



AUTO ELECTRONICS MANUFACTURING

PROJECT

There is provided a project on **launching production of auto electronics** (dashboard camera, on-board computer, gps-navigator, etc.).

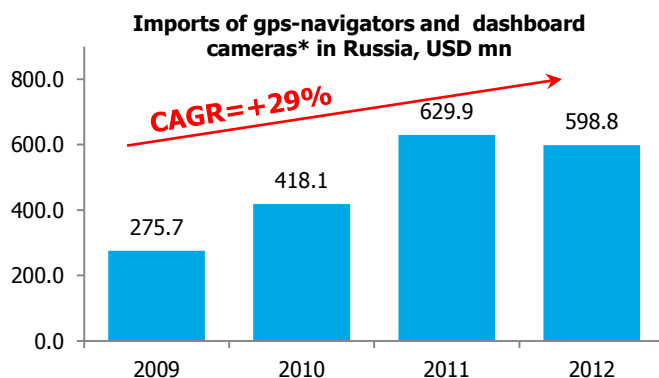
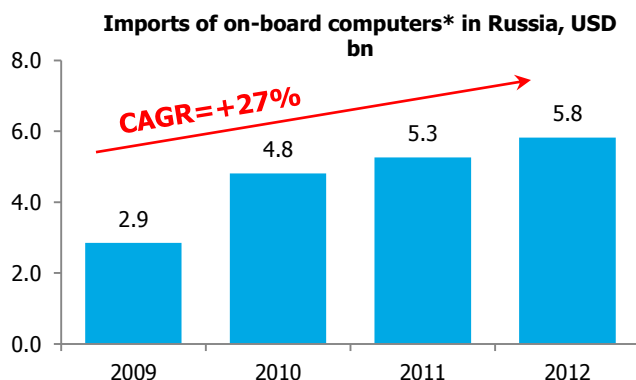
The project is promising due to the following reasons:

- The segment is expected to be top leading by profitability in the near 10 years.
- Imports of parts and components for motor vehicles in Russia in 2012 totaled more than **USD 10,8 bn** and grew by **57%** on average annually over 2009-2012.
- World auto electronics market is projected to reach **USD 18,5 bn** with annual average growth rate of about **3,1%**.
- Global auto parts market is projected to reach **USD 900 bn** by 2020 (in 2008 – app. **USD 675 bn**).
- Capital expenditures for the project are estimated at **USD 70-100 mn**, payback period is about **6-7 years**.

MARKETS

Customs Union market:

- In 2012 Russia imported parts and components for motor vehicles to the value of more than **USD 10,8 bn**, annual average growth rate of the imports over 2009-2012 totaled **57%**.
- Imports of on-board computers in Russia grew by **27%** a year on average over 2009-2012, and in 2012 the imports totaled **USD 5,3 bn**.
- Imports of gps-navigators in Russia grew by **47%** a year on average over 2009-2012, and in 2012 the imports totaled **USD 392,8 mn**.
- Imports of dashboard cameras in Russia grew by **11%** a year on average over 2009-2012, and in 2012 the imports totaled **USD 206 mn**.
- Russian car industry is characterized by developed car assembling, auto parts manufacturing (electronics in particular), in its turn, is still poorly developed segment of car industry in Russia.



* Import according to a wide commodity item, comprising indicated devices (customs tariff code 8471 – for on-board computers, 852691 – for gps-navigators, 852190 – for dashboard cameras).

MARKET OPPORTUNITIES

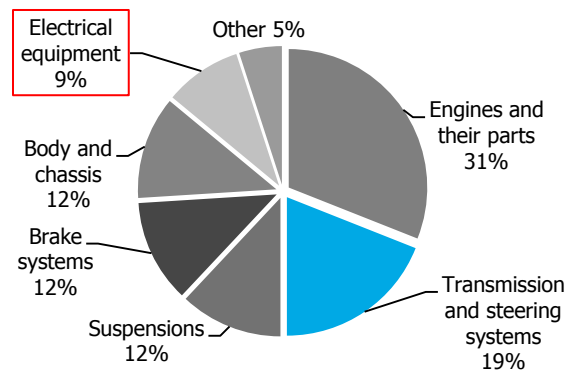
Global opportunities:

- According to Roland Berger, world auto parts market is projected to reach **USD 900 bn** by 2020 (in 2008 – USD 675 bn).
- Annual average growth rate of car manufacturing over 2011-2018 – **5,3%**, projected output in 2018 is **USD 106 mn**.
- Global auto electronics market is projected to reach **USD 18,5 bn** with annual average growth rate by 1% exceeding the one of world's GDP.
- App. **30%** of an automobile cost is formed by electronic components, and the figure is expected to further grow in the future.

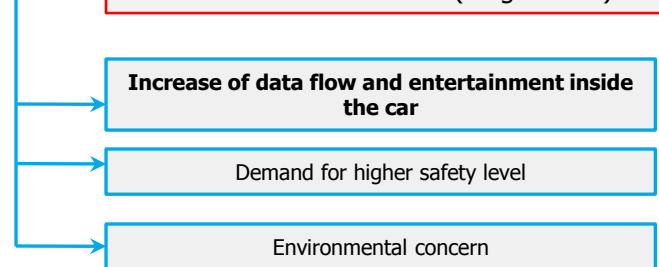
Local opportunities:

- In 2012 auto parts market in Russia reached **USD 41,8 bn**, annual average growth rate over 2009-2012 was **28%**. There has been a significant change in the market structure – in 2009 primary market accounted for 22%, in 2012 – **49%**.
- More than **2,8 mn cars**, out of which 73% – foreign brands assembled in Russia, are projected to be manufactured in 2016 in Russia.
- In spite of continuing growth, Russian car industry is underdeveloped, which is caused by the following factors:
 - Low competition and low product quality;
 - Underinvestment in advanced technologies;
 - Decrease in import duties and possibility to import auto parts at low tariff.

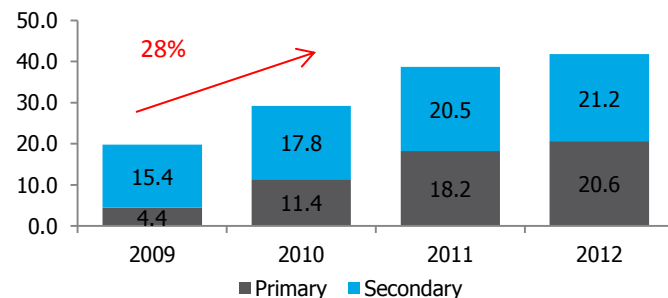
Global auto parts market structure



World car market drivers (megatrends)



Auto parts market in Russia, USD bn



INVESTMENT OPPORTUNITIES

- Capex for the project may total **USD 70-100 mn**.
- Payback period is about **6-7 years**.
- IRR varies between **13-15%**.

POTENTIAL INVESTORS

- Strategic investors** – companies with appropriate technologies and experience in electronics manufacturing in general or auto electronics in particular.
- Forward integration** – companies engaged in the industries – key auto parts and electronics consumers (automobile industry, auto parts distributors, retail, etc.).

Auto output in Russia, thou pieces

