



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.

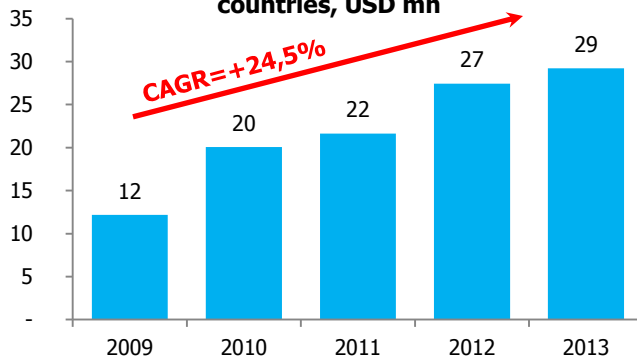
Internal market of Belarus:

- 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.**

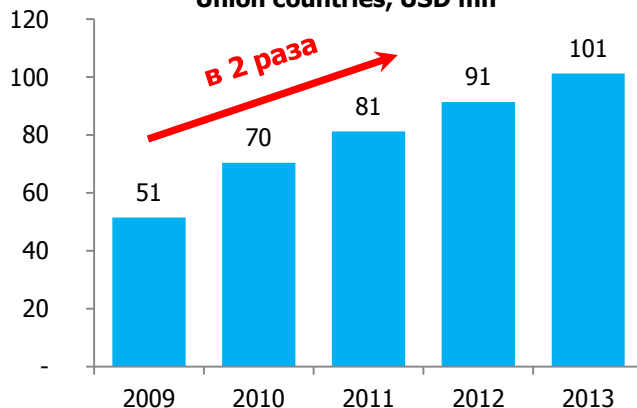
Customs Union market:

- 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.

GMB import in the Customs Union countries, USD mn



GMB and GP import by the Customs Union countries, USD mn



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.

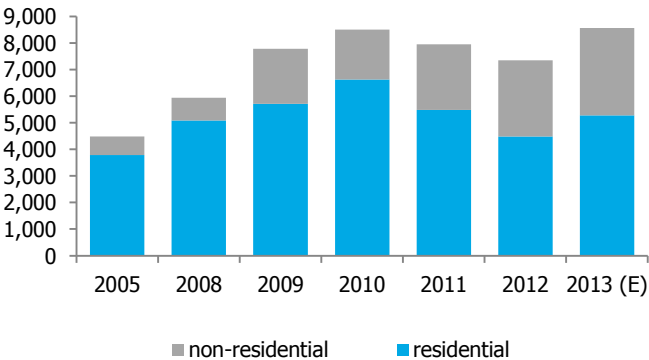
Local opportunities:

- 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.

Commissioning of real estate in Russia, mn sq m



Commissioning of real estate in Belarus, thou sq m



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.

State of housing facilities in Russia

