

Reconstruction of nylon industrial and cord yarn production at JSC «Grodno Khimvolokno»

A. Project Opportunity Description:	
A1. Project Name:	Reconstruction of nylon industrial and cord yarn production at JSC «Grodno Khimvolokno»
a. Short name:	Reconstruction of nylon industrial and cord yarn production
b. Full name:	Reconstruction of nylon industrial and cord yarn production facility at JSC «Grodno Khimvolokno», Republic of Belarus
c. Summary description:	Purpose of the given project is to increase competitiveness of cord fabrics, produced by nylon industrial and cord yarn production facility, and expansion of markets in CIS in 2007-2009.
A2. Progress Status:	Pre-investment stage. List of main equipment is determined by the company. Precontractual work in equipment purchase is led at the moment.
A3. Organizations involved and their roles:	1) JSC «Grodno Khimvolokno» - the initiator of the project, the borrower 230026 Grodno, Republic of Belarus Mr.K.P.Mayanov - General Director. Phone.(+375 152)56-12-64, 56-69-03 Fax. (+375 152)54-33-80, 54-34-39 E-mail: office@grodno-khim.by ; 2) Concern «Belneftekhim»: 73, Dzerzhinskogo Ave., Minsk, 220116, Republic of Belarus. Moiseichik Mariya Ivanovna, tel.: (+375-17) 271-97-28, leadership: tel. (+375-17) 271-79-01, fax (+375-17) 271-97-00
A4. Project Description:	It is planned to reconstruct of nylon industrial and cord yarn production with the installation of efficient equipment for production of high-viscosity PA-6 via caprolactam polymerisation with capacity 160 tones/day Besides, there are plans to install 4-5 spin-draw-winding plants for industrial yarn with total output 80 tones/day. JSC «Grodno Khimvolokno» possesses all necessary production spaces, energy resources. Infrastructure and production spaces will enable to locate new equipment and satisfy necessary safety and ecology requirements, that subsequently allow maximum possible usage of existed elements of the enterprise engineering infrastructure, warehouse spaces, sidings including railway ones. To connect equipment we can use existed communications of compressed air, nitrogen, steam, cooled water, electrical energy and existed system of intrashop transport, that will permit to minimise general capital costs. As a staff there are high-skilled technicians and workers at the enterprise, who possess large operational experience on similar equipment (Zimmer and Barmag plants) that exclude problem of staff taking and training.
A4a. Project cost (mln USD):	62.0
A5. Background / history / overall programme / related or similar projects:	JSC «Grodno Khimvolokno» is related to chemical industry of the Republic of Belarus, belongs to the Belneftekhim concern and is the sole producer of nylon fibres and yarns, PA-6 and nylon cord fabric. At present the state share in the authorized capital stock is 99.97 %. The first production capacity of the company was launched in 1978. At present four process production facilities comprise its structure: - nylon industrial yarn cord fabric production facility - cord nylon yarn production facility - production facility for consumer goods - workshop of production facility for plastics Main types of the goods and their usage: - nylon cord fabric for tyre industry with tensile strength 12 - 35 kgf; - nylon industrial yarns for production of rubber technical articles and fishing nets and ropes; - nylon BCF texturized yarns of carpet assortment for production of tufting floor coverings and carpets of other types; - PA-6 granulated for production of nylon yarns, articles to be in contact with food, as well as engineering plastics for detail moulding in engineering and other industries; - PA-6 granulated reinforced for production of assemblies and details in engineering, electrical and other industries; - tufting floor coverings, which are consumer goods of large demand, produced from own BCF yarn; - braided articles for household and technical purposes. The company have all the necessary licenses for a right of activity in part of chemical yarns and fibres production according to standards in force in the Republic of Belarus. At present there are operating plants and lines of high productivity at the company which were made by Western European companies: - plant for production of PA-6 granulated (Zimmer, Germany), capacity 40 tones/day; - nylon industrial yarn spin-draw-winding plant (Zimmer-Rieter, Germany), capacity 10 tones/day; - nylon industrial yarn spin-draw-winding plant (Barmag, Germany), capacity 18 tones/day; - twin-screw extruders for engineering plastics production (Werner Pleiderer, Berstorff, Germany); - and other high technological equipment. Will be placed

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in operation in 4th quarter 2006: - nylon industrial yarn spin-draw-winding plant (Marubeni, Japan), capacity 16 tones/day; - cord fabric dipping and heat-setting plant (Benninger, Germany), capacity up to 5,5 mill. rms/month As per the audit results QMS of JSC «Grodno Khimvolokno» was acknowledged as complied with requirements of ISO 9001: 2000, and they got a certificate of compliance No. 143870 dd. 17.12.2003.

A6. Environmental impact summary:

There is performed task-oriented work at JSC «Grodno Khimvolokno» to minimise harmful influence on environment. During all operation years set standards on contaminant emissions to atmosphere as well as limits on wastes formation and disposal are constantly kept. Supervising bodies haven't presented penalty sanctions to the enterprise. During last 2-3 years a number of measures to minimise wastes formation, consumption of energy resources of all types, water consumption were performed.

A7. Possible obstacles/ problems/ risk assessment:

Risk assessment for the project realising is low one. Technological processes of industrial yarn and cord fabric production at JSC «Grodno Khimvolokno» meet world level by many indices and considerably exceed level of similar enterprises in the CIS countries. There are long-standing and developed relations with raw material suppliers and ready goods consumers. JSC «Grodno Khimvolokno» possesses quite stable financial state, good credit history. High quality of the goods, service for partners, stability of deliveries, continuous technical rearmament of production capacities are pledge and guarantee of reliability of JSC «Grodno Khimvolokno».

A8. Term of realization / term of recoupment (years):

3/3.5

A9. Project's branch:

Chemical and petrochemical industry

B. Capital Cost Items (additional requirements for project):

B1. Project physical components	B2. Capital cost (mln USD)
Purchasing of equipment and materials (Germany, Japan)	58.2
Construction installation works	3.8
TOTAL :	62.0

C. Capital Resources Available from Sponsors/ Proposers:

C1. Resources 'in kind', grants, investments, equity / ownership, etc.	C2. Amount (mln USD)
Own means	12.6

D. Required Financial Assistance:

D1. Financing gaps, type of financial assistance required:

crediting

D2. Sources of finance	D3. Type of investment	D4. Amount (mln USD)
Additional financing to C1: - financing of purchasing of equipment is necessary	credit	49.4

D5. Financial/ International Institution Name:

E. Demand (users) and revenues:

E1. Type of users/ markets, volumes, pricing, revenues, quantifiable benefits/ savings:

There are sold ca. 30,5 % of produced goods in the Republic, 35,9 % are delivered to the CIS countries (mainly to Russia) and 33,6 % - to foreign countries.

E2. Revenues (Sales)	E3. Amount (mln USD)
Sales proceeds production	152.1

F. Operating and Maintenance Costs:

F1. Cost components, strategies for cost recovery, operating organisations, subsidies, etc.:

To site the equipment the enterprise possesses necessary engineering communications and energy sources. Additional acreage allotment will not be required.

F2. Cost Item	F3. Amount (mln USD)
Raw materials, materials	86.3

Energy resources for technological purposes	5.3
Personnel costs	2.1
Depreciation	11.6
Other	28.2
TOTAL full costs for realized goods	133.5
G. Net Income Value:	
G1. Net Income Value	G2. Amount (mln USD)
Revenues E2 minus operating costs F2	18.6
Net Income Value	15.9
H. Project information source:	
H1. This form was completed by:	
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H4. Date:	
March, 2007	
H5. Supreme Organization:	
Concern «Belneftekhim»	