



## HUNGARY - Automotive tradition and ongoing renewal

The Hungarian automotive sector benefits from an excellent geopolitical position as well as outstanding industrial traditions. Due to the structural reforms undertaken at the turn of the millennium, industrial production rates are today swiftly approaching the Western European averages. The main players in the automotive sector are Audi, Suzuki, Opel, their and individual multinational suppliers as well as the traditional Hungarian manufacturer Rába. Counting more than 600 players the country is widely considered as the supplier base for the manufacturers established in the region. There are outstanding opportunities for joint production with companies in the region, and also specific new opportunities in technology and know-how transfer. Especially after the 2007 EU enlargement, Hungary has gained a more central position in the EU area, and there is optimism that the established automotive industry may see growth opportunities stemming from this.

### Key figures

The Hungarian motor-vehicle industry has an extremely rich heritage: among the most considerable inventions and innovators in the sector, one can list János Csonka (invented carburettor, 1890), József Galamb (organised mass production of Ford Model-T, 1905-1915); Béla Barényi (conceived idea of active vehicle safety and active safety codes, 1939-1972); Ferenc Pavlics (creator of moon craft and Mars vehicles, 1961-1988); Gyula Cser (invented the combined engine-charger system, 1968); Ferenc Anisits (directed BMW diesel engine development, 1981-1999). The vehicle manufacturing capacity has therefore been built on strong historical foundations and on a longstanding expertise provided by important manufacturers such as Ikarus, Csepel Autó and Rába.

Today, Hungary has a population of 10 million and a car fleet of nearly 3 million cars. In 2007, it produced 290,235 passenger cars and 3,566 commercial vehicles. The revenues for 2007 amounted to € 15.9 billion, and the automotive sector share represented 19.4% of total industrial production. The share in total exports was about 20%. There are approximately 630 motor-vehicle manufacturing companies; from this, circa 240 have audited quality assurance systems. The number of employees in the sector is approximately above 110,000, including a considerable number of highly skilled workers. Proportion of employees involved in main-unit manufacturing is 12% and in part-unit manufacturing, 88%.

Direct automotive employment*	57,336
as share of total manufacturing	8.5%
Production of motor vehicles	293,801
of which production of passenger cars	290,235
Car fleet (in 1,000)	2,954
Car density (per 1,000 population)	293

\* total employment depending on automotive sector is around five times higher

## Foreign Direct Investments

Large multinational firms play a very significant role in the national economy, accounting for the overwhelming proportion of the nation's GDP, exports and R&D activity. Hungary has successfully mastered economic transition benefiting from its geographic location and attracting an important share of foreign direct investment in central and Eastern Europe. Among the most important investments made over the past year are the following:

- German giant **Daimler** has decided to invest € 800 million creating 2,500 jobs to build Mercedes A and B class in Kecskemét. The factory will produce 100,000 cars annually from 2011;
- **Audi Hungária Motor Ltd.**, invested € 80 million in its new machine-tool factory in Győr;
- **Renault-Nissan** has invested € 13 million to set up a regional spare-parts supply centre in Győr for the Hungarian, Slovak, Czech, Slovene and Romanian markets;
- Japanese **Denso** has recently invested about € 100 million to enlarge its diesel engine fuel-injection factory in Székesfehérvár, which is ultimately expected to employ over 2,000 people;
- **Suzuki Hungary PLC** invests € 400 million to double production at its plant in Esztergom to 300,000 pieces a year by 2007;
- By 2006 **Robert Bosch Electronika Ltd.** production centre in Hatvan became the Bosch Group's largest producer of electric parts all over the world;
- Hungarian affiliate of Norsk Hydro, **Hydro Aluminium** starts to build a new factory beside its current one in Győr with a greenfield investment;
- Japanese **Bridgestone** has brought its cutting-edge BIRD production system from Japan to Hungary. By investing € 195 million in Tatabánya, the company establishes a production facility with a daily capacity of 8,000 tyres and employs 185 new employees;
- Korean **Hankook** Tire will invest € 528 million by 2010 in its brand-new tyre factory in Dunaújváros that will produce 10 million tyres per year and employ 1,500 people;
- Japanese **Asahi Glass Co.** has invested USD 162 million to build its facility in Tatabánya that will employ 600 people to produce safety glasses;
- Japanese **Ibiden** has invested more than €100 million in the first phase in its factory in Dunavarsány and will employ 1,200 people to produce ceramic filters for diesel engines;
- German **ZF Hungária Ltd.** is investing € 74 million in Eger to build its second manufacturing plant. In 15,000 sqm premises and with 1,400 employees, ZF will manufacture 1.2 million steering gears, 1.7 million A/C pumps and 120,000 gearboxes per year.

## Suppliers

Due to a considerable extent of Suzuki's pioneering investment in 1991, the past 17 years have provided sufficient experience to learn and understand the expectations of foreign investors concerning local component supply. Especially in the automotive industry, there are several reliable suppliers with quality certificates which can actively contribute to the successful and economical operation of foreign investors. A complete car can be built in Hungary.

## Clusters

Over the last years, Hungary has seen the emergence of clusters in several of its industries, ranging from the automotive sector to logistics, construction and tourism. The investment-based, export-orientated automotive industry has been the frontrunner in this development. The main example is the Pannon Automotive Cluster, PANAC, which represents 10% of GDP. The Pannon Automotive Cluster was established in 2000 as the joint initiative of eight large corporations, financial institutions and government organizations. PANAC now accounts for 100 members, including large multinationals such as Audi, Suzuki, GM Powertrain, LuK, Siemens, DHL, or Lear.

## R&D

Due to the structural changes of the past few years, automotive investments in Hungary today tend to be those that generate higher added value, and multinational companies are outsourcing an ever-increasing share of their innovation activities to local automotive SME-suppliers. In order to foster the propensity for innovation and nurturing R&D-related talents, the Association of the Hungarian Automotive Industry (AHAI) has worked out a plan for the Automotive and Transportation Competence Centre (ATCC), which will be at the heart of future developments of the Hungarian Automotive Industry. Government programmes sustain the extension of the network of Automotive Competence Centers to complement the Regional University Knowledge Centers as R&D bases, in order to establish a more efficient cooperation among multinational companies, SMEs (in the supply field) academic research institutes and other relevant institutions. Automotive research is also expected to benefit substantially from other initiatives such as the new Bayh-Dole "Innovation Act" or the "Research and Technology Innovation Fund Act" adopted in 2004. Professional education in the Hungarian automotive industry stands on strong foundations: the engineering traditions and experience gained in previous production and planning are complemented by excellent primary and secondary education (including vocational high schools with focused technical curricula), and a superb system of technical colleges and universities renowned for training of engineers. Among the most important universities providing automotive education one can list the Budapest University of Technology and Economics, Széchenyi István University, Győr, University of Miskolc and University of Veszprém.

