

# GENERAL DIRECTORATE OF STRATEGIC ENVIRONMENTAL ASSESSMENT

**Answers to supplementary questions regarding the proposed wood pellet production plant**

**Barrette Chapais Ltée**

Directive 3214-23-005

Presented to the Review Committee (COMEX)

Minister of Sustainable Development, Environment and the Fight against Climate Change (MDDELCC)

October 2017



## Contents

|   |    |
|---|----|
| Introduction .....  | 5  |
| 1.1 Description of the Project .....  | 6  |
| QC-1. The promoter shall indicate the number of hours per day, days per week, and weeks per year that the plant will be in operation. ....  | 6  |
| QC-2. The promoter shall indicate the hourly nominal capacity (MT/h) of pellet production by the plant. ....  | 6  |
| QC-3. The promoter shall indicate if fossil fuel booster will be used in the bark furnace. If necessary, it shall specify the type of fuel used and its calorific value. ....   | 6  |
| QC-4. The promoter will indicate the power rates (MT/h) of each of the different materials (wet woody material to be dried, wet bark used as fuel, etc.) introduced in the industrial furnace during operation at its nominal production capacity, excluding liquid and gaseous fuels as well as air. ....  | 6  |
| QC-5. The promoter shall indicate the production rate (MT/h) of dried woody materials when the industrial boiler is operating at nominal capacity. ....   | 6  |
| QC-6. The promoter shall specify the type and technical characteristics of the scrubber that will be installed to purify the combustion and drying gases of the industrial oven. ....   | 7  |
| QC-7. Regarding the access road to the plant site, the promoter must provide the following information: .....   | 7  |
| 1.2 Impact of the Project .....   | 7  |
| QC-8. The promoter indicates that the construction of the pellet plant will invest nearly \$70 million in the region, in addition to creating new jobs. It shall provide a summary assessment of the local economic impacts of the project and show how it intends to work with local communities in order to maximize benefits. The promoter shall also describe the types of jobs that will be created (along with necessary qualifications) during the construction and operational phases. ....   | 7  |
| QC-9. In the document provided by the promoter, it is stated in response to Question 10 that "the valorization of forest biomass, which consists in harvesting branches left in cutting areas, could be developed in order to ensure extra supply to the cogeneration plant." The promoter shall indicate if Rentech-Chapais intends to develop this new avenue. It is also stated that "Barrette-Chapais Ltd. confirms that it will be able to maintain the contractual obligations of the cogeneration plant." Is Barrette-Chapais Ltd. referring to the Oujé-Bougoumou plant? Will the arrival of Rentech-Chapais impact the price of sawdust? ..... | 10 |
| 1.3 Atmospheric Dispersion Study .....  | 10 |
| QC-10. Fugitive dust emissions from the site (unpaved traffic areas, storage areas, building leakage) as well as other sources of emissions have been deemed not significant and have not been included in the atmospheric dispersion study. This choice was justified by the implementation of a fugitive dust management plan. The promoter shall present this plan. In addition, to justify its decision to not consider sources EP06 (bark grinder), EP16 (pellet storage container), and EP17 (ash   |    |

|   |    |
|---|----|
| storage container), the promoter shall indicate the rate of flow (m <sup>3</sup> /s) and the vertical upward speed (m/s) of gases vented into the atmosphere and the emission rate (g/s) of particles. ....   | 10 |
| QC-11. In its Atmospheric Dispersion Study, the promoter shall consider sources EP01, EP03, and EP04. ....  | 11 |
| QC-12. The emission of acrolein from the bark furnace as well as the emission of PM <sub>2.5</sub> for all significant sources of the plant shall be modeled.....   | 11 |
| QC-13. For each contaminant and each emission source (Tables A1, A2, A3.1, and A3.2 of the Atmospheric Dispersion Study), the promoter shall transmit reference documents (or Internet links) regarding emission intensity and detailed calculations of emission rates. ....  | 11 |
| QC-14. It is mentioned that the 09292 version of AERMOD was used to perform the atmospheric dispersion study. AERMOD has been updated several times since the publication of version 09292. The promoter shall update its atmospheric dispersion study with the latest version of AERMOD (14134 or later, if any).....  | 11 |
| QC-15. The promoter shall present an image showing the calculation grid that it used and shall also specify the size of the size of the grid mesh. ....   | 11 |
| QC-16. Regarding weather data, the modeling report mentions that "The MOE local meteorological data (5 years) that is applicable for the site and its surrounding land was used." The promoter shall identify the meteorological station from which the data was gathered and define the surface characteristics (albedo, Bowen ratio, and roughness) that were used for processing the data. Furthermore, the modeling report shall present the wind rose and a table showing average monthly temperatures. This information will help determine if the proposed meteorological data are representative of the study site (Chapais).....   | 11 |
| QC-17. The promoter shall refer to the document "Normes et critères québécois de qualité de l'atmosphère" (Quebec air quality standards and criteria) available on the MDDELCC website at <a href="http://www.mddelcc.gouv.qc.ca/air/criteres/Normes-criteres-qc-qualiteatmosphere.pdf">http://www.mddelcc.gouv.qc.ca/air/criteres/Normes-criteres-qc-qualiteatmosphere.pdf</a> for the standards and criteria identified in Table A3.3. Furthermore, this document contains the initial concentrations (or pre-project concentrations) to be considered. This value is crucial in that the site is adjacent to the Barrette-Chapais sawmill. It is not clear in Table A3.3 that the modeled maximum concentration includes the initial concentration. Thus, Table A3.3 shall show, for each contaminant modeled, the modeled maximum concentration (1), the initial concentration (2), the resulting concentration (1+2), the criteria or standard, and the comparison of the resulting concentration with the corresponding criteria or standard..... | 12 |
| QC-18. In order to validate the dispersion study, the main results of the modeling shall be presented in the form of concentration isoline maps. The following maps must be presented: maximum daily TPM concentrations, maximum daily PM <sub>2.5</sub> concentrations, peak concentrations (15 minutes) of formaldehyde, and any other contaminants with concentrations approaching atmospheric quality criteria and standards. The maps shall also show the limit of application of the Clean Air Regulation. According to Section 202 of Clean Air Regulation, atmospheric quality criteria and standards apply "off the limits of the property occupied by the source of contamination   |    |

|   |    |
|---|----|
| and off a sector zoned for industrial purposes or in a buffer zone adjacent to such a sector, as established by the competent municipal authorities." .....   | 12 |
| 1.4 Community Consultation .....  | 13 |
| QC-19. The proponent shall report on the steps it has undertaken with communities of Chapais, Chibougamau, Ujé-Bougoumou, and Waswanipi and Mistissini to introduce them to the project. Moreover, he will present the concerns raised by these communities as appropriate as well as changes to the project in order to address these concerns. .... | 13 |

## Introduction

Barrette-Chapais Ltée. is pleased to present this document to the Advisory Committee for the environment of the James Bay (JBACE) in connection with its project of valorization of the wood resource in Northern Quebec, a new model of fiber usage for Quebec forest industry.

In the year 2016, Barrette-Chapais Ltée and Rentech Inc. decided to put an end to their partnership for the construction of a wood pellet plant. In the months that followed Barrette - Chapais Ltée has decided to continue the project alone. After a few months of additional studies, Barrette - Chapais Ltée wishes to proceed with the construction of a plant of pellets on the sawmill site. This plant will have a yearly capacity of 210 000 tons.

**This project remains virtually the same as that submitted by Rentech Inc. but smaller this effect reduces the impacts of it. In order to proceed as quickly and efficiently as possible, we want to resume the process initiated by Rentech Inc. in providing the answers to questions submitted by the Comex and the new data for the project.**

**The major changes to the project are the following:**

- The size of the plant is reduced from 300 000 to 210 000 tonnes per year.
- The 100% of raw material supply will come from Barrette-Chapais Ltée from its co-products and represents about 80% of its production of co-products.
- Wood pellets will be trucked to the port of Grande-Anse (Lake St. John) instead of the Port of Québec by train.
- Shipping pellets to the Lac-Saint-Jean area will reduce significantly the number of trucks currently used for the expedition of the co-products of the sawmill (lowered by 9 900 trucks per year). This reduction in the number of trucks will result in a reduction of the CO2 emissions of 10,000 Tons per year.
- The location of the factory was changed and it will be built near our boiler and our wood dryers.

The document responds to the additional questions of the Directive 3214-23-005 specifically addressed to RENTECH-CHAPAIS wood pellet plant project and which Barrette-Chapais Ltée wishes to realize, located on his site, located at Km346, route 113, within the municipality of James Bay.

## 1.1 Description of the Project

**Note:** The proponent submits its responses to questions 1 to 7 with the "design basis" completed at this stage of the process.

**QC-1. The promoter shall indicate the number of hours per day, days per week, and weeks per year that the plant will be in operation.**

At full capacity, the plant will operate 24 hours a day, 7 days a week. According to our forecasts and taking into account periods of maintenance, the plant will be operational 350 days a year, the equivalent of about 8,400 hours per year, with an efficiency of 90%, so 7,500 operating hours are used for our calculations of availability.

**QC-2. The promoter shall indicate the hourly nominal capacity (MT/h) of pellet production by the plant.**

Based on a rating of more than 210 000 tons metric and 7,500 hours of production, the factory will have a capacity rating around 28 Mt of wood pellets per hour on average and can reach peaks of 35 T / H.

**QC-3. The promoter shall indicate if fossil fuel booster will be used in the bark furnace. If necessary, it shall specify the type of fuel used and its calorific value.**

No fossil fuel extra will be used in the bark furnace. Only the bark and other residues from wood will be used as fuel for the production of heat to the process.

**QC-4. The promoter will indicate the power rates (MT/h) of each of the different materials (wet woody material to be dried, wet bark used as fuel, etc.) introduced in the industrial furnace during operation at its nominal production capacity, excluding liquid and gaseous fuels as well as air.**

The maximum feed rate of wood fiber as fuel is estimated at 12.7 Mt/h.

The maximum of woody material (bark, chips, shavings, and wet sawdust) process is estimated at 52 MT/h.

**QC-5. The promoter shall indicate the production rate (MT/h) of dried woody materials when the industrial boiler is operating at nominal capacity.**

The rate of production of dried wood out of the dryer is estimated at 27 TM/h.

QC-6. The promoter shall specify the type and technical characteristics of the scrubber that will be installed to purify the combustion and drying gases of the industrial oven.

The most recent analyses and project-related emissions estimates tell us that a scrubber must be installed for the purification of gas combustion and industrial oven drying in order to meet the standards of emissions in force in Quebec according to Appendix C of the regulations on the Clean Air Act. It is premature at this time to determine its specific technical characteristics, given the advancement of the project. The proponent intends to provide this information to the Ministry of sustainable development, environment and the fight against climate change during submission of the application for certificate of authorization

QC-7. Regarding the access road to the plant site, the promoter must provide the following information: Location of the road; length and width of the road; type of environment through which the road will be built; presence of rivers and need to build culverts; estimate of the granular material necessary for road construction, and source of the granular material.

The change of location of the project does not require the construction of new access road so this question is no more relevant.

## 1.2 Impact of the Project

QC-8. The promoter indicates that the construction of the pellet plant will invest nearly \$70 million in the region, in addition to creating new jobs. It shall provide a summary assessment of the local economic impacts of the project and show how it intends to work with local communities in order to maximize benefits. The promoter shall also describe the types of jobs that will be created (along with necessary qualifications) during the construction and operational phases.

The local economic impact of the Barrette-Chapais Ltée pellet plant project will be a tremendous asset to the region of Nord-du-Québec. We believe that the regional forest industry will benefit largely from this new use of wood fiber which guarantees the stability of purchases of wood fiber in the long term.

Indeed, immediate Chapais-Chibougamau region will particularly benefit from the benefits associated with the sustainability of the operations of the Barrette-Chapais sawmill, either in terms of the supply chain or in terms of the production of softwood lumber to the sawmill. Sustainability and stability over

500 direct jobs are currently associated. These jobs contribute directly and indirectly to the economic vitality of several surrounding communities (wages paid to employees, equipment and machinery, transport and fuel, etc.). It should be noted that at the peak of the lumber crisis, the Barrette-Chapais company was able to maintain its operations and jobs that are associated.

Recent assessments of the total capital for the development of the project is now at nearly 55 million dollars of investment (unlike previous estimates amounted to \$ 70 million), including design, Engineering, construction and commissioning of this new industrial complex. From the point of view of employment, it should be noted about 200 jobs related to engineering, construction and management services over a period of 12 to 18 months.

Barrette-Chapais Ltée is currently working on the optimization of the following aspects:

- Plant general Layout
- Design, roles and responsibilities
- Equipment design
- Equipment and installation costs
- Total capital expenditure
- Equipment purchasing contracts

Beyond the construction plant, the economic benefits of the project will spread over the long term, including ensuring creation of approximately 20 new direct jobs and an unspecified number of indirect jobs. Furthermore, it should be noted that nearly 100% of the purchases of an operational nature such as electricity, fibre supply, the purchase of fuel and other consumable goods (with the exception of spare parts of machinery manufactured outside) will be made in the province of Quebec. Local businesses who deal with Barrette - Chapais Ltée will see their activity increase with the implementation of this major project.

Different positions requiring various qualifications will be offered in order to operate the facility. Here is a summary of the responsibilities of the members of the staff for the new wood pellet facility:



| Jobs                                      | Required Qualifications   | Task and Responsibilities  |
|---|---|--|
| <b>Management<br/>(2 jobs)</b>            | <ul style="list-style-type: none"> <li>▪ University Degree in Forestry or engineering</li> <li>▪ Experience in a Wood manufacturing plant</li> <li>▪ Organizational skills.</li> <li>▪ Human management skills and problem solving abilities.</li> <li>▪ Computer literacy.</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Daily production management</li> <li>▪ Staff management.</li> <li>▪ Provide leadership in occupational health and safety.</li> <li>▪ Monitor costs and performance targets.</li> </ul>  |
| <b>Operational<br/>(12 jobs)</b>          | <ul style="list-style-type: none"> <li>▪ Secondary or post-secondary education in a relevant field and/or related experience according to the type of employment</li> <li>▪ Experience working in a plant an asset</li> <li>▪ Impeccable history regarding occupational health and safety</li> <li>▪ Ability to drive motorized equipment (forklifts and/or transport vehicles)</li> <li>▪ Ability to meet production targets</li> <li>▪ Ability to work in a team, communicate with all levels of the organization, and adapt quickly to change</li> <li>▪ Ability to identify problems and take effective corrective measures</li> <li>▪ Impeccable work ethic, good judgment and decision-making skills</li> <li>▪ Ability to work shifts</li> <li>▪ Some IT knowledge an asset</li> </ul> | <ul style="list-style-type: none"> <li>▪ Participate in occupational health and safety initiatives.</li> <li>▪ Participate in daily plant operations and ensure the achievement of weekly production targets</li> <li>▪ Monitor the performance of equipment (power plant (dryer and granulators), conveyors, interim storage sites, coolers, loading and logistics, etc.)</li> <li>▪ Participat in maintenance and operation of equipments</li> <li>▪ Participate in control and quality initiatives: sampling and laboratory testing.</li> </ul> |
| <b>Maintenance Staff<br/>(2 à 4 jobs)</b> | <ul style="list-style-type: none"> <li>▪ Professional or junior college degree in the appropriate field</li> <li>▪ Competency cards and valid work license</li> <li>▪ Minimum of 3 years of experience in an industrial environment</li> <li>▪ Basic knowledge of management skills or related mechanical systems</li> <li>▪ Excellent analytical and problem solving skills</li> <li>▪ Impeccable history regarding occupational health and safety</li> <li>▪ Organizational skills</li> <li>▪ Basic computer skills</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Responsible for maintenance and repair of main plant equipment (electricity, mechanical, etc.)</li> <li>▪ Participate in occupational health and safety initiatives</li> <li>▪ Participate in daily plant operations and ensure the achievement of weekly production targets</li> <li>▪ Collaborate with maintenance supervisor</li> </ul>  |

Only from the point of view of the operations of production of wood pellets, these should generate annual benefits (salaries) close to \$ 1.5 million annually.

QC-9. In the document provided by the promoter, it is stated in response to Question 10 that "the valorization of forest biomass, which consists in harvesting branches left in cutting areas, could be developed in order to ensure extra supply to the cogeneration plant." The promoter shall indicate if Rentech-Chapais intends to develop this new avenue. It is also stated that "Barrette-Chapais Ltd. confirms that it will be able to maintain the contractual obligations of the cogeneration plant." Is Barrette-Chapais Ltd. referring to the Oujé-Bougoumou plant? Will the arrival of Rentech-Chapais impact the price of sawdust?

The thermal plant of Oujé-Bougoumou supply will not be affected by the wood pellet plant project. This supply will be maintained.

Avec la réduction du volume de production du projet, Barrette-Chapais Ltée ne prévoit pas développer à court terme des activités de récupération de la biomasse forestière actuellement laissée sur les parterres de coupe.

With the reduction of the project size, Barrette - Chapais Ltée is not forecasting to recover residual biomass from the forest operations.

### 1.3 Atmospheric Dispersion Study

**A new atmospheric dispersion model will be submitted to the COMEX in the following weeks. Questions QC-11 à QC-18 should be revised, but will be included in the revised model.**

QC-10. Fugitive dust emissions from the site (unpaved traffic areas, storage areas, building leakage) as well as other sources of emissions have been deemed not significant and have not been included in the atmospheric dispersion study. This choice was justified by the implementation of a fugitive dust management plan. The promoter shall present this plan. In addition, to justify its decision to not consider sources EP06 (bark grinder), EP16 (pellet storage container), and EP17 (ash storage container), the promoter shall indicate the rate of flow (m<sup>3</sup>/s) and the vertical upward speed (m/s) of gases vented into the atmosphere and the emission rate (g/s) of particles.

A fugitive emission plan will be revised and submitted to the Comex.

QC-11. In its Atmospheric Dispersion Study, the promoter shall consider sources EP01, EP03, and EP04.

QC-12. The emission of acrolein from the bark furnace as well as the emission of PM2.5 for all significant sources of the plant shall be modeled.

QC-13. For each contaminant and each emission source (Tables A1, A2, A3.1, and A3.2 of the Atmospheric Dispersion Study), the promoter shall transmit reference documents (or Internet links) regarding emission intensity and detailed calculations of emission rates.

QC-14. It is mentioned that the 09292 version of AERMOD was used to perform the atmospheric dispersion study. AERMOD has been updated several times since the publication of version 09292. The promoter shall update its atmospheric dispersion study with the latest version of AERMOD (14134 or later, if any).

QC-15. The promoter shall present an image showing the calculation grid that it used and shall also specify the size of the size of the grid mesh.

QC-16. Regarding weather data, the modeling report mentions that "The MOE local meteorological data (5 years) that is applicable for the site and its surrounding land was used." The promoter shall identify the meteorological station from which the data was gathered and define the surface characteristics (albedo, Bowen ratio, and roughness) that were used for processing the data. Furthermore, the modeling report shall present the wind rose and a table showing average monthly temperatures. This information will help determine if the proposed meteorological data are representative of the study site (Chapais).

QC-17. The promoter shall refer to the document “Normes et critères québécois de qualité de l’atmosphère” (Quebec air quality standards and criteria) available on the MDDELCC website at <http://www.mddelcc.gouv.qc.ca/air/criteres/Normes-criteres-qc-qualiteatmosphere.pdf> for the standards and criteria identified in Table A3.3. Furthermore, this document contains the initial concentrations (or pre-project concentrations) to be considered. This value is crucial in that the site is adjacent to the Barrette-Chapais sawmill. It is not clear in Table A3.3 that the modeled maximum concentration includes the initial concentration. Thus, Table A3.3 shall show, for each contaminant modeled, the modeled maximum concentration (1), the initial concentration (2), the resulting concentration (1+2), the criteria or standard, and the comparison of the resulting concentration with the corresponding criteria or standard.

QC-18. In order to validate the dispersion study, the main results of the modeling shall be presented in the form of concentration isoline maps. The following maps must be presented: maximum daily TPM concentrations, maximum daily PM2.5 concentrations, peak concentrations (15 minutes) of formaldehyde, and any other contaminants with concentrations approaching atmospheric quality criteria and standards. The maps shall also show the limit of application of the Clean Air Regulation. According to Section 202 of Clean Air Regulation, atmospheric quality criteria and standards apply "off the limits of the property occupied by the source of contamination and off a sector zoned for industrial purposes or in a buffer zone adjacent to such a sector, as established by the competent municipal authorities."

## 1.4 Community Consultation

QC-19. The proponent shall report on the steps it has undertaken with communities of Chapais, Chibougamau, Oujé-Bougoumou, and Waswanipi and Mistissini to introduce them to the project. Moreover, he will present the concerns raised by these communities as appropriate as well as changes to the project in order to address these concerns.

See Attached Document

## 1.4 Community Consultation

QC-19. The proponent shall report on the steps it has undertaken with communities of Chapais, Chibougamau, Ujé-Bougoumou, and Waswanipi and Mistissini to introduce them to the project. Moreover, he will present the concerns raised by these communities as appropriate as well as changes to the project in order to address these concerns.

Consultations were held in late April 2015 with five communities located on the territory of Eeyou Istchee - James Bay affected directly or indirectly by the project of wood pellet plant. Chapais and Chibougamau mayors as well as members of the municipal councils, Aboriginal leaders and members of Ujé-Bougoumou, Waswanipi and Mistissini band councils have been met (see list below) during exchange sessions in their respective communities. List of persons interviewed:

### **Ujé-Bougoumou**

- Mr. Reggie Neeposh, Chief
- Mr. Randy Bosum, Vice Chief
- Mr. Sam R. Bosum, Member of the Board
- M<sup>me</sup> Margo M. Cooper, Member of the Board
- Mr. Lance Cooper, Secretary general
- Mr Paul Wertman, Advisor
- Mr. Nathaniel Bosum, Economic development manager
- Mr. Adario Masty, Environment Manager

### **Waswanipi**

- Mr. Marcel Happyjack, Chief
- M<sup>me</sup> Mandy Gull, Vice Chief
- Mr. Stephen Blacksmith, Natural Resources Manager

### **Mistissini**

- Mr. Richard Shecapio, Chief
- Mr. Gerald Longchap, Vice Chief
- M<sup>me</sup> Maggie M. Spencer, Member of the Board
- Mr. William Macleod, Member of the Board
- Mr. Jerry Matoush, Member of the Board
- M<sup>me</sup> Lucy Trapper, Member of the Board

### **Chapais**

- Mr. Steve Gamache, Mayor
- M<sup>me</sup> Roxanne Tremblay, Member of the Board
- Mr. Guy Lafrenière, Member of the Board

- M<sup>me</sup> Lucie Tremblay, Member of the Board
- M<sup>me</sup> Denise Larouche, Member of the Board
- Mr. Jacques Fortin, Member of the Board

### **Chibougamau**

- M<sup>me</sup> Manon Cyr, Mayor
- Mr. Daniel Bergeron, Member of the Board
- Mr. Jerry Poirier, Member of the Board

These meetings were aimed on one hand, to present to the various communities the social, economic and environmental impacts anticipated by the project of pellets of wood plant proposed and on the other hand, to establish a dialogue with the local communities. A visual medium (PowerPoint) was specially produced for this purpose for every session.

From the outset, questions and comments from the participants focused around 4 major aspects; economic benefits for the communities and the region, the impacts on local users of by-products (bark) for purposes energy, the impact on the additional volumes of wood to be harvested and jobs creation.

Despite the diversity of topics covered, all acknowledged the importance of the Barrette-Chapais sawmill and its workers for the region's social and economic vitality. It was also an opportunity for Barrette-Chapais to demonstrate the importance of the market of the co-products for the Quebec lumber industry and its dependence on the decreasing pulp and paper market. Well placed for debate, the company is currently facing the impact of this drop in pulp and paper market, main user of co-products (sawdust, shavings, chips, etc.). Currently, more than 100,000 tons of chips are stacked on the floor in the sawmill yard. In front of these structural and cyclical problems, the sawmilling industry must reorient itself to ensure the sustainability of its operations. The pellet plant project represents a viable alternative for the management of sawmill by-products. All stakeholders appreciated having a better understanding of the current situation on the sawmill by-product market.

For this purpose, the company Barrette-Chapais, recognized as an industry leader for more than 40 years, always maintained operations even during difficult market conditions. In the meetings, it appeared consensually that many jobs dependent on the sawmill activities contribute greatly to the vitality of the two municipalities met (60% of workers in the factory resident to Chibougamau and 40% to Chapais). The new wood pellet plant project annexed to the sawmill has also been seen as an asset by all the communities especially in terms of creating jobs and regional economic benefits. The project aims to maintain of the forest industry in the North of Quebec and allow the creation of around 20 new direct jobs in addition to the jobs during construction but above all to maintain the 500 jobs that represent Barrette-Chapais.

Beyond their unanimity relatively of benefits, some interviewed stakeholders have indicated their interest to better understand the possible impact the arrival of a new player in the market of by-products (more likely bark) for the Chapais-energie co-generation plant. For this purpose, representatives of Barrette-Chapais, one of the existing supplier of the co-generation plant, were able to reassure stakeholders met, on their goal to fulfil their contractual responsibilities to Chapais-energie. Moreover, clearly mentioned that it's a private sales agreement between 2 parties and therefore, it was understandable that negotiations would not take place in the public place. It was the same for the

thermal energy system of Oujé-Bougoumou, which consumes a negligible volume of by-products generated by Barrette-Chapais. Barrette-Chapais reiterated all the importance of good relationship and their intention to continue their business relationship with the community of Oujé-Bougoumou.

In Mistissini, despite the great interest shown for the project throughout the meeting, the leader and all of its Board, said not being very concerned due to its location (territory of Oujé-Bougoumou) and distance from his community. They therefore referred us to Oujé-Bougoumou to the continuation of our process, territory covered by the project.

As for Oujé-Bougoumou and Waswanipi, their representatives have requested (beyond the Thermal Energy System from Oujé treated above) to hold information sessions open to all of their community member in order to present the project. It was agreed that this approach would be undertaken once the project ensured. A second concern among the two communities were to know if this new plant would require an increased volume of timber and therefore a greater road access network. It was clear that it would not. The pellet plant project will be strictly supplied from the co-products of the sawmill, reason why it is installed on the sawmill site. Also, at the request of the leaders of the communities of Oujé-Bougoumou and Waswanipi, representatives of Barrette-Chapais met on 3 July 2016 masters trappers, who are immediate neighbors of the planned pellet plant to explain the project and take into their concerns. The masters Trappers are recognized by their community as being responsible for the wise and sustainable use of the natural resources on their traditional hunting, fishing and trapping territory.

The meeting with Mr. David Mianscum (Oujé-Bougoumou) took place at the offices of Barrette-Chapais while Mr. Raymond Dixon (Waswanipi) was met at his fishing lodge in about half an hour drive of the sawmill. Yet once, noted that the cumulative environmental impacts of the project on the quality of hunting, trapping or fishing would be irrelevant because of the nature of the project and its location on the sawmill facility. In both cases, they said to have little concerned since the project required no tree cutting and that it would be on the site of Barrette-Chapais. However, they wanted that this project will generate economic benefits for their communities. In addition Mr. Dixon referred us more to Mr. Mianscum responsible of this territory where the project would be implemented.

Finally, the question most frequently raised by all the communities referred to employment and the place made to young people from their community. Barrette-Chapais representatives confirmed and still confirms their intention to make room for local communities in terms of new jobs created and the place given to local entrepreneurs. A program for this purpose will be implemented for the construction phase and for the operation of the plant. Besides employment and succession are major challenges for the forest sector like many others.

Overall, consultations have resulted in many expectations for this project and the opportunities it represents in terms of employment but especially of consolidation in a sector that is too important to lose.