

A. Description of the projects possibilities:

A1. Name of the project:

Planning & mastering of production of headlamp lenses

a. Brief name:

Planning & mastering of production of headlamp lenses

b. Full name:

Planning & mastering of production of headlamp lenses

c. Short description:

The purpose of the project is the organization of production of headlamp lenses. To organize the given production it is necessary to complete the following tasks:

-melting of glass with the required characteristics (heat stability, chemical resistance, impact toughness, etc.);

-press forming of headlamp lenses of the required size & quality.

These tasks will be completed by means of execution of the following works:

-engineering & construction of a cost-effective gas-fired oven with a productivity rate of 5 tons of glass per 24 hours;

-purchase of an updated high-production press forming line for headlamp lenses («Waltec», there's a commercial offer);

-purchase of an updated automated production line for batch preparation;

-purchase of a cost-effective leer.

Apart from headlamp lenses there's a demand for other technical products which can be manufactured of the same glass & by means of the same equipment (lenses for traffic lights, large-sized Fresnel lenses for illumination devices, technological equipment observation glass, etc.).

The organization of this production in Belarus will allow to cut import of headlamp lenses by more than 780 thousand euro per year & increase export by more than 350 thousand euro per year.

There will be no negative consequences in the course of the project's implementation

A2. State of the project:

Plant Optic JSC is an operating plant & a FEZ «Grodnoinvest» resident. The enterprise have got more than 20 years of experience in optical glass melting & produce splitters of glass K100, plates of LK105 & LK 107 glass, rods of DS glass, coquilles, etc. The enterprise's specialists are constantly conducting R&D works aimed at the improvement of glass melting technology, glass structure & working:

-the structure of spectacle lenses was changed to protect eyes from ultraviolet radiation;

-the construction of the glass-melting tank was changed to prolong its durability;

-the technology of melting & the construction of a pot furnace were worked out;

Belarusian & Russian scientific brainpower may be attracted for the development of the project.

The project's condition – an investor is needed

A3. Participating organizations and their role in the project (contact person, telephone, fax, e-mail, web-page):

The project's initiator – Plant Optic JSC

The enterprise's director – Tadeush Golovach

Contact person – Alexander Ermolaev, R&D deputy director

Tel.: +375 1561 45469;

Fax: +375 1561 47846;

Web-site: www.optic.lida.by/rss/rus/rss.xml

E-mail: optic@mail.lida.by

A4. Description of the project (approaches, tasks, components, results, stages, terms, general financing, advantages, influence on transition periods in economy, etc.):

The project provisions the production of headlamp lenses with the following specifications:

Glass technical characteristics:

- glass – silicate, colourless;
- light transmittance of a 10 mm plate – no less than 0,85;
- bubbles' size – from 0,8 up to 1,5 mm;
- colour characteristics – according to the sample.

Furnace characteristics:

- furnace type – regenerative tank with U-shape flame distribution;
- output – 5 tons per 24 hours;
- melting temperature – up to 1500 °C;

Lenses' characteristics:

- light characteristic – according to all-Union State Standard 5635-80;
- heat stability - 65°C;
- impact toughness – 0,36 J;
- other specifications are indicated in all-Union State Standard 5635-80.

The cost of the project – 3 mln. US dollars

a. General cost of the project (mln. US dollars):

The cost of the project is 2 mln. euro (3 mln. US dollars). Pay-back period is 5,2 years

A5. Preconditions / history/ general program / interconnected or similar projects:

At present Belarus has got well-developed productions of automotive & agricultural engineering. To reduce the amount of imported materials used in these productions, in Belarus there were organized productions of headlamps & other illuminating ware (joint-venture «Bel-Fer» – Dzerzhinsk, «Rudensk» JSC – Rudensk). Although headlamp lenses are not produced in Belarus

A6. Brief description of influence on environment:

Was not considered

A7. Possible obstacles/ problems/ level of risk:

Were not considered

A8. Terms of realization and payback period of the project (years):

Payback period – 5,2 years

A9. Branch characteristic of the project:

Machine building & instrument making industry

B. Articles of capital costs (total investments necessary for the realization of the project):

B1. Physical components of the project (equipment, work, services etc.) necessary for the realization of the project:	B2. Capital investments (mln. euro):
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Equipment	1,7 - 2,0
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B3. Sub-projects on the disposition	B4. Project cost
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C. Capital according to the source of origin which is available at the initiators of the project (proprietors, associates, sponsors, etc.):

C1. Kind of sources (grants, investments, share participation/ property etc.)	C2. Sum
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D. Required investments, missing means:

Direct foreign investments		
D2. Sources of financing	D3. Type of a financial instrument	D4. Sum (mln. US dollars):
Borrowed & attracted funds	Direct investments / indirect investment	--

E. Demand (consumers) and proceeds

E1. Type of consumers/ markets, volumes, prices, incomes, estimated benefits / savings:

The main consumers of headlamp lenses are native & foreign enterprises producing headlamps. In Belarus: joint-venture «Bel-Fer» – Dzerzhinsk, «Rudensk» JSC – Rudensk. In Russia: «Avtosvet» JSC – Kirzhach, «Osvar» JSC – Viazniki, joint-venture «Riazan-Bosch» – Riazan, joint-venture «The 21st century» – Moscow. Production volume of headlamps produced by these factories amounts to 1200 thousand per year. In 2010 the demand for headlamp lenses of joint-venture «Bel-Fer» amounts to 520 thousand pieces, of «Rudensk» JSC – 608 thousand pieces.

The main supplier of headlamp lenses for Belarusian & Russian headlamp producers is «Starsteklo» JSC – Star – the only producer of headlamp lenses in Russia.

According to preliminary estimates market capacity of headlamp lenses amounts to 500 thousand per year. Total headlamp lenses demand constitutes 1,6 mln. pieces per year.

E2. Proceeds (sales)

E3. Sum (mln. euro)

Own, borrowed funds

1300

F. Operational expenditures

F1. Component expenses, depreciation policy, organization of manufacture and etc.:

F2. Articles of expenses

F3. Sum (mln. euro)

Cost of products sold

1000

H. Information source of the project:

H1. Form is filled in (by first name, last name, position):

Contact person – Alexander Ermolaev, R&D deputy director

H2. Organization (name and address):

Plant Optic JSC, Masherova str., 10, Lida, 231300, Grodno region, Belarus

H3. Tel. / Fax / E-mail:

Tel.: +375 1561 45469;

Fax: +375 1561 47846;

E-mail: optic@mail.lida.by

H4. Date:

October, 2009

H5. Departmental characteristic of the project:

Ministry of Industry of the Republic of Belarus