



PIGMENT PRODUCTION

PROJECT

For implementation there is provided a project on building a **pigment production plant**.

This is a high-opportunity project due to the following prerequisites :

- By 2018 world pigment market is forecasted to reach **4,4 mn t (USD 14,7 bn)** increasing on average by **4,5%** per year.
- Belarus has a developed chemical industry, research and raw materials base, experienced personnel.
- Imports of pigments in Russia total **USD 35 mn** with CAGR of **17%**. Belarus imports pigments to the value of **USD 7 mn**, annual average growth rate of the imports is **8%**.
- An attractive segment is production of **printing inks**, which market is projected to reach **USD 18,2 bn** by 2017.
- Capital expenditures for launching a pigment production plant are estimated at **USD 70-120 mn**, IRR is **18-20%**, payback period is **4-5 years**.

MARKETS

Internal market of Belarus :

- In 2012 Belarus imported pigments to the value of **USD 7 mn**, annual average growth rate over 2009-2012 totals **8%**.

Customs Union market:

- In 2012 Russia imported pigments to the value of **USD 35 mn**, imports annual average growth rate over 2009-2012 amounts to **17%**.
- Import share on the Russian pigment market exceeds **80%**.

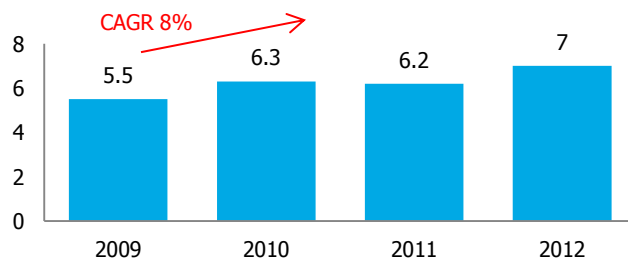
Asia Pacific market:

- More than a half of global pigment consumption accounts for Asia-Pacific Region. China's imports of pigments totals almost **USD 250 mn**, CAGR is **15%**.

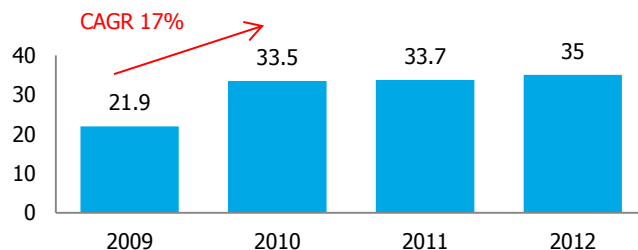
Global consumption of pigments



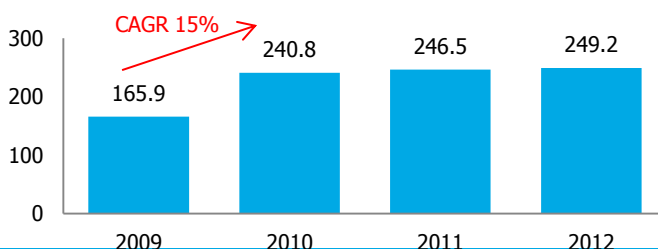
Pigment imports in Belarus, USD mn



Pigment imports in Russia, mn USD



Pigment imports in China, mn USD



MARKET OPPORTUNITIES

Global opportunities:

- By 2018 world pigment market is forecasted to reach **4,4 mn t (USD 14,7 bn)** increasing on average by **4,5%** per year.
- The key consumers of pigments are **paint and coatings industry** and **plastics production**, accounting respectively for **43%** and **27%** of global demand.

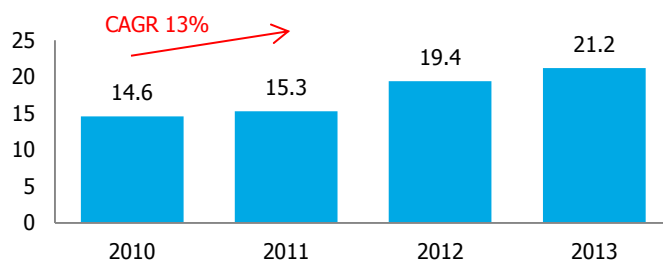
Worldwide application of pigments



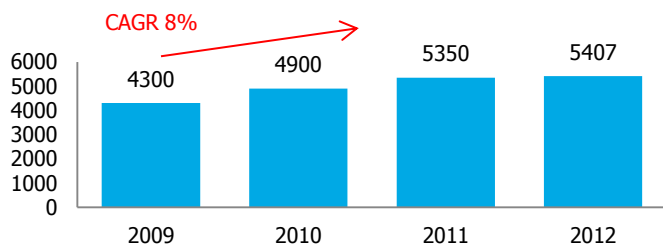
Local opportunities:

- Annual average growth rate of paint and coatings industry in Russia over 2010-2013 is **13%**, output increased by 1,5 times and totaled **21,2 thou t**.
- Plastics production in Russia increased on average by **8%** since 2009 and totaled **5407 thou t** in 2012.
- Since 2009 paint and coatings production in Belarus increased by almost 2 times to reach **248 thou t**, annual average growth rate is **24%**.
- Plastics output in Belarus totaled **468 thou t** in 2012, having increased during 4 years by **11%**.

Paint and coatings production in Russia, thou t



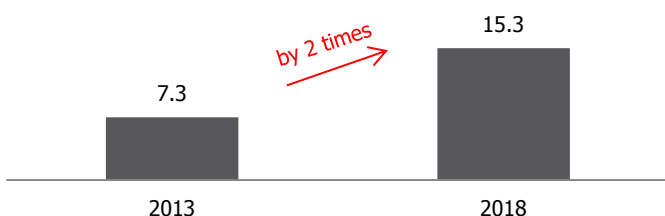
Plastics production in Russia, thou t



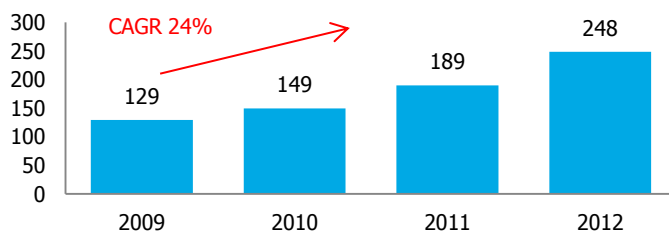
Attractive segments:

- Due to the increase in global demand for printed packaging, a considerable growth is expected in the field of **printing inks**.
- Global printing inks market is projected to reach **USD 18,2 bn** by 2017.
- World market for printed packaging is expected to double – from **USD 7,3 bn** in 2013 to **USD 15,3 bn** in 2018.

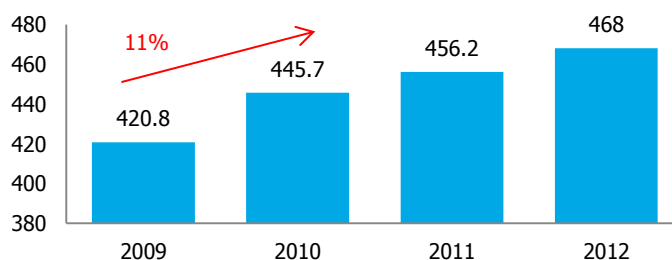
World market for printed packaging, USD bn



Paint and coatings production in Belarus, thou t



Plastics production in Belarus, thou t



INVESTMENT OPPORTUNITIES

Building a **pigment production plant**:

- Capital expenditures for the project implementation might total **USD 70-120 mn**
- Payback period is about **4-5 years**.
- IRR of the project varies within **18-22%**.

POTENTIAL INVESTORS

- **Strategic investors** – world chemicals producers with appropriate technologies and experience in pigment production.
- **Vertical integration** – major players on chemicals market (chemical concerns).