Yaroslavl region - the area of the development of automotive components cluster
The history of automotive industry started nearly 100 years ago

1916 - Car plant was opened in Yaroslavl
1917 - the first truck Y-3 with load-lifting capacity of 3 tons was produced
1931 - the YAG10 truck with load-lifting capacity of 8 tons was produced. We started to supply new coating materials and varnishes to GAZ company
1932 - a bus YA-2 with capacity of 100 passengers was produced
1932 – Yaroslavl Tire Plant (YASHZ) was opened. The first Russian tire produced
1933 - the first local diesel engine was produced
1936 - the first trolleybus was built
1951-1958 – production focused on diesel engines
1977 - YZDA plant started to supply diesel equipment
1980 - production of combine harvesters YSC-170 started
1990 – YASHZ released the first metallic-cord tire
2006 - joint venture DuPont Russian Coatings was established
2011 – production of a new family of engines JAMZ – 530 is planned
Automotive industry in the Yaroslavl Region

Engines and components

«Autodiesel», Tytaev Motor Plant, YAZTA & YAZDA plants

Engines, gearboxes, fuel systems, pump elements, engine control systems

Tyres and mechanical rubber goods

Yaroslavl Tire Plant, Yaroslavl Plant RT

Tires, gaskets, sealing rings, cuffs, barrels, cases, caps
Enterprises of the region deliver their products to the major Russian and foreign car manufacturers:

- **Transmission, cables**
  - TIIR, Fritex, Markon,
  - RybinskAutoCable plants
  - Sealing, covers, brake pads, pump elements, cables

- **Car’s coatings**
  - DuPont Russian Coatings
  - Automotive and conveyor materials, lacquers, primary coatings, electrovection

- **Units**
  - Savell, Multitruck
  - Assemblies, bodies, tanks, wagons
Basics of automotive components cluster

Manufacturing
- Motor units, engines, chassis, cables, assemblies, coatings, tires, electronics, technical textiles...
- Creation of assembly plants, new foundry, SKD, industrial site of automotive cluster...

R&D
- Higher professional education, training, research activities...
- Creation of R&D infrastructure, industrial design, engineering and technology transfer, ...

Logistics
- Trans-regional industrial logistic system, provided by the railway, car, aviation and water infrastructure
- International transport hub, ...

Government of the Yaroslavl Region
# The development strategy of automotive components cluster

## Leading industries of the region

<table>
<thead>
<tr>
<th>Industry</th>
<th>Direction of development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical textiles</td>
<td>Production of passenger compartment items</td>
</tr>
<tr>
<td>Chemical industry</td>
<td>Production of high quality motor oil and car chemicals</td>
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<tr>
<td></td>
<td>Production of plastic items</td>
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<tr>
<td></td>
<td>Manufacturing of rubber products</td>
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<tr>
<td>Automotive industry</td>
<td>Expansion of OEM-coatings production</td>
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<tr>
<td>Power engineering industry</td>
<td>Placement of assembly plants, stamping</td>
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<tr>
<td>Radio electronics</td>
<td>Foundry</td>
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<tr>
<td></td>
<td>Production of engines, fuel systems and components</td>
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<tr>
<td></td>
<td>Production of electric and hybrid engines</td>
</tr>
<tr>
<td></td>
<td>Manufacturing of lighting equipment, electronic control units, etc.</td>
</tr>
</tbody>
</table>
Medium diesel engines YAMZ-530

The new family of inline engines YMZ-530 is being developed at Yaroslavl Motor Plant “Avtodiesel” jointly with the Austrian engineering company AVL List.

- The fundamentally new design using advanced technologies;
- Compliance with the requirements of "Euro-3 and Euro-4/5" combined with very low operating costs;
- powerful from 120 to 315 hp

The project goals:

- Maximum satisfaction of the GAZ Group enterprises needs in their own power units
- Expansion of the product line
- Strengthening the positions of "Avtodiesel" as a leading manufacturer of diesel engines in Russia and CIS
- Creating opportunities for entering the world market

Project indicators:

- The investment amount - 340 mln. USD
- Production capacity - up to 50 000 units/year
- Start of manufacturing - October 2011
## Prospects of YMZ-530 engines application

<table>
<thead>
<tr>
<th>New consumers Of YAMZ engines</th>
<th>Currently used engines</th>
<th>Engines since 2012</th>
</tr>
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<tr>
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<td>Cummins, MMZ, CAT, Deutz, V-shaped YAMZ Euro-3</td>
<td>YAMZ-534/536 Euro-4</td>
</tr>
<tr>
<td><img src="image1" alt="Bus" /></td>
<td>Cummins, MMZ Euro-3</td>
<td>YAMZ-534 Euro-4</td>
</tr>
<tr>
<td><img src="image2" alt="Truck" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td><img src="image3" alt="Excavator" /></td>
<td>Perkins, Deutz, MMZ Regulations 96-01</td>
<td>YAMZ-534/536 Euro-4</td>
</tr>
<tr>
<td><img src="image4" alt="Military Vehicle" /></td>
<td>Cummins</td>
<td>YAMZ-534</td>
</tr>
</tbody>
</table>

### New consumers Of YAMZ engines

- Perkins, Deutz, MMZ Regulations 96-01
- Cummins

### Currently used engines

- Cummins, MMZ, CAT, Deutz, V-shaped YAMZ Euro-3
- Cummins, MMZ Euro-3
- Perkins, Deutz, MMZ Regulations 96-01
- Cummins

### Engines since 2012

- YAMZ-534/536 Euro-4
- YAMZ-534 Euro-4
- YAMZ-534/536 Euro-4
- YAMZ-534
Comau (Italy) – a partner in technological engineering

AVL List (Austria) – a partner in design and testing of engines
The project started in 2009 with the investment agreement. In September 2010 fully equipped plant proceeded to business.
Cluster projects:
I.L.M. Foundry

- **Industrial site** - Greenfield in Tytaev, supplied with all necessary communications
- Project is developed by «Krapohl – Wirth Foundry Consulting» (KW).
- Equipped by modern facilities of leading world manufacturers (ABP, Kunkel Wagner, Loramendi, etc.)
- Gradual increase of production capacity

1-st molding line - 30 thousand tons of high quality casting, (the same line with additional features can increase output of casting up to 60 tons).
2-nd phase - 60 - 120 thousand tons is planned and will require the installation of the second line. The expansion of the plant area up to 100 000 m² is planned.

**Proposal to investors:**
- Rate for a technological electricity connection = free
- Tariff for electricity– 2,6 rub. per kWh
- Tax benefits
- Available workforce
- Education Development Center of competence
Factors to select the region

**Hard factors**
- Geographical location and natural resources
- R&D base
- Workforce
- Infrastructure opportunities
- Size of the accessible B2C market
- Size of the accessible B2B market

**Soft factors**
- Regional government commitment to FDI
- Managing expectations
- Successful experience in implementation of FDI projects
- Administration process
- Legal environment
- Financial and tax incentives

**Investor expectations vs. regional observations**

Government of the Yaroslavl Region
The central position of the region between the main centers of automotive industry.
Advantages of the Yaroslavl region

- Regular rail communication with Moscow (4-hours travel time), St. Petersburg, Samara. Routes to the Urals and the Far East.

- It is planned to launch “Sapsan” train in nearest time (travel time 1.5 h).

- Car journey to Moscow (260 km) - 3 hours, to Nizhny Novgorod (600 km) - 7 hours, to Kirov (360 km) - 4 hours, to Vologda (180 km) - 2 h.

- Distance to Sheremetyevo airport 300 km – 4 h.

- It is planned to build a new road from Sergiev Posad to Rostov - travel time to the Moscow Ring Road will be no more than 2 h.
Industrial sites of the region

1. Industrial site «Tytaev» (34.5 ha)
2. Industrial site «Novoselki» (450 ha)
3. Industrial site «Rostovskaya» (up to 250 ha + 150 ha)
4. Industrial site «Glebovskoe» (113 ha)
5. Technological park «Gavrilov-Yam» (100 sq.m., 12 ha)
Industrial site «Novoselki», Yaroslavl

- **Located on the border of Yaroslavl city**
- **Near the road «Yaroslavl - Kostroma»**
- **3 km to the federal road M-8 «Moscow-Arkhangelsk»**
- **7 km to the main railway, 2 km to the terminal endpoint of the railway, 8 km to the railway station**
- **16 km to the airport «Tunoshna»**

**Greenfield**

- **Area** - more than 450 hectares with prospects for expansion
- **The possibility of choice**
- **Gas, water, sewage systems, electricity supply, available infrastructure**
- **Potential producers can be located next to existing residents (Komatsu, Astron Buildings, Nycomed, Baltic)**
- **The possibility to locate production in a sanitary zone from 50 to 300 meters**
- **Support of infrastructure development for new investors**

- **Located on the border of Yaroslavl city**
- **Near the road «Yaroslavl - Kostroma»**
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- **16 km to the airport «Tunoshna»**
The total area to lease will be 84 500 sq.m.

**Infrastructure**
- **Electric power supply**: available capacity up to 8.3 MW
- **Water supply**: available capacity up to 16 m³/hour.
- **Heat supply**: available capacity up to 100 Gkal.
- **Gas supply**: available capacity up to 10 million m³/year
- **Existing railway** platform with cranes.
Industrial site «Rostovskaya»

**Location:** northern part of Rostov

**Area:** 200 ha

**Type of permitted use:** for the placement of industrial enterprises up to I class of hazard.

**Current residents:** CJSC «MD-RUS» (Velux), «R-Farm»

**Specialization:** Pharmaceuticals, wood processing.
Industrial site «Rybinskaya»

**Location:** eastern part of the Rybinsk Area: 160 ha  
**Type of permitted use:** for the placement of industrial enterprises V - III class of hazard.  
**Current residents:** «General Electric», «VimpelCom»  
**Specialization:** energy-machine producing, Hi-Tech industry.
It’s easy to Build

- roads
- accessible infrastructure
- power network
- availability of modern industries, materials

The Yaroslavl Region advantages

Positive experience

The first European-quality plant in Russia by Lindab-ASTRON

Komatsu plant in Yaroslavl is designed and built by ASTRON Buildings, (Industrial Site “Novoselki”)

Astron buildings plant, 14 000 sq.m.

Komatsu plant, 50 000 sq.m.
The training system for specialists

Leading State universities, producing specialists of engineering qualification:
- Yaroslavl Technical University
- Aviation Technological Academy
- Yaroslavl State University
- etc.

Spheres of professional education:
- Automotive Technology
- Metallurgy
- Automatic control and Management
- Engines designing and building
- Engineers of electrical power systems
- Electrical, radio engineering
- Chemical engineering

- 58 000 students
- 38 institutions of higher education
- 61 institutions of higher and secondary professional education
Advantages of the Yaroslavl region

Regional government support offered to investors

**Forms of regional government support**

**Tax benefits**

- Period: 7 years with the possibility to extend up to 9 years
- Full property tax exemption (rate – 0%)
- Reduced income tax rate by 4,5 % (up 15,5 %)
- Full vehicle tax exemption (rate – 0%)
- Tax benefits for a land tax
- Possibility of getting subsidies from the budget to compensate the costs of infrastructure, as part of an investment agreement

**Support and maintenance of projects**

- Selection of sites for investors;
- Support of infrastructure issues;
- Participation in negotiations with the infrastructure companies, federal and local authorities;
- Fast gaining of necessary approvals and permits;
- Assistance in registering of a local company of the investor;
- Assistance in staff training.
Thank You for your attention

Welcome to Yaroslavl region

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