Vojvodina Investment Promotion – VIP

Industry sectors in Vojvodina and suggestions for B2B event
- 4 Motors for Europe Mission in Novi Sad
**AGribusiness Sector (Including Renewable Energy)**

One of the priority sectors for further development of Vojvodina economy is Agribusiness sector, which consists of Primary agriculture and Food & Beverage industry. Traditionally, agriculture in Vojvodina has always been a significant part of the local economy and a generator of good results due to the abundance of fertile agricultural land that make up 84% of its territory (1,78 million hectares) providing favorable resource base.

This sector is characterized by excellent raw material base, suitable production capacity and a significant level of domestic and foreign demand.

Domestic companies in Food industry are active in following subsectors:

- **Processing of cereals and flour** - production and cultivation of grains is one of the most dominants agricultural subsectors in Europe and in Vojvodina, where it has a long tradition. In 2011, areas under grains in Vojvodina covered almost 1 million hectares, from which 73% was corn and 24% wheat. Cereal production in Vojvodina makes 62% of the total cereal production in Serbia.

- **Fruit and vegetable processing** – fruits: mostly apple (significant export to Russia), in the last years also plums, peach and cherries. Vegetables: potato, onion, peppers, tomato and carrots.

- **Meat processing** – although husbandry is in continuing decrease for years, meat production does show positive trends. Apart from smaller farmers, there are also large trading companies, who have their own food production, pig and cow production and sales.

- **Dairy industry** – 67% of the market is covered by big dairy producers, although they make only 10% of all dairy producers (200 dairy farms), which makes the market dominantly defined by big players.

- **Industrial plants production** – soya, sunflower and sugar beet, shows changes in demand – higher demand for soya (in Serbia it is prohibited to grow or import GMO products, so our conventional and organic soya has high demand on international market) and for sugar beet. Soy production in Vojvodina is actually total production in Serbia, but also covers the most of soya production in the region. Sugar became the most significant industrial plant for export.

- **Production of Confectionery products**
- **Beer and malt production**
- **Production of wine and distillates**
- **Production of animal feed**
Agriculture production makes 40% of total industrial production and 30% of total export from Vojvodina. Top export countries for Food industry of Vojvodina are Romania, Hungary, Italy, Slovenia, Bulgaria, Greece, Germany, Austria, Belgium and Netherlands.

**EXPORT FROM VOJVODINA**

![Chart showing export from Vojvodina]

**TOP EXPORT PRODUCTS IN 2012**

<table>
<thead>
<tr>
<th>Product</th>
<th>In million USD</th>
<th>% in agro products export</th>
<th>% in total export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn, yellow</td>
<td>369.06</td>
<td>31.06</td>
<td>10.19</td>
</tr>
<tr>
<td>White sugar</td>
<td>103.74</td>
<td>9.47</td>
<td>3.11</td>
</tr>
<tr>
<td>Edible sunflower oil</td>
<td>70.10</td>
<td>6.05</td>
<td>1.99</td>
</tr>
<tr>
<td>Raw soy oil</td>
<td>44.06</td>
<td>3.80</td>
<td>1.25</td>
</tr>
<tr>
<td>Beer, out of malt, in bottles</td>
<td>41.23</td>
<td>3.55</td>
<td>1.17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Export Countries</th>
<th>Million USD</th>
<th>% in total export</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>652.87</td>
<td>57.1</td>
</tr>
<tr>
<td>CEFTA</td>
<td>411.92</td>
<td>36.4</td>
</tr>
<tr>
<td>Russia</td>
<td>37.35</td>
<td>3.3</td>
</tr>
<tr>
<td>Other</td>
<td>12.7</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Total export</strong></td>
<td><strong>1,140.22</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Source: PKV, 2012*

Products exported from Vojvodina are mostly raw materials (primary agricultural products) and not products with higher added value, which need to be changed in the future.

Vojvodina Investment Promotion – VIP is promoting this sector in order to attract further foreign companies to invest in Vojvodina and to start production of higher added value products.

**Possibilities for cooperation between companies in Vojvodina and companies from 4 motor regions are the following:** development of trade relations with successful domestic companies; strategic partnership or purchase of domestic companies (active or in bankruptcy), who need new technology, fresh capital and knowhow for further development; cooperation in organic agricultural production; cooperation in renewable energy sector (biomass & biogas)
1. **Trade relations with active and successful domestic companies**, who are already trading with the EU, with different kind of food products, from the sub sectors listed below.

   *Domestic companies who will be invited to B2B, as potential trade partners:*

   - Processing of cereals and flour (Institute of Fields and Vegetable Crops, Žitko, Bačka Topola; Kikindski mlin, Danubius, Repro Trade)
   - Fruit and vegetable processing (Zdravo Organic; Sojaprotein; Aleva, Vitamin Horgoš, Medoproduct, ABC Food)
   - Meat processing (Carnex, Vrbas, Neoplanta, Novi Sad, Big Bull and others)
   - Dairy industry (Subotičkamlekar, Subotica)
   - Production of Confectionery products (Banini, Kikinda and Jaffa, Crvenka)
   - Oil production (Dijamant AD, Zrenjanin)

2. **Strategic partnership with domestic companies (active or in bankruptcy procedure)** who are searching for either partners in modernization of technology, joint venture partners or potential buyers of the whole company, who will use their capacities, their experienced labor force and resources to enter the market of Serbia and CEFTA market, or to produce high quality products with low operating costs for the EU market and to expand on Russian market.

   *Companies for B2B:*

   - Vrsac Vineyards – the largest vineyard in Serbia and one of the largest in SEE with 1,200ha of vineyards. The company is in restructuring and currently state owned, searching for a buyer. Tender for sales will be organized when there is serious interest from potential buyers.
   - Natura Coop and Zitohem – two domestic privately owned companies, active in fresh and frozen fruit & vegetables business, searching for strategic partners who will invest in modernization
   - MentaPadej – producer of medicine, seasonal and aromatic plants, also searching for strategic partner.

3. **Organic agricultural production for EU market**

   This sector has already been defined as highly potential sector for cooperation with companies from EU – agricultural producers in Vojvodina can produce organic products and supply EU market, due to the very good land quality in Vojvodina and very low level of pesticide use, which allows easy conversion of land into organic land. Our agricultural producers have potential to supply EU market with organic soybeans (non GMO!), organic wheat and maize.
German GIZ is making great efforts in promoting this sector in Serbia by helping domestic land owners to start organic production and by bringing buyers of organic soybeans, corn, wheat and other crops in Vojvodina and initiating cooperation with agricultural producers. VIP has organized last year, together with GIZ, the conference “Export possibilities of organic soybeans and other crops to Germany”, where we had two German companies – buyers for organic crops from Serbia and 150 agricultural producers, interested for this kind of cooperation.


Companies for B2B: companies/members of the Association “Serbia Organica”.

4. **Renewable Energy – Biomass & Biogas** – considering very high share of agriculture production in Vojvodina and based on its residues, there is a great potential for usage of biomass in energy production for European customers.

Vojvodina is a region with significant natural potential in the field of renewable energy sources and with a stable and growing economy. Moreover, national energy policy calls for increased use of renewable resources in order to meet rising electricity needs.

The most common plant remains in Vojvodina are from agricultural production. In more recent time, more and more oil crops are being produced in order to obtain a liquid biomass to be used as fuel. Vojvodina's plan of energy balance predicted proportion of biomass, primarily crop residues, from 35,000 TJ of heat and 360 GWh of electricity per year.

Out of 1,790,000 hectares of agricultural land in Vojvodina, 1,580,000 hectares represent arable land. The most important crops whose remains can be used for energy use are: corn, stubble, soybeans, rapeseed and sunflower. In addition, significant potential are also remains of pruning of fruit growing and viticulture.

Corn cobs are of greatest energy potential of crop residues production in Vojvodina, especially those found on the small and medium-sized farms. After corn cobs come wheat and soybean straw, according to energy potential significance.

The following quantities of biomass are available for energy production purpose:

- crop residues: approx. 1.7 m t
- pruning of fruit growing and viticulture: 325,000 t
- Residues from forestry and fast-growing trees: 50,000 t
- Processing residues, out of dring facilities, seed centers, fruit processing, etc.: example sunflower husk 54,000 t
Potential production of biogas on pig and cattle farms Vojvodina is about $9.5 \times 10^3$ m³/a. The total possible amount of produced electricity, out of pig and cattle farms is about 20 GWh per year, and heat energy about 8 GWh. In addition to liquid manure as a feedstock for biogas production, other waste organic matter from farms are being used as raw material for biogas production (slaughterhouse waste, waste from processing of poultry meat or fish), and also the raw material of plant origin, silage grass and corn.

<table>
<thead>
<tr>
<th>BIOMASS</th>
<th>CLOSE FUTURE, GWh/a</th>
<th>BY YEAR 2020, GWh/a</th>
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<tbody>
<tr>
<td></td>
<td>ELECTRICAL ENERGY</td>
<td>HEAT ENERGY</td>
</tr>
<tr>
<td>RESIDUES OF CROP PRODUCTION</td>
<td>128</td>
<td>300</td>
</tr>
<tr>
<td>RESIDUES OF FRUIT GROWING AND VITICULTURE</td>
<td>39</td>
<td>100</td>
</tr>
<tr>
<td>RESIDUES FROM FORESTRY AND FAST-GROWING TREES</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>RESIDUES OF PROCESSING INDUSTRY</td>
<td>36</td>
<td>85</td>
</tr>
<tr>
<td>LIQUID BIOMASS</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BIOGAS</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>229</strong></td>
<td><strong>510</strong></td>
</tr>
</tbody>
</table>

**Partners for B2B:** local municipalities, association of primary agricultural producers “Vojvodina Agrar” as potential suppliers of biomass; BPI - Czech company producer of agro pellets, Victoriaoil – biomass boiler using sunflower hull 15t/h; Sojaprotein biomass boiler using soy straws – 15t/h; Panonska Thermoelectric-Heating plant on biomass....
METAL PROCESSING INDUSTRY

VIP is working together with metal processing and machine engineering companies on realization of their investment projects in Vojvodina. We also support domestic companies from both sectors in terms of finding suitable JV partners, foreign clients or matching them with existing investors who are searching suppliers.

Vojvodina has a long tradition in the metal industry with various subsectors and with suitable employee labor pool. This industry was first developed as supporting sector for agriculture, by production of agricultural mechanization.

Today, key elements that make the companies in Serbia competitive are competitive and qualified labor force and free trade agreements with a number of countries in the region and worldwide.

Industry in Vojvodina consists mainly of smaller metal processing companies involved in components manufacture, and to a lesser degree of OEM’s with their own brand name products. Major companies with a larger pool of employees are foreign owned, investments of major international companies such as Siemens, Cimos, Le Belier, Albonplc, StreitGroupe.

Companies from Vojvodina are mainly exporters and supply clients from West European countries, with especially long tradition in supplying German customers.

The major strengths are:

- Qualified human resources
- High quality and world-wide respected research and educational institutions for electrical and mechanical engineering within the University of Novi Sad offer support for foreign companies in this sectors and specific programs, based on their needs
- Numerous advantages of Free Trade Agreements with Russia, Turkey, EU, CEFTA and EFTA countries, Belarus and Kazakhstan, USA preferential agreement

Companies for B2B (who are already supplying European customers):

1. **KM Mont** - Company for production of metal constructions

KM Mont d.o.o. Company is based on manufacturing of metal constructions of black metal and INOX of top quality. The range of activities encompasses manufacturing of parts of constructions for machinery used in food industry, petrochemical industry, aero industry, pharmaceutical industry, car industry etc. In other words, all industries that have need for metal constructions of considerable dimensions and high quality. The basic activities of the company are: welding, lock smiting, piping, and installing, in the area of black and INOX metallurgy and processing industry.

Almost 100% of their production is going for exports.

Termometal doo today is a modern company whose main activities comprise two parallel production programs:

- Serial production of agricultural fitting machines and spare parts for agricultural machines
- Manufacture of separate and small-series metal parts, components and subassemblies for the needs of various industries in accordance with the requirements and documentation of the customer

Besides production, they also provide services of mechanical and heat processing of metals with the state-of-the-art technological procedures. Machine fleet consists of CNC machines for grinding, turning, cutting, plasma and carbonitriding, plasma cutting, machines for bending, welding and heat treatment, for quality control etc. Reference – INA Schaeffler KG and Tischer Technik Vertriebs from Germany, CD Technologie Italy, Tentec England etc.

3. **UNIMET** – CNC turned and machined parts, sheet metal parts, assembling and testing

Their highly productive CNC machines are capable of executing complex and precise demands. The machines are of renowned Japanese, American and European brands - 50 CNC machines at disposal, as well as measuring equipment.

The main products that Unimet manufactures today are flow-control instruments (positioners and switchboxes), valves, construction lasers, sub-assemblies for pick and place machines for the electronics industry, beverage packaging machines and parts for pneumatic power tools. Recently they have started a production of parts for aerospace industry. The end users are companies in oil, chemical, food and beverage and the pharmaceuticals industries.

Their clients are Pratt & Whitney Canada, Canada; Moog Industrial Group, Luxembourg; Telsonic Ultrasonics, Switzerland; Knorr-Bremse R.S., United Kingdom; Trox Gmbh, Germany; Bocom Gmbh, Germany; VMI Pétrins et Mélangeurs, France; Savio Macchine Tessili S.p.A., Italy

4. **MARS GROUP**, Novi Sad - sub assembly and mechanical machining like: turning, milling, punching, bending, cutting and casting.

The company was founded in 1989 in Novi Sad and it is a production company with a head office in Stockholm, Sweden, but production factory in Novi Sad with 100 employees.

The company owns following machines:

- CNC milling machines
- CNC lathes
- CNC grinding machines
- Casting
- CNC punching, bending and laser cutting machines etc.
VOJVODINA ICT SECTOR

Software development is the main source of revenue in the high-tech sector, with embedded software, ERP solutions, Java applications and software for mobile devices leading the way. Automation and control are strong sectors as well, especially in view of a strong processing industry in Vojvodina, based on its agricultural potential. Mechatronics is an emerging sector closely linked to processing technology.

Companies in ICT sector in Serbia and Vojvodina are mostly involved in software outsourcing based on inquiries from international clients or development of their own software products for domestic as well as international markets.

FTN (Faculty of Technical Sciences) is the largest technical faculty in the country and very internationally recognized. As a supporting institution for ICT industry in Vojvodina, FTN offers studies specialized in fields such as Computing and Control Engineering, Power, Electronic and Telecommunication Engineering, Energy and Process Engineering, Industrial Engineering and Engineering Management, Graphic Engineering and Design.

We are proud that some of the biggest players in the industry decided to set up in Vojvodina and Serbia, such as Microsoft, Siemens, Bosch, Alcatel, Cisco, Ericsson, Muehlbauer, LEVI9, Hintech and they are successfully operating in Serbia. There are also domestic companies such as Telvent DMS (850 people), leader in power grid control software or RT-RK, embedded software developer which has its solutions incorporated in almost every TV set on the planet.

Electronics production is one of the sectors with biggest potential in Serbia, and more and more investors decide that it makes more sense to produce in Serbia, closer to their markets, than outsource everything to China. Currently, there are producers of PCBs (up to 24 layers), LED TV assembly lines, PIC development tools and boards, display boards, audio & voice boards, power supply boards, cable harnesses, POS terminals, handheld terminals, etc. We also have some companies involved in electronic and chip design and verification such as Frobas from Germany.

For more info, please check the latest brochure about this sector in Serbia “ICT at a glance in Serbia” at the VIP website: http://www.vip.org.rs/files/ICT%20in%20Serbia%20at%20Glance.pdf

Companies for B2B:

VOJVODINA ICT CLUSTER - http://vojvodinaictcluster.org/
Vojvodina ICT Cluster gathers about 30 companies from this sector with the total workforce of 1,500 experienced IT professionals and turnover in 2011 of EUR 60 million. These companies will be invited for B2B event.