



GLASS MAGNESIUM BOARDS

PROJECT

There is provided a project of launching glass magnesium boards (GMB) production.

- Glass magnesium board is the main competitor of gypsum plasterboards (GP) on the world's largest construction markets China and USA.
- Consumption of finish materials in the Custom Union totaled about USD 45 bn in 2013. GMB imports amounted to about USD 30 mn.
- World GMB market doubled during the last 5 years and totaled about **0,5-1 bn sq m**. It is projected to grow by **2,5-3 times** over next 7 years.
- Capital expenditures for the project are estimated at USD 5-50 mn, IRR 20-30%.

MARKETS

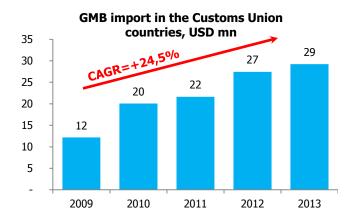
GMB is one the most competitive substitutes for GP in the segment of finishing boards.

Internal market of Belarus:

- In 2013 Belarus imported gypsum plasterboards and glass magnesium boards to the amount of more than **USD 20 mn**.
- Annual GP output in Belarus totals app. 6 mn sq m, bulk of which is exported.
- Bulk of the finishing boards is imported in 2013 the imports totaled about 11 mn sq m.

Customs Union market:

- Over the last 4 years annual GMB imports by the Customs Union countries grew by 24,5% on average and totaled in 2013 about 12,5 sq m (USD 29 mn).
- At the same time, imports of finishing boards (GP, GMB) by the Customs Union countries doubled during the past 4 years up to **USD 100 mn**, which is **50 sq m**.
- Major suppliers of finishing boards are: China, Japan, Germany – GMB; Poland, Finland, Ukraine – GP.
- GMB was one of the major finishing materials used for construction at the Olympic games 2014 sites in Sochi.







MARKET OPPORTUNITIES

Global opportunities:

- Global finishing boards market is projected to grow by around 5% over 2014-2018.
- World GMB output totals about **0,5-1 bn sq m** a year (**app. USD 5 bn**). Main producers and consumers are China and USA. The market doubled over the past 5 years.
- Annual world GP consumption is more than 10 bn sq m a year.
- World consumption of GMB, due to its physical properties, is expected to increase by 2,5-3 times during the next 7 years.

Local opportunities:

- GMB was one of the major finishing materials used for construction at the Olympic games sites in **Sochi 2014** and **Beijing 2008**.
- Annual growth of finishing boards consumption in the Customs Union is projected **15-18%** over 2014-2018.
- Over the past 8 years volume of construction in Russia, Belarus and Kazakhstan almost doubled up to 130 mn sq m of housing and non-residential premises.
- Consumption of finishing materials in the Customs Union countries totaled app. **USD 45 bn** in 2013.
- During the past 5 years around 80% of the Customs Union population renovated their houses. Savings for renovation are ranked the fourth in the households' savings structure.

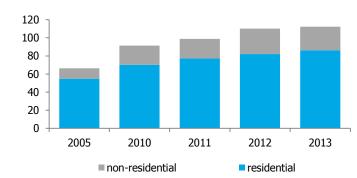
INVESTMENT OPPORTUNITIES

- Capex for the project may total USD 5-50 mn.
- Payback period is about 5-7 years.
- IRR varies within 20-30%.

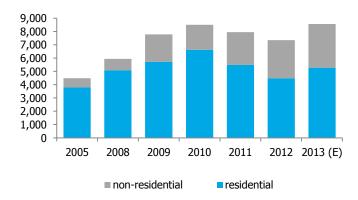
POSSIBLE INVESTORS

- Strategic investors global (in particular, Chinese) companies with appropriate technologies and experience in the GMB production.
- Holders of GMB production technologies (Chinese companies, in particular).
- Integration with the companies having access to the raw materials – magnesium oxide and dolomite – in Belarus.

Commissioning of real estate in Russia, mn sq m



Commissioning of real estate in Belarus, thou sq m



State of housing facilities in Russia

