests, plantations and crops. However, a clear estimation or assessment of the water needs of the two plantation projects (with a clear justification through the calculations) does not appear to have been provided.	Estimation or assessment of the water needs needed.	The water demand estimate are described in every water use authorization process (water use plan by property) is submitted to the environmental agency for evaluation, approval and issuing the authorization for water using considering hydraulic parameters as (Q90, multiple use, etc)	Please provide us with the estimations.
38		Integrated Pest Management (IPM): extend EIAs to include IP	The pests combat and also the inputs used to combat it are	An analysis of the feasibility for integrated pest management (IPM) has not been included as part of the EIA. An analysis of the feasibility of IPM approach should be included along with a justification of the pest management measures selected based on the environmental/ecological criteria. In the selection of the agrochemical products, the original EIAs should demonstrate that the pest management products selected for the project, are less hazardous than other available products.	Additional analysis of the feasibility for integrated pest management (IPM) needed.	For bait chemical control it should be noted the species, calculation of nest area, products and application time. Chemical control is done with bait or any insecticide/formicide powder. For the case of ants nests in surface, they are charmed and the poison is applied to the pots. (3-49 p, Item 3.5.2.4-Fighting Ants).The Pest Monitoring and Combating Plan is provided in section 3.5.2.10 (page 3.55) The item 3.5.2.11 (p. 3.56) refers to all products used in the plantation projects. It is important to note that all products described are commonly applied and are approved by the competent agencies, not requiring an assessment for comparison to other products with less toxicity. Fighting ants in the areas of planting consists of three methods, chemical control with baits, and cultural control by fogging with soil disturbance. According Arrigone (1991), another form of combat which can be used in the method of fogging is used to control ants, being economically viable only for large areas and large ants, as ant with chlorpyrifos. The method consists in using an ant-based chlorpyrifos at a concentration of 2% diesel oil. The diesel combats (burns), generating gas and causing the active ingredient (chlorpyrifos) is nebulized, is transformed into tiny droplets, forming a mist, which is introduced in the ant scouts. It can also use the base deltamethrina insecticides. The cultural control consists of plowing and / or disking causing soil disturbance and destruction of nests surface. The first ant fighting will be done prior to soil disturbance in the internal areas of the stands, in the year before planting during the summer (June-December), to facilitate location scouting, using granulated bait base sulfuramida. The amount applied per hectare is variable depending on the level of infestation, and were around 2.0 kg / ha or 4-10 g / scout. Before soil preparation is done to combat a passing ant, using fogger (if necessary). The product used is an ant-based chlorpyrifos or deltamethrin, and concentrations used according to the recommendation. • Monitoring and Combating Pests The pest monitoring will be accomplished through field surveys and the installation of light traps or ethanolic, when necessary, to collect insects for identification and monitoring of changes in their populations. The recommendations of how to control are formulated on the basis of monitoring results (type and intensity of pest attack) proposed in the previous phase. The two main pests that have high potential attack are: - The leaf-cutting ant (Atta seedens) and, The defoliating caterpillars (mainly Thyritina arborea). For the control of ants cutter is usually used bait granulated with sulfuramid. The amount applied per hectare varies according to the infestation, normally used on average 2.0 kg / ha or 4-10 g / scout after equilibrium is attained in the area. Regarding defoliating caterpillars in normal recommended monitoring a control action, which uses biological insecticide based on Bacillus thuringiensis. They should also be accompanied by other less common pests such as beetles (Costalimaita ferruginea), beetles (Scotilideos) and termites	Please consult Environ to make sure this is fulfilled.
39		Pesticide use and management: EIAs need to be extended to i	The procedure for agrochemical utilization (pesticides, herb	Although no specific information on the types of pesticides to be used for the Tocantins plantation was provided, any agrochemical products used by Suzano will be registered for that specific use by the Brazilian Agriculture Ministry. The list of agrochemicals which will be used at the Maranhao plantation were already registered by the Ministry. A description of intended uses was included. However, the EIA reports do not appear to include procedures to control access to agrochemicals, nor do they define training requirements for agrochemicals application. Procedures to regulate access to agrochemical products and training requirements for their application should be clearly defined, and compliance should be monitored. Suzano should pursue the least hazardous product available for the intended use.	Description on procedures to regulate access to agrochemical products and training requirements as well as monitoring programmes needed.	About the procedures for pesticides application there are internal procedures (MO 06.00002 and MO 06.00006) already approved by the company, they weren't referenced at the EIA because they weren't available back then, however, the EIA has a item for appropriated handling plan (3.5.). About access to pesticides (storage, handling and disposal), there is an internal procedure of solid waste that treats those subjects. As for the more specific issues are related to Law No. 7802 and Dec. 4074, cited in section 3.5 (pay 3.61) of the EIA.	Shown to the consultants? If not, consult with Environ.
40	IFC PS5, Land Acquisition & Invol. Resettlement	Community Engagement - EIAs will need to be extended to p	It has been done through workshops that are held with 21	No documented evidence was provided to assess compliance. See response to public consultations comment above. No formal or procedural provisions for potential compensation at full replacement cost appear to be currently in place; reportedly, these are decided on a case-by-case basis. Affected population were already present/living in the close proximity to some of the plots already acquired by Suzano prior to the start of the environmental licensing process and the preparation of the PBAs. No detailed information on the number and characteristics of affected population and compensation measures was reportedly available at the time of preparation of the PBA, nor was it indicated in additional documentation made available by Suzano at a later stage.	See response to public consultations comment above.	suzano has a specific procedure for land purchase (PR 13.00004)	See our previous comments.

N°	Item/Issue	ENVIRON first findings	Suzano's comments on Draft report/presentation	Conclusions	ECA Comments	Suzano's comments	ECA comments 2011-05
PLANTATIONS							
41	IFC PS5, Land Acquisition & Invol. Resettlement	EIAs need to be extended to include an assessment of whether	In a general way, there is a program which clarify and disc	See previous comment. Note that the program mentioned by Suzano does not include a methodology of a screening formal process/procedure to establish if compensation at full replacement cost is necessary, as required by international standards; similar assignment are dealt with on a case-by-case basis.	See previous comment.	suzano has a specific procedure for land purchase (PR 13.00004)	See our previous comments.
42	IFC PS5, Land Acquisition & Invol. Resettlement	The risks of economic displacement should be examined for	The following programs have related actions to the Law Pr	Based on international standards, the scope of these programs is considered insufficient. It is acknowledged that the PBA for Maranhao includes provisions to support sustainable extraction and trade of vegetable forest resources, categorize impacts and define support to affected populations. However specific compensation criteria are defined on a case-by-case basis. It should be noted that there is no evidence of a process used to identify vulnerable groups (e.g. women-headed households, people with no legal title to land, extremely poor households, etc) as part of the land acquisition due diligence, as required by international standards. The risks of economic displacement should be specifically examined for all affected people, including those who are traditional gatherers of Babacu produce, and whose livelihood depends on access to and availability of Babacu trees.	Clarification on the programs and their compliance with international standards needed.	There is no loss, reduction or ban access to babassu considering that these are recognized as areas of high social consevation value and protected as they are within the legal reserve. Moreover, the results of dialogue with traditional communities was the development of the project for strengthening the Extractive Sustainable production arrangements included in this value chain, with an agenda to support food security and income generation for these communities.	See our previous comments.
43	IFC PS7, Indigenous People	Critical Cultural Heritage: The Programme for Maranhão has	Some planned activities are described in Programa de Edu	A Programme for archaeological protection is currently in place, and covers preservation and salvage of any finds and has been approved by the competent authorities as part of the licensing procedure for the plantations. During the preparation of the original EIAs for Tocantins and Maranhao, a cultural/historical/archaeological survey was performed in accordance with IPHAN (National Historical Heritage Protection Institute) regulations. Both PBAs have a Cultural, Historical and Archaeological Conservation Program which covers procedures for fortuity findings. The Programme for archaeological protection of Tocantins specifically promotes the participation of local communities during all the different stages (from the scope of the program and the fieldwork campaigns to the preservation of their cultural knowledge and traditions), and appears to have a wider scope since it not only focuses on archaeological findings but also promotes the protection of historic and cultural heritage. The Programme for Maranhao has an education component but does not actively promote public participation, and mainly focuses on archaeological heritage to the detriment of historic and cultural heritage. The wider cultural activities can be easily added to the Maranhao programme to make sure it is consistent with the same component of the EIA for the Tocantins area.	Clarification on methods to promote public participation in the Programme for Maranhao needed.	In addition to the archaeological studies aimed at prospection Suzano has a Statement of Commitment to IPHAN which ensures that there will be the lifting of the tangible and intangible heritage of the areas covered by the project, this survey is done through two methods provided by IPHAN (SICG and INRC) that generates a database that will be made available to covered municipalities and various publications.	Consult Environ?
44	IFC PS7, Indigenous People	Participation and Consent - No comprehensive documented e	In Porto Franco EIA, the indigenous communities were ide	Collection of data (primary data is required in this case, not secondary) is only part of Participation and Consent process. Based on international standards, indigenous populations located in BOTH direct and indirect area of project influence will need to be involved in the consultation process related to the project.	Clarification on the involvement of indigenous people in the consultation process needed.	Suzano awaiting finalization of the process of choosing new board of the Joint Coordination Organizations and Indigenous Peoples of Maranhao - COAPIMA, and held meeting with the National Indian Foundation - FUNAI for validation and partnership in implementing the Program under PBA (Enhancement Program and understanding of Indigenous cultural rights and Support for Environmental Conservation of Indigenous Lands).	Please provide us with an update of the status of this process.