

# Made in Slovenia

## Automotive Industry

Electrical & Electronics

Machining & Metalworking



Ihk Nürnberg für Mittelfranken

März, 2018

Issued by Katja Stadler

Sources:

<http://www.stat.si/StatWeb/en>

<https://www.investslovenia.org/>

<http://www.umar.gov.si/en/>

## Why Slovenia?

Most foreign investors are attracted by Slovenia's **strategic position** at the heart of Europe, its excellent transport and ITC **infrastructure**, its value chains, industry clusters and centres of excellence. Investors keen on locating their operations at the heart of the **market with 500 million consumers** will find Slovenia's international commercial contacts and the **land-sea-air transport system** ideal.

A **corporate culture** of **transparency** and **accountability**, observance of international technical standards, personal integrity and company loyalty make a foreign manager's job easy ever since the first big international companies established their operations in Slovenia. Investor confidence thrives on legal and institutional reforms designed to facilitate investment. Starting a company is straightforward and easy through **single-access points** to register a limited liability company, obtain a construction permit and carry out any other administrative procedures.

Slovenia as a potential host country has balanced class forces, class-based economic disputes are rare and wages are very reasonable for the level of **education** and **skills** of the **local workforce**.

## Main Economic Indicators

Indicators	2012	2013	2014	2015	2016 forecast	2017 forecast	2018 forecast
GDP (real growth rates, in %)	-2.7	-1.1	3.0	2.9	1.7	2.4	2.3
GDP in EUR million	35,988	35,907	37,303	38,543	39,598	40,613	41,880
GDP per capita (PPS)*	21,500	21,500	22,600	-	-	-	-
GDP per capita, in EUR	17,498	17,435	18,093	18,680	19,179	19,670	20,283
Trade balance, as % of GDP	2.6	5.6	7.0	7.3	7.5	6.8	6.3
Gross external debt in EUR million	42,872	41,658	46,314	44,723	44,541	-	-
Gross external debt, as % of GDP	119.1	116.0	124.2	116.0	-	-	-
Standardised rate of unemployment (ILO)	8.9	10.1	9.7	9.0	8.6	8.1	7.5
Labour productivity (% of GDP per employee)	-1.8	0.3	2.5	1.4	0.8	1.5	1.7
Inflation, year average	2.6	1.8	0.2	-0.5	-0.3	1.3	1.3
Average exchange rate USD/EUR	1.286	1.328	1.329	1.110	1.111	1.114	1.114

\* P\* PPS - Purchasing Power Standard

Source: Institute of Macroeconomic Analysis and Development, 2016

Following the setback during the crisis, Slovenia has been making progress in terms of economic development and the welfare of its population in recent years; it has also reduced pressures on the environment. Since 2014 the economic picture has been improving, and Slovenia is again catching up with economically more advanced countries. The recovery has led to an overall improvement in the material situation of the population, while quality of life is also being favourable affected by the relatively good access to a large part of public services. Despite the rising economic activity, the movements of key environmental indicators have remained favourable in the last few years.

However, owing to the significant fall in GDP during the crisis, Slovenia still lags significantly more behind the EU average than before the crisis in terms of economic development and the living standard of its population.

Source:Umar

### GDP and prices

	2018	2019
<b>Gross domestic product</b> (growth in %)	5.1	3.8
<b>Gross domestic product</b> (in EUR mrd)	46.6	49.7
<b>Gross domestic product per capita</b> (in EUR)	22,563	24,035
<b>Inflation</b> (annual average, in %)    1.5      1.9		

### Labour market

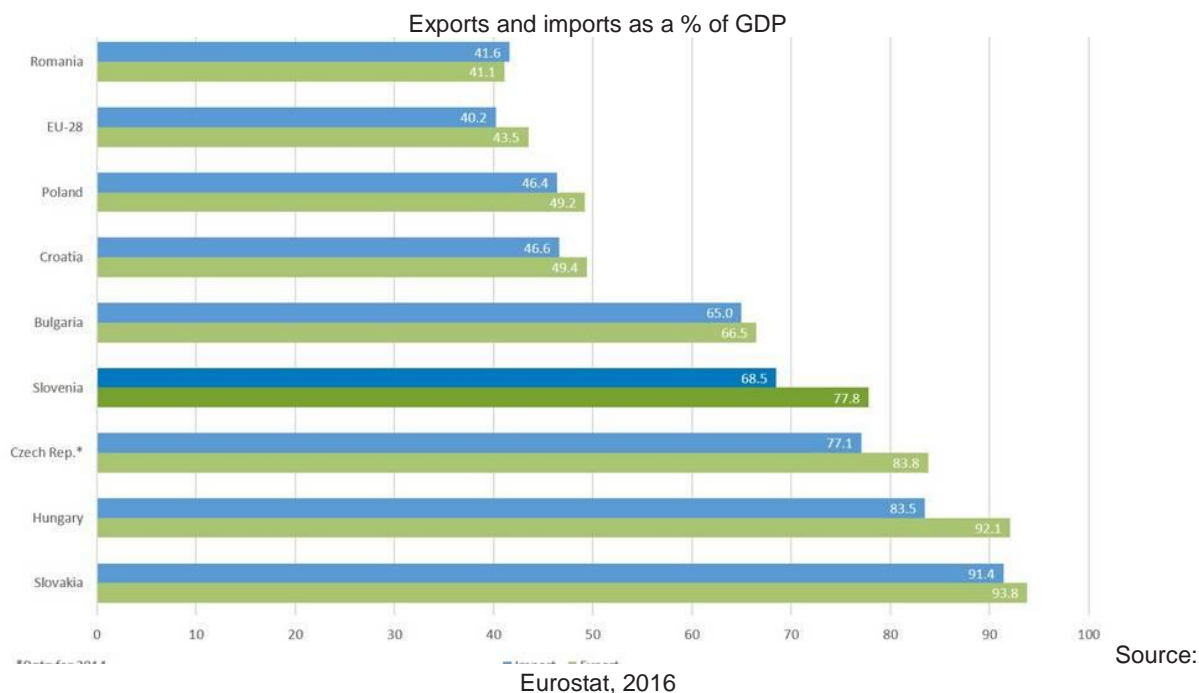
	2018	2019
<b>Employment</b> (growth in %)	2.4	1.5
<b>Registered unemployed</b> (number in 1.000)	75.6	68.8
<b>Registered unemployment</b> (rate in %)	8.0	7.2
<b>Earnings per employee</b> (growth in %)		

	2018	2019
<b>External trade</b>		
<b>Exports</b> (real growth in %)	9.2	7.5
<b>Imports</b> (real growth in %)	9.3	8.1
<b>Current account of the balance of payments</b> (in EUR mrd)	3.2	3.4
<b>Current account of the balance of payments</b> (as a % of BDP)	6.9	6.8

Slovenia's economy is **highly dependent** on international trade. The ratio of merchandise trade (imports and exports) to GDP is one of the highest in the region. External trade equals nearly **150% of GDP** (exports and imports combined).

Slovenia is the 62nd largest export economy in the world and the 11th most complex economy according to the Economic Complexity Index (ECI). In 2015, Slovenia exported \$27.4B and imported \$27B, resulting in a positive trade balance of \$392M. In 2015 the GDP of Slovenia was \$42.8B and its GDP per capita was \$32k.

## Exports and imports as a % of GDP, 2015



Source: Eurostat, 2016

In the early 1990s Slovenia, faced with the loss of Yugoslav markets and the breakdown of transport and communications to south-eastern Europe, **reoriented trade towards the EU** and associated countries; these now account for over **three-quarter** of Slovenia's trade. Pre-transition trade links have not disappeared, however; by 2000, the decline of trade with countries of the former Yugoslavia and Russia had been halted.

## External trade in 2017 the largest in recent years

Slovenia's exports in 2017 amounted to EUR 28.2 billion (a 13.1% increase over 2016) and imports to EUR 27.5 billion (a 14.2% increase over 2016).

The top export destinations of Slovenia are Germany (\$5.70B), Italy (\$3.24B), Croatia (\$2.24B), Austria (\$2.17B) and France (\$1.57B). The top import origins are Germany (\$5,23B), Italy (\$4,32B), Austria (\$2.95B), France (1,17B) Hungary (\$ 1,07B) and China (\$0,91B)

## Main Slovene trading partners, 2017

Markets	Export / EUR Million	Import / EUR Million
Germany	5706206	5236365
Italy	3243617	4321384
Croatia	2249109	1509074
Austria	2170824	2950036
France	1570140	1173660
Poland	868622	804048
Russian Federation	838819	294106
Hungary	747389	1072435
Bosnia and Herzegovina	732766	517574
Tschech Republik	684714	724401
USA	559579	380669
Spain	554677	503374
UK	538538	382990
Netherlands	528896	913552
China	320286	854913

Source: Statistical Office of the Republic of Slovenia; 2018

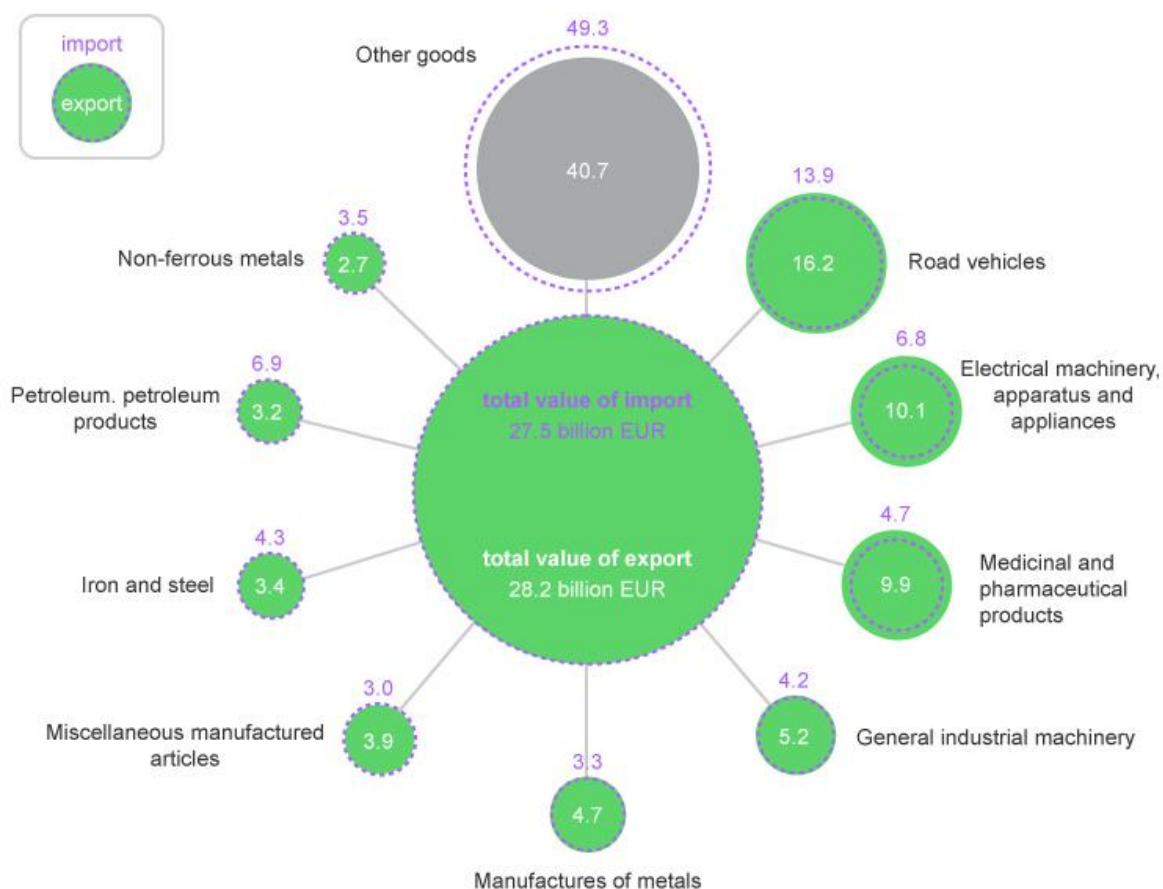
The top exports of Slovenia are Cars (\$2.38B), Packaged Medicaments (\$2.23B), Vehicle Parts (\$905M), Refined Petroleum (\$758M) and Electricity (\$561M), using the 1992 revision of the HS (Harmonized System) classification. Its top imports are Refined Petroleum (\$1.69B), Cars (\$1.55B), Packaged Medicaments (\$902M), Vehicle Parts (\$776M) and Electricity (\$402M).

## MAIN TRADING PRODUCTS, 2014

Exports of groups of goods	as % of total	Imports of groups of goods	as % of total
Road vehicles	12.8	Road vehicles	11.2
Medical & pharmaceutical products	10.3	Petroleum, petroleum products and related materials	10.1
Electrical machinery, apparatus & appliances	9.8	Electrical machinery, apparatus & appliances	6.0
General industrial machinery	5.5	General industrial machinery	4.3
Manufactures of metals	4.8	Medical & pharmaceutical products	4.3
Petroleum and petroleum products	3.9	Iron & steel	4.1
Miscellaneous manufactured articles	3.6	Non-ferrous metals	3.4
Iron & steel	3.5	Manufactures of metals	3.3
Power-generating machinery and equipment	2.8	Miscellaneous manufactured articles	3.0
Non-ferrous metals	2.7	Plastics in primary forms	2.9

Source: Statistical office of the Republic of Slovenia, 2015

## Structure of imports and exports, 2017



Source: SURS

© SURS

## Foreign direct investment in Slovenia

Slovenia is focusing its efforts on building a strong **business-friendly environment** as a precondition to capturing growth-fuelling FDI investments. Foreign direct investment is equally important to Slovenia's economic growth as it is for global GDP and jobs worldwide.

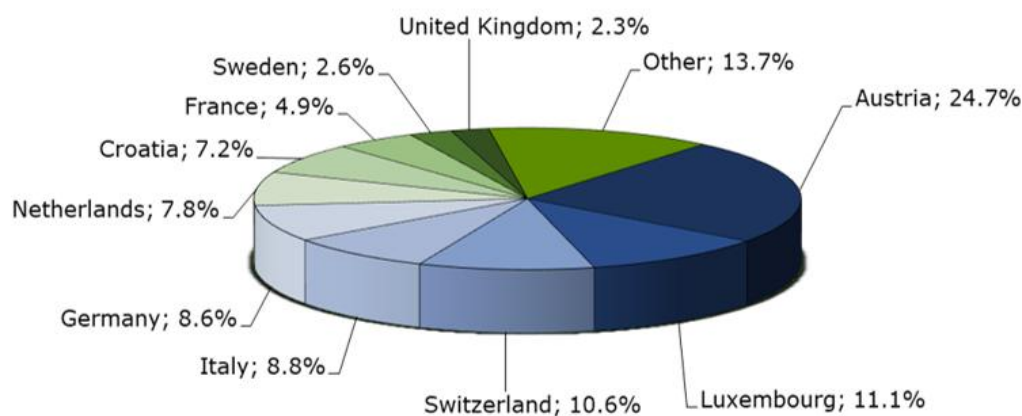
Facts and figures, investor stories and experiences over the past decades can help potential investors to benchmark the qualities of the country and its people to land investment project in Slovenia.

## Major foreign investors in Slovenia

<b>Manufacturing</b>	Aviat Networks, Belimed, BSH Bosch und Siemens Hausgeräte, Brigl&Bergmeister, Carthago, Danfoss, E.G.O. Elektro Geräte, Ecolab, Geberit, GKN Italia, Goodyear Dunlop Tires Europe, Grammer Automotive, Gruppo Bonazzi, Hella, Henkel, Johnson Controls, Knauf Insulation, Lafarge Perlmooser, Meyr Melnhof, Odelo, Palfinger, Poclain Hydraulic, Renault, Safilo Group, Sandoz Group, Siemens, Sogefi, Solvay, Styria, Sun Roller, Unicut, Vogtronics, XAL, Wolford, Yaskawa
<b>Financial services</b>	Hypo-Alpe-Adria Bank, KBC, Raiffeisen Bank, Intesa SanPaolo, Société Générale, UniCredit Bank
<b>Retail</b>	Aldi Süd, E. Leclerc, Eurospin Italia, Harvey Norman, Lidl, MOL, ÖMV, Rutar, Spar
<b>Other services</b>	AC Nielsen, Debitel, Deloitte, DHL, Ernst & Young, GfK, Grieshaber Logistik, KPMG, IBM, ISS Servissystem, McDonald's, Microsoft, Mobilkom, Oracle, PricewaterhouseCoopers, SAP, Schenker, Sodexo Alliance, S&T

## Main investing countries into Slovenia

FDI stock as of year-end 2016 EUR 12,950 million



Source: Bank of Slovenia 2017

Source: Bank of Slovenia, 2017

## Automotive

### KEY FIGURES 2016

**Number of companies:** 278

**Number of employees:** 14,207

**Revenues (in €):** 3.3 billion

**Exports (in €):** 2.9 billion

**Key export markets:** Austria, Croatia, Hungary, France, Germany, Italy, Mexico, Romania, Spain, Turkey, UK, USA

*Source: AJ PES, 2017*

Key products:

- Seats and seat components
- Components and materials for interior furnishing
- Car body parts
- Components for braking systems
- Mechanical and electric/electronic components for engines
- Exterior equipment and body lighting equipment
- Exhaust systems
- Engine and gearbox components
- Steering system components
- Drive components
- Other systems and components
- Manufacturing spot welding equipment
- Tooling for automotive industry
- Research, testing and other development activities

### Quality workforce

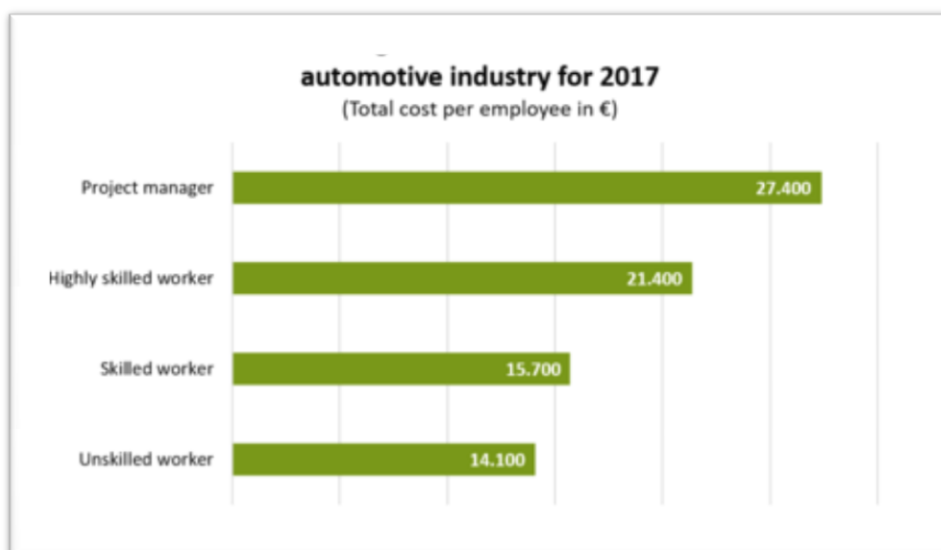
---

Carmakers remain in confident mood despite an uneasy economic backdrop and continue to display technologically advanced and boldly designed vehicles at the leading motor shows around the world. Cars equipped to download data about the traffic, the weather and the driver's preferences should make the time spent behind the wheel less stressful and boost consumer confidence shaken by the public debt crisis and austerity measures taken by the governments in the euro zone and beyond. As a consequence, carmakers seek innovative solutions to make their operations profitable and comply with the latest requirements of green engineering including the reduction of CO<sub>2</sub> emissions, fuel consumption and waste while increasing safety. It takes high engineering skills to design and manufacture components and roll out vehicles Slovenian companies collaborate with universities to accelerate performance in research and innovation.

***Estimated gross annual labour costs in automotive industry for 2016***



Estimated gross annual labour costs in automotive industry (Total cost per employee in €)



Source: Adecco & own calculations, 2015

The latest industry trend favours large system suppliers capable of developing and manufacturing entire vehicle assemblies, sub-assemblies of entire vehicles. With over **16,000-strong direct automotive employment** in some **250 companies** and the total employment depending on the automotive sector estimated to be five times higher (Eurostat, ACEA) Slovenia has highly qualified people for the competitive and sustainable auto industry. Nearly **12,000 students in secondary schools** for automotive and mechanical engineering (car-body maker, car service and sheet metal working), some **3,300 students enrolled in undergraduate courses** in mechanical engineering and more than 2,000 registered researchers are a guarantee that many Slovenian Tier 2 and 3 suppliers are poised to be promoted to the Tier 1 status.

As automakers continue to place emphasis on operating with lean organisations and increasing their productivity, dedicated and creative workforce found in Slovenia is capable of working to high professional and technical standards, Knowledge of foreign languages and high interpersonal skills are an asset in an industry where only the best get to sell to original equipment manufacturers.

#### Productivity / value added per employee, 2014

Company	Value-added per employee (in €)
KLS Ljubno	93,642
TAB	66,899
Adria Mobil	58,800
Revoz	58,434
Starkom	58,019
Akrapovic	52,679
Hidria AET	46,709
GKN Driveline Slovenija	46,288
Hella Saturnus Slovenija	45,153
Sogefi Filtration	42,140
odelo Slovenija	37,572
Mahle Letrika	35,569

Quality Link to Regional Markets

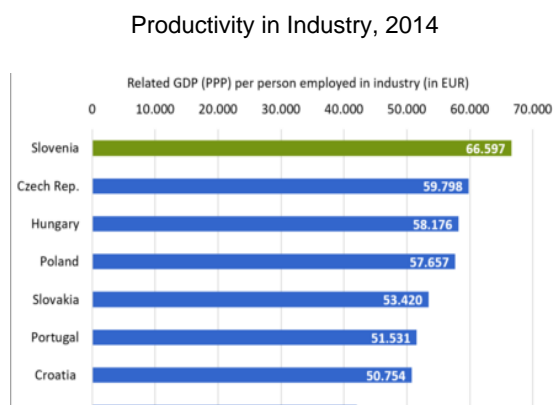
Off-shoring engineering tasks allows car manufacturers to reduce development-related costs and Slovenian automotive suppliers and engineering firms have a reputation of suitable partners. They handle calculation and simulation work, electrical and electronic development tasks, and detail design engineering tasks such as sample and prototype construction. As safety and environmental requirements are becoming stricter, automobiles are becoming more electronically controlled. Many leading players in the automotive industry set up operating partnerships with Slovenian firms in the electronic control unit (ECU) development area: software coding, hardware design, the design and testing of entire assemblies and other electrical integration tasks such as CAD modelling are offshore to Slovenia.

Slovenia's automotive industry generates **one tenth of the country's GDP** and accounts for **12.5% of its exports of goods**. Slovenian companies have achieved compliance with all EU green and safety requirements and supply the international industry leaders. German carmakers Audi, BMW, Daimler, VW, as well as MAN, and Ford in Germany account for some 40% of car component exports, followed by France, Italy, Austria, the UK, and the USA. Reliability of the vehicles that roll off the assembly lines of Renault, PSA, Brosse; Lombardini, Landini, Fiat and Magna Steyr gives credit also to suppliers from Slovenia.

**Revoz** owned by the **French Renault** remains Slovenia's only car manufacturer and the number one Slovenian exporter, employing around 2,000 people. The cars produced by Revoz Novo mesto are renowned for their uncompromising quality, which ranks them high among Renault vehicles also in terms of productivity.

Foreign investors wishing to locate in Slovenia to sell their products and services both locally and across the Western Balkans will not have to waste time and money on the nuances of localisation. Local staff can give an insider's perspective of the way the businesspeople in the region think and companies make decisions based on the decades of co-shaping the geopolitical architecture of the region. Slovenia's economic performance continues to build on the positive momentum of its leadership in business and technology best seen in robust export figures.

### Productivity in Industry, 2014



Source: IMD - World Competitiveness Yearbook, 2016

*Related GDP (PPP) per person employed in industry (in €)*

### Quality Infrastructure

The EU initiatives launched to strengthen competitiveness and employment in the automotive sector while enhancing progress toward safety and environmental goals such as CARS 21, expect manufacturers to do it at a price affordable to the consumer. Simple as it may sound, it means that manufacturers have to develop vehicles with competitive economics and prove that their brand is the best in terms of total cost of ownership, drivability, and reliability.

Slovenia's well-developed general and soft infrastructure could play a crucial role in making the right number of quality cars by introducing breakthrough technologies, keeping inventories low and production linked to demand. Its engineering and manufacturing industries and their partners from R & D institutions have a long tradition in delivering to discerning foreign buyers. As brand reputations depend on innovation and quality, compliance with recognised automotive standards and delivering parts used across multiple platforms and vehicles, most manufacturers apply the method of early involvement and close, long-term partnerships with individual suppliers,

as well as single-sourcing. **The Automotive Cluster of Slovenia (ACS)** is the hub for Slovenian automotive suppliers in metal processing, mechanical, electrical and electronics, chemical, rubber, textile and transport equipment industries as well as partners from RTD institutions and support services.

**Innovation centres, institutes for materials and technologies, knowledge academies** – these are modern building blocks for the Slovenian companies that start with the evaluation of the technical feasibility of new ideas and technologies and follow through to mass development and production. Commitment of **Hidria**, a global leader in the supply and development of a variety of subsystems and components, to the development of innovative technological and product solutions for the automotive and HVAC industries is best illustrated by the construction of its third R & D facility co-financed from the European Regional Development Fund. Its solutions for car steering, hybrid engines and cold start systems are used by the best-known manufacturers in their high-end models as the visitors to the Frankfurt Motor Show could see.

### Leading domestic and foreign-owned companies

- Adria Mobil (Coachwork for motor vehicles, trailers & semi-trailers)
- Agis zavore (Breaks and break parts)
- Akrapovic (Exhaust systems)
- Boxmark Leather / **Unicut** (Sewn seat covers, leather wrapped parts and leather parts)
- Carthago / **Carthago Reisemobilbau** (Motor homes)
- CECOMP / **CECOMP** (Blanking from coils, cut-to-length, progressive dies stamping)
- Cimos (Turbo systems, powertrain, chassis and body components)
- Domel (brushless EC motors, brushed DC motors, stepper motors and other components)
- Ebm-papst Slovenija / **EBM Papst** (Electric motors, generators & transformers)
- Filc (Thermal insulation of car batteries, acoustic insulation materials for motor area and vehicle interiors ...)
- GKN Driveline Slovenija / **G.K.N. Industries** (Ball, needle and roller bearings)
- Grammer Automotive Slovenija / **Grammer** (Seats, seat frames and parts)
- Hella Saturnus Slovenija / **Hella KGAA Hueck & Co.** (Motor vehicle electrical and electronic equipment)
- Hidria AET (Motor vehicle electrical and electronic equipment)
- KLS Ljubno (Starter ring gears for flywheels)
- LTH castings (Transmission and engine components, systems and components for steering and breaking)
- Mahle Letrika / **Mahle** (Starter motors and generators for internal combustion engines)
- Mahle Letrika Bovec / **Mahle Letrika Laktaši** (Motor vehicle electrical and electronic equipment)
- Novem Car Interior Design / **Novem Car Interior Design** (Decorative components and functional elements for vehicle interiors)
- odelo Slovenija / **Odelo** (Parts & accessories for vehicles and engines)
- Resistec UPR / **Krah Unternehmungsholding** (Resistors and rheostats)
- Revoz / **Renault** (Passanger cars)
- Rotis (Bearings, gears, gearing and driving elements)
- SG Automotive (Electronic equipment and components for vehicles)
- Sogefi filtration / **Sogefi** (Motor vehicle body components and engine components)
- Starkom / **Daimler** (Assemblies for vehicle axles and structural components)
- Sumida Slovenija / **Sumida** (Special parts for automotive industry)
- TAB (Batteries & accumulators)
- TAM-Europe / **CHTC-China Hi-Tech Group Corporation** (Bus and commercial vehicle manufacturer)
- TBP (Parts and accessories for motor vehicles and their engines)
- TPV (Components for automotive industry)
- Johnson Controls Novo mesto / **Johnson Controls International** (Complete seat systems)
- Johnson Controls Slovenj Gradec / **Johnson Controls** (Seating and overhead systems, floor consoles, door pnels and instrument panels for motor vehicles)
- TPV Prikolice / **Böckmann Fahrzeugwerke** (Light trailers)

## Electrical & Electronics

## KEY FIGURES 2016

**Number of companies:** 626

**Number of employees:** 28,334

**Revenues (in €):** 4.4 billion

**Exports (in €):** 3.4 billion

**Key export markets:** Austria, Croatia, Denmark, France, Germany, Italy, Russian Federation, UK

*Source: AJPES, 2017*

Key products:

- Electro motors and machines
- Household appliances
- Telecommunication equipment
- Electronic measuring systems
- Medical and optical equipment
- Power distribution facilities
- Electrical components

## Quality workforce

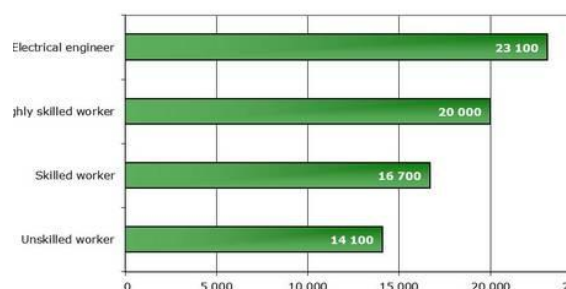
By ensuring a continuum of education and training opportunities that support a skilled workforce in the electrical and electronics sector, Slovenia's workforce combines successfully the country's long industrial tradition with ingenuity and skills to produce clever technical solutions.

The electrical and electronics sector employs nearly **28,000 people** in **over 600 companies**. Some **2,100 students** are enrolled in **undergraduate courses** for electrical and electronics engineers. The number of **students in secondary schools** for electrical engineering and computers is around **2,900**.

### *Estimated gross annual labour costs in electrical industry for 2016*

*(Total cost per employee in €)*

Estimated gross annual labour costs in electrical industry



Source: Adecco & own calculations, 2015

Since the gross enrolment ratio in tertiary level of education is 85% of the Slovenian population, it does not come as a surprise that some **91% of population** is able to **communicate in one** and **71% of population** is able to **communicate in two or more world languages** respectively with **English** and **German** being the most widespread. Government-sponsored training and re-training programmes help upgrade job seekers' employability by providing adult education and other in-demand skills to meet employers' entry-level job requirements. Co-financing is available to manufacturers to provide training in skills specific to their jobs for new employees within the framework of Slovenia's active employment policy measures.

## Productivity/value added per employee, 2014

Company	Value-added per employee (in €)
Interblock	147,200
Kolektor ETRA	75,429
Iskrateł	63,866
Kolektor Sikom	62,530
ITW Metalflex	47,876
Bartec Varnost	46,342
LPKF	45,584
BSH Hisni aparati	42,450
Elrad International	39,842
Gorenje	33,135
Iskraemeco	29,124

Source: Bisnode, 2015

### Quality link to regional markets

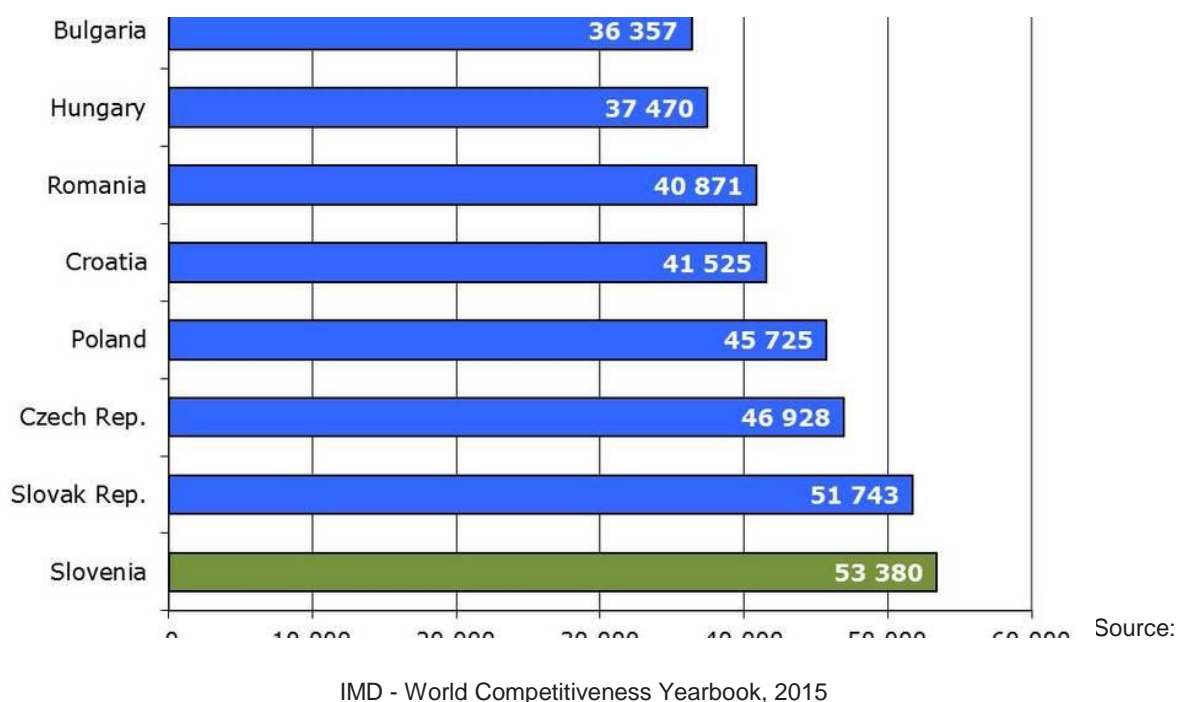
---

Foreign investors wishing to locate in Slovenia to sell their products and services both locally and across the Western Balkans will not have to waste time and money on the nuances of localisation. Local staff can give an insider's perspective of the way the businesspeople in the region think and companies make decisions based on the decades of co-shaping the geopolitical architecture of the region. Slovenia's economic performance continues to build on the positive momentum of its leadership in business and technology best seen in robust export figures.

A strong export performance of the Slovenian electrical and electronics industry with **76% of revenues earned in foreign markets** dented by volatility in economic performance of its trade partners. **Home-grown companies** such as **Gorenje, Kolektor, Iskra, Hidria, Elektronek** and many others displayed great resilience of their brands through the crisis and the companies in foreign or mixed ownership followed suit as illustrated by value-added per employee. **Gorenje Group**, household appliance maker, is holding its position as **second biggest Slovenian exporter** also in **2014**.

Electrical and electronic equipment for the automotive industry, commutators for electric motors, electric motors, electronic components for household appliances, vehicle lighting, thermal management, explosion-protected electrical devices and wireless designs are among the products developed and manufactured in Slovenia.

The Slovenian electrical and electronics companies have a strong presence in Europe's east and southeast markets thanks to substantial outward investments. In addition, there is an ever-increasing number of international companies with regional head offices in Slovenia attracted by easy access to quality staff, supplier chains, research institutes and a range of supports to foreign investors and export-oriented companies.



*Related GDP (PPP) per person employed in industry (in €)*

### **Quality infrastructure**

Slovenia has excellent physical and soft infrastructure. Its international airports, road and rail networks shorten travel distances and make Slovenia one of the most attractive investment location in the region. **The Adriatic Port of Koper** is the shortest maritime connection for cargo arriving through the Suez Canal from Asia to the landlocked countries of central Europe and the **well-branched ICT infrastructure** is a result of an early commitment to making ICT one of the national development priorities.

Foreign investors will compete in the global market more efficiently if they locate in Slovenia where the electrical and electronics industry can provide **innovative solutions** that meet both the requirements of business and the broader needs of society. Products are manufactured in conformity with the specifications and criteria to be applied consistently in the classification of materials, the manufacture of products and the provision of services leading international standards and EU directives. Operating efficiency is backed by close cooperation with the universities, research institutions, and professional associations. Slovenian suppliers are well known both on the business-to-business and on the business-to-customer markets.

Capabilities of Slovenia's leading manufacturers to design, verify, test and produce sophisticated electrical and electronic components, sub-assemblies and equipment continue to inspire investor confidence in an environment fine-tuned to delivering products, services and information supported by innovation and research. **Slovenian innovators** often return with medals from international trade fairs for ideas, inventions and new products and as long as the Slovenian knowledge-based companies prosper, they will drive the country's economy.

### **Leading domestic and foreign-owned companies**

- Athos Elektrosistemi (Electric garden hose reel)

- Bartec Varnost / **Bartec** (Explosion protected electrical devices)
- Bisol proizvodnja (Photovoltaic modules)
- BSH Hisni aparati / **BSH Finance & Holding** (Domestic appliances)
- Cablex-M (Conduits, contacts and connections for home appliances)
- Diotec / **Diotec Semiconductor** (Semiconductor diodes and rectifiers)
- DomeI (Electrical motors, fume exhaust units)
- Ebm-papst Slovenija / **EBM Papst** (Small electrical motors and fans)
- Elrad International / **Kona International** (Consumer electronics)
- Eta / **E.G.O. Elektro-Geräte** (Electronic domestic appliances)
- Eti / **Jean Müller Elektrotehnische Fabrik** (Fuses, circuit-breakers, surge switches)
- EureI (Integrated mechatronical solutions)
- Fotona / **Fotona Holdings** (Laser technology, defence optoelectronics, precision mechanics)
- Gorenje / **Panasonic corporation** (Domestic appliances)
- Hella Saturnus Slovenija / **Hella KGaA Hueck & Co.** (Vehicle lighting electronics)
- Hidria AET (Motor vehicle electrical and electronic equipment)
- Hidria Rotomatika (Electric motors, generators and transformers)
- Indramat Elektromotorji / **Bosch Rexroth** (Electrical motors, generators)
- Interblock / **Elektronek Group** (Electromechanical gaming machines)
- Intra lighting (Architectural luminaires and lighting systems)
- Iskra (Electrotechnical products for energy sector and logistics)
- Iskra mehanizmi (Electric domestic appliances)
- Iskra zascite / **Raycap** (Surge voltage protection systems)
- Iskraemeco / **EI Sewedy Cables** (Devices and systems for electric energy measuring, registration and billing)
- ITW Metalflex / **SG Invest Holding** (Components for household appliances)
- Kolektor ETRA (Manufacture of power (generator) transformers)
- Kolektor Sikom (Commutators for electrical motors)
- LPKF / **LPKF Laser & Electronics** (Laser and electronics for printed circuit board technology)
- Mahle Letrika / **Mahle** (Automotive electrical devices)
- Mahle Letrika Bovec / **Mahle Letrika Laktaši** (Thermosetting and thermoplastic materials)
- Metrel (Measuring and regulations equipment)
- Resistec UPR / **Krah Unternehmungsholding** (Electronic components)
- RLS / **Renishaw International** (Rotary and linear motion sensors)
- Safilo / **Safilo** (Sunglasses and optical frames)
- XAL svetila / **XAL** (Indoor & outdoor lighting solutions)

## KEY FIGURES 2016

**Number of companies:** 3,148

**Number of employees:** 57,425

**Revenues (in €):** 7.6 billion

**Exports (in €):** 5.0 billion

**Key export markets:** Australia, Austria, Croatia, Czech Rep., France, Germany, Hungary, Ireland, Italy, Netherlands, Serbia, Spain, Switzerland, UK, USA

*Source: AJPES, 2017*

Key products:

- vehicles and auto parts
- metal fittings and components
- cast and fabricated metal elements
- water turbines and pumps
- various metal products
- metal tools
- truck lifts
- HVAC systems

## Quality Workforce

---

Slovenia's machining and metalworking sector holds hope for the future as manufacturers commit to more **efficient technology practice** and **green engineering** widely regarded as being near the top of recession-resistant industries. The machinery must be designed and constructed taking into account the results of the risk assessment. As labour productivity has come into sharper focus than ever before, all major manufacturers are working to upgrade facilities and invest in new projects. At this point, **experience and knowledge of employees** give companies an edge through innovative solutions that translate to continuing improvements of manufacturing processes. The CE conformity marking affixed to the »**Made in Slovenia**« products speak of a high level of metalworking technology, machine tools and precision engineering found in Slovenia. Car component manufacture and assembly is another sector's facet outlined in the Automotive Industry.

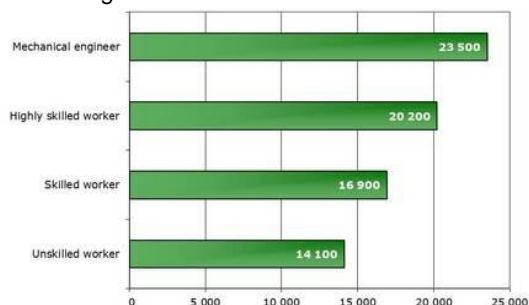
The fact that some **51,000 people** work in over **2,900** machining and tooling **companies** explains the progress in the development of modern technologies and their application to a lean-manufacturing environment. The bulk of workforce is employed in metal forming and metal fabrication working, but in terms of value-added per employee, the companies specialising in car component manufacture and assembly post the best results. Staff training is highly important as less expensive, faster and more efficient process become the stepping stones to improved competitiveness thanks to research and innovation. Slovenian manufacturers are moving to the fore of the international supply chains as slow stamping-press speeds and frequent die crashes are regarded as not acceptable.



## Estimated gross annual labour costs in machining & metalworking industry for 2016

(Total cost per employee in €)

Estimated gross annual labour costs in metals industry



Source: Adecco & own calculations, 2015

Different educational institutions create knowledge that enhances the productivity and competitiveness of the metals industry, and develop its human resource base. Currently some **3,300 students** are enrolled in **undergraduate courses** for occupations in the machining and metalworking industry. The number of **students in secondary schools** for metallurgy and mechanical engineering is nearly **9,100**.

An integrated, results-oriented education system providing young people and adults with critical career information resources and the skills they need to make effective educational and career decisions is widely appreciated by employers. Learning **foreign languages** is not a hobby in Slovenia but a practical business skill playing a crucial role in securing a job and enhancing one's career. Most people can speak good English and there are many German and Italian speakers.

## Productivity/value added per employee, 2014

Company	Value-added per employee (in €)
Danfoss Trata	101,426
Acroni	72,500
Pisek - Vitli Krpan	65,852
Difa	61,168
Akers valji Ravne	59,223
Brinox	57,780
Yaskawa Ristro	54,083
LTH castings	51,924
Metal Ravne	51,076
Kovis	50,682
Lama	50,627
GKN Driveline Slovenija	46,288

Source: Bismode, 2015

## Quality Link to Regional Markets

---

When forming strategic partnerships, innovating and accessing new customers, the country's position on the doorstep of the fast-growing markets in central and south-eastern Europe is of key importance. With its cutting-edge technologies, a skilled workforce and high quality products, Slovenia is a hotbed of business opportunity for investors seeking to create a new paradigm in modern machining and tooling industry. The manufacture of all kinds of fabricated metal products and machined parts accounts for **60% of revenue earned in foreign markets** and with **4.0 billion euros in exports** in 2014, the sector generated **17% of total Slovenian exports** of the manufacturing sector. The EU Member States remain Slovenia's biggest market and thanks to the decades of fostering economic links with its neighbours, Slovenia keeps expanding trade with the markets in the region. The leading Slovenian machining and tooling companies are among the most important foreign investors in the markets of South-Eastern Europe (SEE) and it is a clear benefit for their international business partners.

Slovenia is an excellent base for accessing key customers and many international companies use it for their **regional hubs** attracted by the expertise of local managers and engineers, and their in-depth knowledge of the regional markets. There is little need for compliance training and cultural integration, there are no language barriers and a culture of transparency and accountability is at home in Slovenia.

## Quality Infrastructure

---

The provision of efficient, reliable and affordable infrastructure services, such as water and sanitation, power, transport and telecommunications is crucial to economic growth and sustainable development. The level of infrastructure services is high in Slovenia as the pace of market development and output growth clearly show. Investors stand to benefit from general infrastructure such as highways and railroads and soft infrastructure (political, institutional, and legal environment) and Slovenia's record of accomplishment is equally impressive in both fields. The fact that two Pan-European Transport Corridors (V and X) intersect in Slovenia makes it a location of choice for investors that want to offshore some or all operations to a safe country with **well-developed transport and IT infrastructure**. The Adriatic Port of Koper is the shortest maritime connection for cargo arriving from Asia to landlocked countries of Central Europe through the Suez Canal.

The companies working in the metal forming and metal fabrication industry co-operate in clusters, professional associations, universities, research institutes, supporting fundamental and applied research that address technological barriers facing the industry. Designers and manufacturers of tools have been at the forefront of the industry providing a platform for toolmaking companies with CAD/CAM/CAE designed and manufactured tooling. Other companies benefit from comprehensive hi-tech solutions to increase productivity and speed delivery. These are large, as well as medium and small enterprises, well-known in the EU working to specifications of leading manufacturers in the automotive and aviation industry (Audi, Benteler, BMW, Chrysler, Alfa, Magna, Mercedes, PSA Group, VW), and non-metal industry sectors such as household appliances and IT.

## Leading domestic and foreign-owned companies

### Principales entreprises nationales et étrangères

- Acroni / **AO Koks** (Manufacture of basic iron, steel & ferro-alloys)
- ADK (Lifting & handling equipment)
- Aha emmi (Aluminium processing)
- Akers Valji Ravne / **Akers** (Manufacture of specialty tools)
- Arcont / **Containex Container** (Metal structures)
- Croning livarna / **Krombach International** (Cast steel production and machining)
- Daihen Varstroj / **Daihen Corporation** (Welding and thermal cutting machines)
- Danfoss Trata / **Danfoss International** (Industrial machinery & equipment)
- DOM-Titan / **Securidev** (Locks & hinges)
- EMO - Orodjarna (Tools for sheet metal fabrication, CAD/CAM/CAE designed tools)
- Farmtech / **Komptech** (Agriculture & forestry machinery)
- GKN Driveline Slovenija / **G.K.N. Industries** (Ball, needle and roller bearings)
- Gorenje Orodjarna (Tools for sheet metal fabrication, plastics processing and CAD/CAM/CAE designed tools)
- Impol group (Aluminium and aluminium-alloy products)
- Kolektor orodjarna (Integral tooling services, production lines and machines)
- Kovinoplastika Loz (Metal fittings, tools for sheet metal fabrication, plastics processing and die casting)
- Kovis - Livarna (Railway locomotives and rolling stock)
- Lama Avtomatizacija / **Titus Tool Company** (Furniture fittings, prefabricated systems, tools)
- Lama (Fittings, assembly systems, tools)
- Lestro-Ledinek / **Ledinek Maschinen und Anlagen** (Woodworking machines)
- Litostroj power / **Energo pro** (Integrated solutions for hydro energy equipment)
- Livar (Grey and nodular cast iron castings)
- LTH castings (Complex aluminium and magnesium high-pressure die-cast components and system)
- MLM - Mariborska livarna Maribor (Copper, copper alloy and aluminium alloy products)
- Metal Ravne (Manufacturing of basic iron, steel & ferro-alloys)
- Niko / **Ring International** (Variety of metal products designed mainly for the paper and wood industry)
- Omco Feniks Slovenija / **Omco International** (Glass industry castings, copper-based and other grey castings)
- Orodjarna in inženiring Alba / **Naue industries** (Machine tools)

### Faculties, research institutions, clusters and associations

- University of Ljubljana, Faculty of Mechanical Engineering
- University of Maribor, Faculty of Mechanical Engineering
- Institute of Metals and Technology
- TECOS - Slovenian Tool and Die Development Centre
- Toolmakers Cluster of Slovenia