AUTOMOTIVE INDUSTRY IN HUNGARY
OPENING DOORS
FOR YOUR INVESTMENT
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ABOUT HUNGARY

MAIN FIGURES

- AREA: 93,022 km²
- TIME ZONE: GMT + 1 HOUR
- POPULATION: 9,830,485 (as of January 2016)
- CAPITAL: Budapest
- CLIMATE: Temperate (similar to the rest of the continental zone)
- RISK OF NATURAL DISASTERS: Very low
- AUTOMOTIVE INDUSTRY IN HUNGARY

- FORM OF GOVERNMENT: Parliamentary Republic
- CURRENCY: Forint (HUF)
- UNEMPLOYMENT RATE: 5.1% (2016, HCSO)
- INFLATION: 0.4% (2016, HCSO*)

HUNGARY: Inward FDI stock in 2015 (percentage of GDP)

<table>
<thead>
<tr>
<th>Country</th>
<th>Hungary</th>
<th>Czech Republic</th>
<th>Slovakia</th>
<th>Poland</th>
<th>Romania</th>
<th>Slovenia</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>70%</td>
<td>62%</td>
<td>51%</td>
<td>40%</td>
<td>39%</td>
<td>30%</td>
</tr>
</tbody>
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Source: wiiw FDI Database

EU, UN, OECD, WTO, NATO, IMF, EC

EU member: since 2004

MEMBERSHIP IN INTERNATIONAL ORGANISATIONS

Source: HCSO

Hungarian Central Statistical Office
The initial evaluation of ten countries resulted in a short list of three countries, in which we analyzed several regions and cities. Finally, we made a decision for Hungary and more specifically in favor of Miskolc. Hungary was chosen as our investment location among other reasons due to the availability of a developed infrastructure, logistics conditions, strong industrial traditions and background, as well as due to the availability of skilled workforce and an investor-friendly environment. Also, the renowned technical university of Miskolc as well as the availability of technical and vocational schools played a crucial role while considering our long term plans and strategy.

Kersten Bachmann, Director, EMEA Operations Airbag TAKATA Safety Systems Hungary Ltd.
In order to improve the business climate, the Hungarian government...

- has modified its taxation and incentive system related to R&D activities to make Hungary the innovation hub of CEE.
- is committed to further reduce taxes on employment.
- was the first to implement a Digital Nation Development Program in the CEE region.
- has introduced a new incentive scheme supporting tech-intensive investments.
- has created the most competitive CIT in the EU with 9% flat rate.
- has introduced its unique economic development plan based on Industry 4.0 requirements.
- has signed more than 70 strategic partnership agreements giving companies fast access to the Government.
- has further improved the practice-based dual education system built on industry needs.
- is committed to further reduce taxes on employment.
**EXPATs LIKE HUNGARY**

Budapest is a city full of surprises and wonders, with its lively centre, pretty parks, majestic river, tall church spires, and lavish spas. One of the most exciting cities in the world, Budapest is full of secrets, hidden spots to explore, and old favourites to revisit. This is the city where being bored is not an option. According to TripAdvisor, Budapest is offering the best price-value ratio in the world. According to Condé Nast Traveler readers, Budapest is the second best city on earth.

**INTERNATIONAL SCHOOLS**

Expatriates looking to stick with the curricula of their home countries can choose from a range of private international schools for their children. There are also many English, German or French public and private pre-schools for children aged from three to six. The school year starts in September and ends in June, and school buses are usually available at private schools. There are many opportunities to study in a foreign language at universities too.

**EXPLORE THE COUNTRYSIDE**

Hungary’s diverse countryside offers a wide range of outdoor activities: 11,000 kilometres of hiking routes; more than 2,500 kilometres of cycle paths; 22 golf courses; ten national parks; and many protected nature reserves for those in love with fresh air. The protected Puszta region, the Great Plain, the romantic Danube Bend with its historic sites, and pretty baroque towns, such as Eger, attract visitors all over the year. Lake Balaton, the largest fresh water lake in Central Europe, is a perfect holiday resort.

**ABOUT HUNGARY**

**QUALITY OF LIFE**

**EXPLORE THE COUNTRYSIDE**

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# Automotive Industry in Hungary

Long with many discoveries and inventions, Hungarians have contributed to the spread of the automobile across the world.

<table>
<thead>
<tr>
<th>Century</th>
<th>Event</th>
<th>Description</th>
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<tbody>
<tr>
<td>15th</td>
<td>Kocs</td>
<td>Horse-drawn vehicle with steel-spring suspension.</td>
</tr>
<tr>
<td>1893</td>
<td>Csonka &amp; Bánki</td>
<td>First petrol vaporizer (carburetor)</td>
</tr>
<tr>
<td>1905</td>
<td>János Csonka</td>
<td>Organised automobile manufacturing began in Hungary.</td>
</tr>
<tr>
<td>1913</td>
<td>József Galamb</td>
<td>Concept of the Model-T Ford.</td>
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One of the earliest examples of this was during the reign of King Matthias Corvinus in the 15th century, with the wheelwrights of Kocs in Komárom county and their construction of a horse-drawn vehicle with steel-spring suspension. This “cart of Kocs” as the Hungarians called it (kocsi szekér) soon became popular all over Europe and lent its name to the English word “coach”.

János Csonka and Donát Bánki constructed the first petrol vaporizer (carburetor), which they patented in February 1893. János Csonka was the first to utilise the use of aluminium in the manufacturing of engines, he also developed controlled inlet valves and high voltage magneto ignition for petrol engines.

Organised automobile manufacturing has been present in Hungary since 1905, when János Csonka, commissioned by the Hungarian Royal Post created his mail transport car in the training centre of Budapest University of Technology.

József Galamb with others together framed the concept of the famous Model-T Ford. His intention was to create a car that would be cheap and simple to manufacture. In this model he applied technical innovations, such as the planetary gear and the removable cylinder head. In 1913, with his lead, the Ford Factory switched to serial production on its production lines. This resulted in the Model-T becoming the world’s first mass produced affordable car. During its 20 year production, over 155 million units were manufactured.
THE CENTURIES-OLD HISTORY OF THE AUTOMOTIVE INDUSTRY IN HUNGARY

1939

Béla Barényi as a constructor for Daimler-Benz, established the basic methodologies of passive safety in vehicles. Thanks to his activity, we have a crash zone, a non-deforming passenger compartment, and the telescopic collapsing steering column in modern cars. In the late forties, he introduced safety crash tests to the automotive industry.

1957

Ferenc Pavlics was a technical director for General Motors, later participating in the formation of the Lunar Roving Vehicle in the Apollo Space Programme.

1993

Ferenc Anisits (Dr.) played a hugely significant role in the development of the first eight-cylinder, direct-injection diesel engine and headed up the BMW Diesel Development Centre in Steyr, Austria. Under his leadership the electronically controlled diesel injection system was introduced in 1993, for which he was awarded Ernst Bleckle Innovation Award in 1995.
László Palkovics is a Professor of Budapest University of Technology and Economics and the Centre of Competence. He was leading a 100-engineer R&D unit in Budapest, and coordinate the worldTheir wide range pre development activities of Knorr Bremse AG. In his engineering career, he has been involved in vehicle dynamics, controlled vehicle systems, modeling techniques, hybrid vehicle drives and safety systems. Now being as a state secretary he is dedicated in the development of new generations of engineers for the future.

Pál Lukács (PhD) has achieved significant results in the area of research and development, for instance in the area of garage diagnostic tool development of brake systems for heavy trucks during the three years spent at the Knorr Bremse development institute in Budapest. In recent years, he has been working on the development of technologies for the recovery of organic materials from car wrecks and electronic waste, and is currently engaged in projects on technological innovation in the area of recycling.

The international career of Miklós Kovács was straightforward. Initially, after completing his studies at design college, he got a job at Audi as a scholarship recipient. He took part in the preparation of studies on the Audi A8 and Audi A4 models, and now he is the designer of the current Hyundai models. In 2011, he received the award of one of Europe’s most prestigious design competitions, the Best of the Best Award of the German Red Dot Design Award.
The automotive industry in Hungary registered a 15.0% growth between 2010 and 2016. Production value of the industry amounted to €25.3 billion in 2016.

The automotive industry accounts for 30.1% of manufacturing industrial output in the first eleven months of 2016. The number of people employed in the automotive industry was 155,508 in the 2016 Q4.

92% of the automotive industry’s output is exported. The automotive industry gives 20% of Hungary’s total exports.

Over 520,000 passenger cars were manufactured in Hungary in 2016.

4 OEMs have already chosen Hungary (Audi, Mercedes, Opel, Suzuki).

1071 EUR/month average gross earnings in the automotive industry (HCSO, 2016).

Over 40 of the top 100 global OEM parts suppliers are in Hungary in the automotive industry.

More than 700 suppliers in the automotive industry.

Main export market EU 87%.
“We decided to establish a production unit in Hungary 24 years ago. Since then AUDI HUNGARIA Zrt. has become the biggest engine factory and one of the most modern car production plants of the world. It employs 11,600 people. The central location of Hungary, the advanced infrastructure, the stable political and economic conditions of Hungary as an industrial site and skilled workforce all contribute to the success of our company. We are at home in Hungary.”

Peter Kössler, Chairman of the Board of Management, AUDI HUNGARIA Ltd.
I believe that Hungary, and especially its automotive supplier base, has an outstanding potential for development. As to our car plant in Esztergom, it is located in the heart of the country, but it is also close to the capital city of Budapest which is the largest Hungarian city with the largest pool of professional talent. The constantly developing infrastructure of our country allows for the Suzuki products, such as Vitara, an easy access to the European and global markets. Our talented, dedicated and hard-working innovation-minded personnel enable us to provide our customers with world-class cars which have the ‘Made in Hungary’ plaque on them while embodying the values of Hungarian talent alloyed with state-of-the-art Japanese technology.”

Dr. László Urbán
Deputy CEO, Magyar Suzuki Corporation
The past five years have been a success for Mercedes-Benz Kecskemét plant in Hungary. Thanks to the high-quality products and to the well-trained labour force the car production, started in 2012, has written a great success story. We are particularly proud to say that two of the three Mercedes-Benz models made in Kecskemét, called the CLA and CLA Shooting Brake are produced exclusively for customers around the world. In 2016 we established the fundamentals of the future success. Mercedes-Benz announced to invest around 580 million euros in the expansion of capacity and the technological upgrade of the existing facility for the production of compact cars at the site. The new generation of compact cars will also be produced in Kecskemét. In addition, we will invest 1 billion EUR in building a second factory until the end of the decade to create 2500 new jobs. Our series of investment is a clear sign of our commitment to Hungary, the government and the leaders of Kecskemét are key partners in our endeavors. We believe in quality work, that is the most important aspect of our work, and for that we rely on an effective and loyal employee team in Hungary.

Christian Wolff – CEO, Mercedes-Benz Manufacturing Hungary Ltd.
After 25 years and a total investment of over 1.5 billion Euros, Opel Szentgotthárd builds multiple engine families including the latest applications coming from our new Flex Plant. We also continue to invest into the future – in 2015 we opened our new Opel Knowledge Center that will help educating the next generation of qualified professionals.

Hungary is important for us, not only because of our manufacturing presence – Opel has the largest car park with over 475,000 cars running on the roads and the brand secured the number one position on the passenger car market 5th year in a row. I trust we have everything in place to look forward to another successful 25 years in Hungary.”

Grzegorz Buchal, Managing Director, Opel Szentgotthárd Ltd.

Did you know that...
...the new 2016 Astra’s power is delivered exclusively by the newest-generation diesel and gasoline engines which are produced at Szentgotthárd, Hungary?
DENSO Manufacturing Hungary Ltd. currently has— including rented associates — more than 5,000 employees so we can say that we are one of the biggest employer of our Central-Transdanubian region. The cause for this great performance is that in Hungary we found a real good place to invest and to develop our business. The central location of Hungary on the continent ensures continuous economical development to the country. Beside that the Hungarian workforce have real good features as the people are clever, hardworking and the school system gives a sincere and useful knowledge on each level. I believe that Hungary was a wise choice for our mother company as in 2017 DENSO celebrates its 20th year of operation in Hungary and the company plans to stay in the country for much more decades.

Kato Yukihiro,
President of DENSO Manufacturing Hungary Ltd.
Hungary has adopted the well-working GERMAN MODEL in medium & higher education.

CURRICULUM is customized to company needs.

Long term market-ready WORKFORCE.

The cooperation of academia and the corporate players resulted in a customized education at the Universities of Győr, Veszprém, Miskolc, Kecskemét, Debrecen.

What do we do to make the required labour force available for you?

The MEETING POINT OF CORPORATE CULTURE & EDUCATIONAL POTENTIAL

- Training of young engineers on internationally approved standards.
- Close cooperation between corporate partners & universities.
- Customized curriculums & departments strongly linked to the actual needs of the industry.
- Participation in real INDUSTRIAL PROJECTS during studies.
- Participation in STUDENT COMPETITIONS.
At the end of 2016 the number of students who were engaged in vocational dual training was over 50,000. Until 2018 it is expected to increase to 70,000.

In the 2016/2017 academic year, higher education in the dual form in Hungary is provided in the agricultural, economic, engineering and information technology areas, thus highly qualified young graduates will continue to be available for companies.

In the 2016/2017 academic year 24 higher education institutions offered dual education programmes. The number of partner organisations increased to almost 600.

There will be large numbers of students leaving the higher education who can immediately enter the world of work, without years of education and additional financial investment. It will be important to reduce the drop-out rates, to encourage practice-oriented training and to ensure real labour market-oriented diplomas.

Great number of available productive labour with competitive costs

- 95% of fresh graduates has English language skills
- 2nd most popular foreign language: German (71%)
- Followed by: French (18%), Russian, Italian, Spanish
- All degrees include foreign-language certificate and computer skills

EF English Proficiency Index 2016 (%)
Great innovation capacity available.
Dedicated to innovation: amount of Government incentives has been doubled.
Great research and development potential.
Thyssenkrupp is a technology leader in the field of steering systems and a major innovative partner of the automotive industry worldwide. The thyssenkrupp Competence Center in Budapest has developed a complex mechatronic system that includes both software and hardware. This enables automotive OEMs to give their cars a unique and precise handling feel for the steering wheel. Further advantages of our systems are the significant decrease of fuel consumption of passenger cars and also enabling the integration of special functions like side wind compensation or parking assistant into vehicles. Innovation, though crucial, is not enough today. In case of such a safety critical equipment, the key to success in automotive R&D is how one transforms innovative ideas into products that are appreciated around the world. This is what our Competence Center excels in. In order to leverage our know-how in steering systems in Budapest, we are currently building a plant as well in Hungary where the production of steering systems and, in addition to that, camshafts will take place. The latest milestone in the history of thyssenkrupp in Hungary is the announcement in February, 2017, that thyssenkrupp Springs and Stabilizers selected Eastern Hungary for their new plant. With these ongoing developments, thyssenkrupp is looking forward to meeting the challenges of the future.

Marc de Bastos Eckstein, General Manager, thyssenkrupp Presta Hungary
The BorgWarner turbocharger plant in Oroszlány was originally built to serve one of the most important Audi factories located in the region, but it soon began to manufacture the products itself as well and broaden its customer portfolio. From the very beginning, the company has seen strong growth, doubling its turnover year by year. BorgWarner have been committed to make this growth possible along the following reasons:

- Investments creating workplaces and providing opportunities for the economic development of different regions have highly been encouraged by Hungarian Government incentives.
- BorgWarner has an excellent customer footprint in Hungary.
- Hungary and the region itself have an adequate industrial culture, well trained in the automotive industry. There are several technical universities in Hungary and a skilled workforce can be hired from countrywide.
- The region itself has also been providing available labor force, both white collars and blue collars.
- Hungary’s advantage is also its great logistics opportunities and infrastructure.

Attila Bogár, General Manager of BorgWarner Oroszlány Ltd.
Continental has a more than 25 years history in Hungary. The company has several sites across the country, in the following cities: Szeged, Budapest, Makó and Vác.

ContiTech Rubber Industrial Ltd. in Szeged manufactures two main product groups: textile conveyor belts mainly for the mining industry and rubber as well as composite hoses mainly for the oil industry. The site has the world’s biggest capacity of textile conveyor belt production and supplies approximately one third of the oil hose market.

Plant Budapest produces vehicle electronic components and microelectronic circuit modules, using state-of-the-art and innovative technologies, being engaged in almost all areas of vehicle electronics for the Continental divisions Chassis & Safety, Powertrain and Interior, and supplies all major car producers worldwide.

The product range in Budapest includes brake systems, various comfort and chassis electronic components, sensor clusters, electronic control units for electronic stability systems and hybrid drive systems, body control electronics, oil sensors etc. The plant in Budapest celebrated its 25th anniversary in 2015.

ContiTech Fluid Automotive Hungária Ltd. is a subsidiary of the ContiTech division and has production sites in Makó and Vác. The company in Makó, which was founded in 1995, and the factory in Vác, which has been producing since 1999, were united in 2006, and since 2008 they have been called ContiTech Fluid Automotive Hungária Ltd. The profile of the company is still the production and sale of heating and cooling hoses for the automobile and truck sections, but in addition, Vác produces fuel hoses as well.

The Bosch Group relaunched its operations in Hungary in 1991 and first established a presence in the country 119 years ago, in 1898. Robert Bosch himself founded the first company in Hungary. The Bosch Group has achieved a steady expansion in Hungary over the years, and by now has 9 companies, 7 manufacturing plants and, including the number of engineers working at the 10-year-old Engineering Centre Budapest, the largest European development centre outside Germany. The efforts of the 11,000 employees contribute to the progress of Hungary as a whole, because they are responsible for generating over 2.7% of the Hungarian GDP every year. The company’s growth is also supported by the activities of the Hungarian Investment Promotion Agency.
HOW DO WE SUPPORT YOUR AUTOMOTIVE PROJECT?

BEFORE YOU MAKE A DECISION

- meetings with HR & real estate agencies, law firms and other consultants based on your needs.
- one-stop-shop management consultancy services to address your business needs.
- tailor-made incentive offers and information packages on the business environment, labour market, tax regulations, etc.
- location search & evaluation + site visits.

WE OFFER YOU...

AFTER YOU HAVE CHOSEN HUNGARY

- assistance with your incentive application.
- reference visits at companies that are already established in Hungary.
- we support your further expansion and plans.
- we are open to your feedback and offer mediation between government and business based on your inputs.
- we support your further expansion and plans.

Please contact us

Address: 1055 Budapest, Honvéd utca 20.
Customer service: investment@hipa.hu
Telephone: +36 1 872 6520
Web: www.hipa.hu
### Our Services

#### For Integrators
- **Supplier Lists** = Filtering by company requests
- **Partnership Agreement** = Cooperations and common projects to develop Hungarian suppliers
- **Development of Actual Suppliers** = Training for the Hungarian suppliers and potential suppliers

#### For Suppliers
- **B2B, Supplier Forum** = Personal encounter between potential suppliers and producers
- **Certified Supplier Database** = Online, interactive certified supplier database and virtual marketplace
- **University and R&D Cooperation** = Supporting educational and R&D cooperation between universities and suppliers
- **Education, Training** = Professional trainings in several fields (efficiency trainings, benchmarking techniques, automotive standards)
- **Exhibitions** = Appearance on Hungarian and international exhibitions and fairs
- **Publications, Market Information** = Information about the current Hungarian supplier base
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Regional grants are the most typical forms of incentives for greenfield / brownfield investments or reinvestments. The maximum amount of regional incentive is shown on the regional aid intensity map. The map above illustrates that regional aid available for investment for a large enterprise may be up to 50% of the eligible costs of the investment, depending on the region. For investments not exceeding €50 million, the maximum intensity ratio can be increased by 10 percent for medium-sized and by 20 percent for small enterprises. In case of R&D activities, the maximum aid intensity is 25% all over the country.

As a member of the European Union, Hungary’s regulations on incentive opportunities are in accordance with the EU rules. One of Hungary’s competitive advantages over other countries in the region is the Government’s strong commitment to increase the competitiveness of SMEs and large enterprises in Hungary. Alongside the regulatory tools that contribute to the competitive business environment of local companies, Hungary offers wide-ranging incentives to facilitate foreign direct investments and reinvestments by local enterprises. Subsidies may be granted as regional aid or specific aid, such as R&D subsidies.

The maximum available aid intensity decreases if the investment is a large investment (exceeding €50 million): 50% of the maximum aid intensity determined in the regional aid map is available for investment between €50 and €100 million, with 34% of the maximum aid intensity for investment over €100 million.

For information on up-to-date and individual incentive packages please contact HIPA directly.
THEY HAVE ALREADY CHOSEN US!