



PRODUCTION OF X-RAY APPARATUS

PROJECT

Proposed project – **production of equipment for X-ray control.**

Feasibility of establishing a production of X-ray equipment is determined by the following factors:

- Availability of highly qualified specialists and R&D in the field of X-ray equipment, successful experience in creating similar productions.
- **Localization of production close to final consumers** (primarily Russia).
- High growth rate of imports to Russia (CAGR **+31%** since 2009). In 2012 imports of X-ray equipment exceeded **500 mn USD**.
- The main markets are **the market of Customs Union and markets of developing countries (BRIC and others)**.
- Investment costs are estimated at **30-50 mn USD**, payback period – **6-7 years**.

SALES MARKETS

Customs Union market:

- The Russian market of medical equipment, products and furniture in 2012 reached **8,4 bn USD**, long-term market growth rate amounts to **18,2% per year**.
- X-ray equipment market in Russia exists and develops due to public procurement of equipment. The vast majority of equipment sold in Russia is imported (Philips, Siemens, General Electric, Toshiba, Shimadzu, etc.).
- There are also local producers (created on the basis of cooperation with foreign manufacturers) in Russia. Local players represent the middle price segment (Electron, Amico, Gelpik, SpektrAp, Medical Technologies, etc.).
- In 2012 imports of X-ray equipment exceeded **500 mn USD**. Average annual growth in 2009-2012 amounted to **+31%**.

Developing countries market:

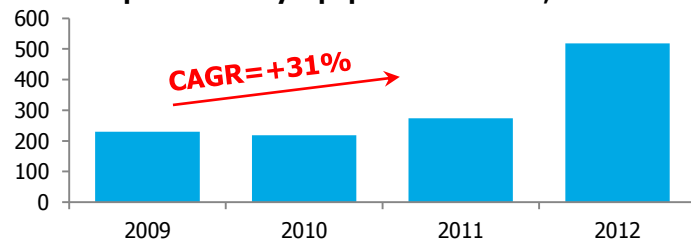
- Emerging markets (BRIC) for the last 5 years have shown a significant growth in consumption. Share of BRIC countries in global consumption of medical equipment and furniture **exceeded 10%** and amounted to **43 bn USD**. In 2012 Chinese market became the 4th largest market, Russian - **8th**.

Thus, the most promising market is **the Customs Union market as well as the market of developing countries.**

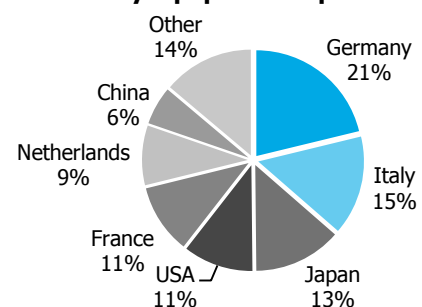
Russian medical products market, 2005-2012



Imports of X-ray equipment to Russia, mn USD



Structure of X-ray equipment imports to Russia



MARKET OPPORTUNITIES

Global opportunities:

- Global diagnostic imaging market exceeded **30 bn USD** in 2013. CAGR for 2010-2013 amounted to **13%**.
- Global diagnostic imaging market is expected to reach **49 bn USD** in 2020.
- X-ray equipment accounts for about **a third (34%)** of the global market for diagnostic imaging equipment.
- There is a constant **ageing of population** and expansion of application fields of diagnostic imaging equipment.

Regional opportunities:

- There is a reorientation of the world producers from mature markets of North America and the EU to the more lucrative markets of developing countries.
- Developed countries account for two-thirds of the market, developing countries' share is **36%**. But this share is forecasted to reach about **40%** by 2017. Growth in consumption of medical equipment and furniture in emerging markets is conditioned by a significant **growth in income**.
- Russian market of medical products may exceed **10-12 bn USD** by 2018.
- About **75%** of equipment for medical diagnostics in Russia is over 15 years, i.e. equipment on the market is obsolete.
- There is a lack of X-ray equipment in Russia. X-ray equipment market in Russia is expected to grow in the next 5 years, incl. due to the development of private medicine.
- Diagnostic imaging equipment occupies the first place by the volume of imports of medical equipment to Russia (in 2012 imports increased **by 50%** compared to 2011).
- Market development will be determined not only by modernization of existing health care organizations, but also by the commissioning of new facilities. About **9 thou beds** are commissioned annually in Russia.

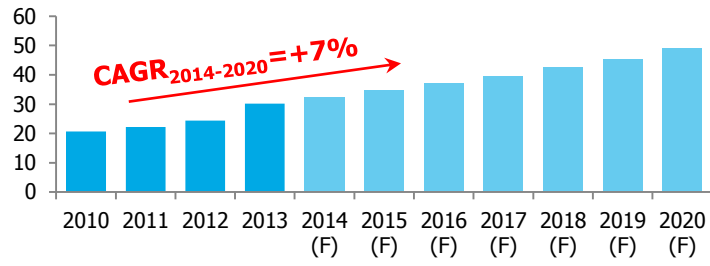
INVESTMENT OPPORTUNITIES

- Investment costs for the creation of facilities for X-ray equipment production are estimated at **30-50 mn USD**.
- Expected payback period of the project may amount to **6-7 years**.
- IRR** for the project may reach around **15%**.

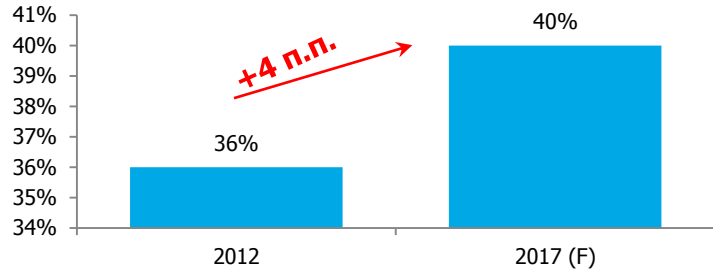
POTENTIAL INVESTORS



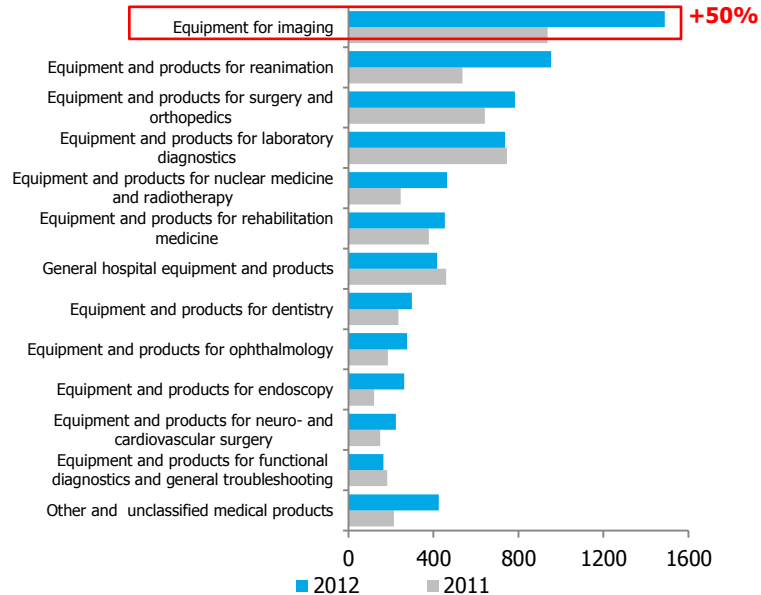
Forecast of global imaging market, bn USD



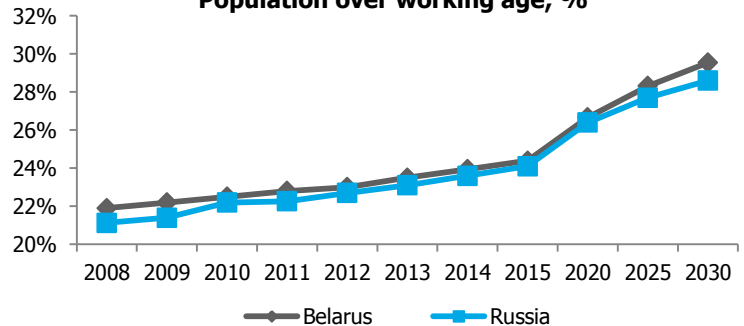
Developing countries' share on the imaging equipment market



Structure of medical products imports to Russia, mn USD



Population over working age, %



Commissioning of hospital organizations, thou beds

