

Supply Base Report for State Forestry Institution "Begoml Forestry Enterprise"





Version 1.1 February 2016

For further information on the SBP Framework and to view the full set of documentation see www.sustainablebiomasspartnership.org

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1 Overview

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29/08/2016
UAB NEPCon LT, 29.08.2016
Yes
SBP Standard 2: Verification of SBP-compliant Feedstock (Version 1.0)
SBP Standard 4: Chain of Custody (Version 1.0)
SBP Standard 5: Collection and Communication of Data (Version 1.0)
http://www.sustainablebiomasspartnership.org/documents/standards-
documents/standards

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
✓				



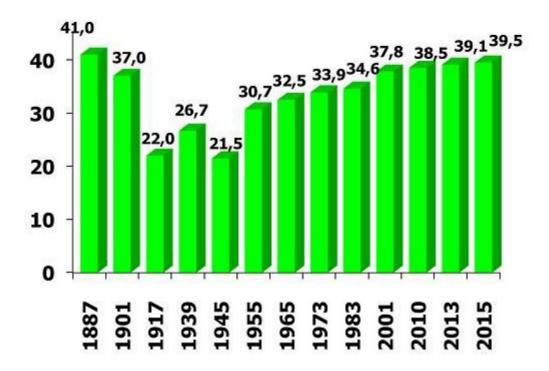
2 Description of the Supply Base

2.1 General description

2.1.1 Belarus, forest resources

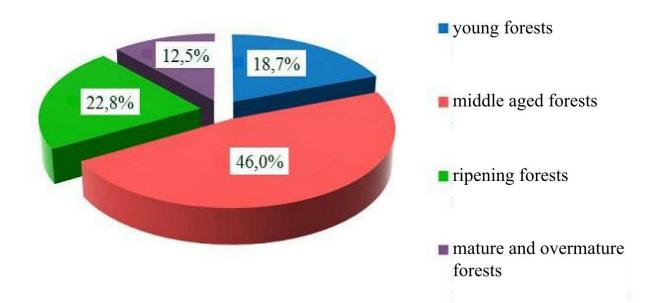
Forest resources of Belarus as an aggregate of all natural and homogeneous national forests include woodlands and other lands allotted for forestry. Total area of forest resources is 9.5mln ha, including 8.2 mln ha of forested area (with no glades, hewn or burnt-out places). It is 14.8% over the area of 1988. The gain was mainly achieved by natural and homogeneous a forestation of low-yield lands and lands unfit for agriculture. The percentage of forest lands in Belarus is 39.5% that is optimal for our country in general. See evolution in the figure below.

Evolution of the percentage of forest lands in Belarus



Forest resources of Belarus are quite well studied. Experts estimate timber volume in 2015 equal to 1714.3 mln m³ including approximately 263 mln m³ of commercial timber (mature and over mature wood). Total annual forest gain is about 32.1 mln m³. Average age of Belarusian forests is 54 years. Forested area is distributed by age as follows: 18.7% of young growth, 46.0% of middle aged stand, 22.8% of ripening stand, 12.5% of mature and over mature wood (see the figure below).





Forest exploitation in Belarus implies continuity and inexhaustibility. Annual average loggingis 10.0 to 11.2 mlnm³including 4.3 to 4.5 mln m³ (40%) of major harvest(in mature stands), 5.4 mln m³ (48%) of maintenance and sanitary cuts (young, middle aged and ripening forests), 1.0 to 2.3 mln m3 (12%) of other felling types. Forest exploitation is expected to intensify in the following potentially to over 16 mln m³ in 2011-2015 and to over 19 mln m³ in 2016-2020. However, it is not going to be unsafe for forests in view of the current annual forest gain in Belarus about 25 mln m³. Moreover, the annual forest gain is getting bigger and bigger as the percentage of forest lands grows and age structure of forests gets more uniform. Forest exploitation practice is primarily dependent on allowable felling rate - annual felling quota or amount of products to be taken off further forest reproduction for timbering. The allowable felling rate is calculated on the basis of available mature wood, reproduction specifics, needs for wood, and compliance with continuity and inexhaustibility principles. Only 70% to 80% of the quota has been actually used in recent years. Underuse is mainly related to soft-wooded broadleaved species, small merchantable wood and hard-toreach areas where felling is not reasonable economically. Lack of capital investments limits wood usage in energetics. Average annual forest exploitation rates have been equal to not more than 1.5 to 1.7 m³ per 1 ha of forested area in recent years -that is 2.4 times less than the annual wood gain equal to 3.6 m³/ha. Allowable final yield is expected to increase almost twice in 2015, thus, allowing expansion of all kinds of forest exploitation and timber export.

Forest and wood working industries

Belarusian forest industry consists of forestry (13.5% of total output), woodworking (69.6% of total output) and pulp-and-paper (16.4% of total output) sectors. Sawmilling has been a major activity historically, and today about 1500 enterprises are certified to produce saw timber. Most of them combine the latter with mechanical woodworking (windows and doors, wood-frame houses) or wood harvesting. State forestry institutions possess their own woodworking facilities dedicated to machining own round timber. Thus, 71 workshops at state forestry enterprises processed over 1.9 mln m³ of wood in 2013.

Forestry contribution to the national economy made up USD575mln or 1.1% of GDP in 2011. According to FAO (Food and Agriculture Organization) 113 thousand people are directly engaged in forestry.

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More than 75 woodworking and trade Belarusian companies had been certified by FSC (Forest Stewardship Council) by mid-2015.

Belarus consumes approximately 967 PJ annually that equals to 23 mln t of oil. Belarusian wood biofuel potential is assumed to be equal to 611 mln m³. Annual ship yield had reached 1.25 mln m³ by 2014.

2.1.2 State Forestry Institution "Begoml Forestry Enterprise"

State Forestry Institution "Begoml Forestry Enterprise" is situated in Dokshitsy District of the south-west Vitebsk Region. The enterprise comprises eight forest districts and a base nursery.

Begoml Forestry Enterprise is bordered with Postavy Forestry and Glubokskij Experimental Forestry Enterprise (in the north), Minsk region, Logoysk Forestry and Narochansky National Park (in the south-west), and Berezinsky Biosphere Reserve (in the east).

The company is involved in forestry, wood harvesting, wood machining and trade both within the country and abroad. It is responsible for 74.3 thousand ha of forest resources including 63.2 thousand ha of woodlands. Forests of the 1st group occupy 23.9 thousand ha, while forests of the 2nd group occupy 50.4 thousand ha. 53 years is the average forest age.

Forestry activity includes:

- Forest exploitation
- Afforestation and reforestation
- Forest protection against fire, illegal felling and other violations
- Forest protection against disease and vermin
- Hunting ground management

The enterprise harvests round wood; produces coniferous and deciduous saw timber, regularized round and disbar ked timber, wood pellets and firewood; sells products to companies and individuals ex-works or delivered.

The following categories of raw materials are used for production:

EC UK

Forest residues

- Diseased wood and storm salvage
- Thinnings
- Tree tops

Wood industry residues

- Sawdust
- Slab wood

Begoml Forestry Enterprise exports products to Lithuania, Latvia on FCA terms (Incoterms 2000) by road; to Poland, Latvia, Lithuanian DAF terms by railways.

The company is mainly dedicated to forest exploitation, protection, security and reproduction management in framework of the Ministry of Forestry of the Republic of Belarus.

Furthermore, to preserve and to create high-productive, quality, biologically sustainable forests and forest



fauna as part of forest resources that comply with contemporary environmental, social and economic demands by state and society, including applicable legal requirements – that is another goal of the enterprise.

2.2 Actions taken to promote certification amongst feedstock supplier

Not applicable. State Forestry Institution "Begoml forestry Enterprise" for the production of fuel pellets uses only the FSC 100% certified wood which grows in the territory of forest fund of the entity.

2.3 Final harvest sampling programme

Not applicable.

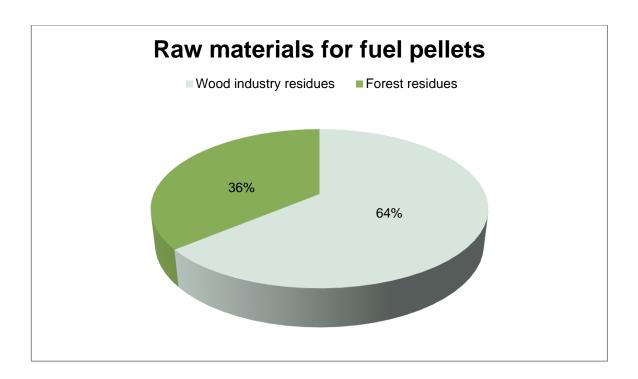
2.4 Flow diagram of feedstock inputs showing feedstock type

State Forestry Institution "Begoml Forestry Enterprise" for heating dryer drums and produces fuel pellets uses sawdust, slab wood and felling residues(diseased wood and storm salvage, thinnings, tree tops). For heating of rotary driers are used slab wood and felling residues(diseased wood and storm salvage, thinnings, tree tops). All raw materials are received from coniferous breeds with the statement of FSC 100% (based on data on processing in the shop of a woodworking):

- 58% of Pinussylvestris
- 42% of Piceaabies on the territory of their own forest areas

Step	Description of product flow and checkpoints	
1	Forestry activity at own forest areas 100% FSC-certified	
2	Production of the sawn wood on own shop of a woodworking of SFI "Begoml Forestry	
	Enterprise". (checked during FSC audit)	
3	Production of fuel pellets from woodworking production waste of SFI "Begoml Forestry	
	Enterprise" andfelling residues(checked during FSC audits)	





2.5 Quantification of the Supply Base

Supply Base

a. Total Supply Base Area (ha): 63'236

b. Tenure by type (ha): 63'236 state ownership of the Republic of Belarus

c. Forest by type (ha): Temperate

d. Forest by management type (ha): Managed semi-natural

e. Certified forest by scheme (ha): 63'236 (FSC and PEFC certified forests)

Feedstock

f. Total volume of feedstock 22 343.79 m³ per year

g. Volume of primary feedstock 8 075m³ per year

h. List percentage of primary feedstock (g) by the following categories. Subdivide them by SBP-approved Forest Management Schemes:

Primary feedstock is delivered from 100% FSC-certified (FSC Forest Management) woodlots in possession of State Forestry Institution "Begoml Forestry Enterprise".

i. List all species in primary feedstock, including scientific name.

For production of fuel pellets the following breeds of primary feedstock are used: pine (Pinus silvestris), firtree (Picea abies).

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- j. Volume of primary feedstock from primary forest. Not applicable (0 m³).
- k. List percentage of primary feedstock from primary forest (i), by the following categories. Subdivide by SBP-approved Forest Management Schemes.
- Primary feedstock from primary forest certified to an SBP-approved Forest Management Schemes
- Primary feedstock from primary forest not certified to an SBP-approved Forest Management Schemes Not applicable (0 m³).
- I. Volume of secondary feedstock: 14 268.79 m³/year
- m. Volume of tertiary feedstock: Not applicable (0 m³)



3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
	✓

SBP fuel pellets are produced of FSC-certified wood, i.e. 100% of total pellet production is 100% ESC-declared. Supply base evaluation is not required.



4 Supply Base Evaluation

4.1 Evaluation techniques

Not applicable.

4.2 Justification

Not applicable.

4.3 Results of Risk Assessment

Not applicable.

4.4 Results of Supplier Verification Programme

Not applicable.

4.5 Conclusions



5 Supply Base Evaluation Process



6 Stakeholder Consultation

Not applicable.

6.1 Response to stakeholder comments



7 Overview of Initial Assessment of Risk



8 Supplier Verification Programme

- 8.1 Description of the Supplier Verification Programme Not applicable.
- 8.2 Site visits

Not applicable.

8.3 Conclusions from the Supplier Verification Programme Not applicable.



9 Mitigation Measures

9.1 Mitigation measures

Not applicable.

9.2 Monitoring and outcomes



10 Detailed Findings for Indicators



11 Review of Report

11.1 Peer review

Peer Review of Report on Supply base of State Forestry Institution "Begoml Forestry Enterprise"

Expert's qualification: Sergei Vladimirovich Kovalevski. a 1998 graduate of 1998 from Belarusian State Technological University, Forestry Faculty; a postgraduate from Forest Management department, and a PhD in Agriculture. Mr Kovalevski is a highly experienced party to the National Forestry Scientific Programme projects related to forest conservation and environmentally friendly forestry.

Expert's opinion: The Report on Supply base of State Forestry Institution "Begoml Forestry Enterprise" (the Report) was reviewed. Company's forest resources are located in Dokshitsy District of the south-west Vitebsk Region, Belarus. The enterprise uses coniferous timber harvested in its own forest resources feedstock. Therefore the Report briefly describes forest resources of State Forestry Institution "Begoml Forestry Enterprise" and condition thereof. The review revealed no gross violation or figure misinterpretation. The Report refers to official data sources in order to prove given information and conclusions. General description of Belarusian forest resources contains main properties like forest area, gross annual gain, total stand stock, harvesting intensity, range of species, etc. Wood supplies from proper forests, only, imply extremely low risk of purchasing wood from high nature value forests, radionuclide-contaminated wood, and other. FSC-certified wood from proper forest minimizes the risk to purchase wood from a doubtful source.

Reviewer

Forest Management Department Associate Professor

PhDinAgriculture (signed) S.V.Kovalevski



11.2 Public or additional reviews

The Report in Russian is available for public awareness to whom it may concern on State Forestry Institution "Begoml Forestry Enterprise" website:

• http://www.begomlles.by

Anyone concerned may provide feedback to e-mail: zemchenok.a.g@gmail.com

The present Report has been sent to various public institutions. No response has been received yet.



12 Approval of Report

Approval of Supply Base Report by senior management			
Report prepared by:	Artem Zemchenok	Quality Engineer	29/08/2016
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organization's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalization of the report.			
Report approved by:	Aleksej Prokopov	Director	29/08/2016
	Name	Title	Date
Report approved by:	Oleg Jakubovich	Chief Engineer	29/08/2016
	Name	Title	Date
Report approved by:	Dmitry Kurnish	Engineer	29/08/2016
	Name	Title	Date



13 Updates

Please note: the updates should be submitted in the form of additional pages

13.1 Significant changes in the Supply Base

Provide a description of any significant changes in the resource base

13.2 Effectiveness of previous mitigation measures

For each measure, to reduce the level of risk identified during the assessment, provide a detailed report on whether the measures are effective or not.

13.3 New risk ratings and mitigation measures

Not applicable.

13.4 Actual values of feedstock over the previous 12 months 22 343.79m³per year

13.5 Projected values of feedstock over the next 12 months
1.0 - 200.000 M³