LUXEMBOURG – YOUR AUTOMOTIVE BUSINESS PARTNER



LET'S MAKE IT HAPPEN

WELCOME TO LUXEMBOURG WHERE ROADS CROSS, IDEAS MULTIPLY AND INNOVATION ABOUNDS

A founding member of the European Union and part of the Eurozone, Luxembourg is situated at the heart of Europe - 60% of the EU's GDP can be reached by a one-hour flight - and within easy reach of the European development headquarters of the leading Original Equipment Manufacturers (OEMs).

Distance from Luxembourg City to:

Brussels 200 km Frankfurt 250 km Paris 380 km



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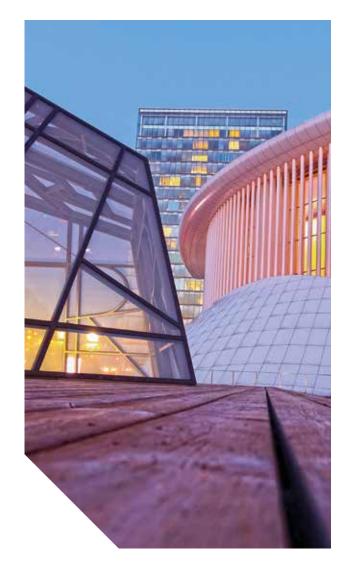
• 1 market - 28 countries (GDP €14.6 trillion in 2015)

• 19 countries in the Eurozone (one currency - euro)

 Easy access to 500 million consumers

• Free mobility of capital, products, services and labour

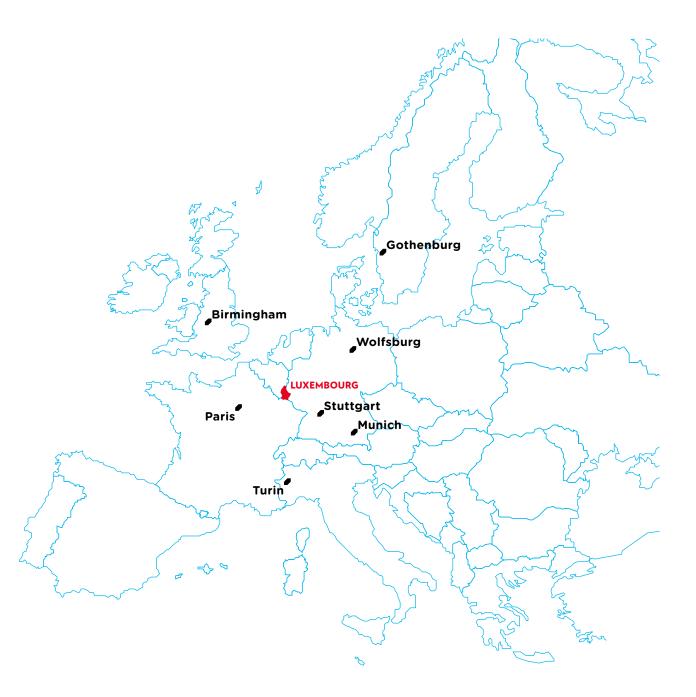
LUXEMBOURG AT THE CENTRE OF EUROPEAN AUTOMOTIVE BUSINESS DECISIONS



A founding member of the European Union and part of the Eurozone, Luxembourg is centrally located at the heart of the European automotive community. At the crossroads between Germany, France and Belgium, it offers excellent access to all European development locations of Original Equipment Manufacturers (OEMs), suppliers and mobility service providers. It is an ideal location for companies with a multi-customer base to develop and adjust products to a wide range of customer requirements.

Even though European OEMs have in the last few years expanded production in countries outside of Europe, most of the technology-related decisions are still taken at European development headquarters. Here, purchasing and development teams work closely together and OEMs coordinate their global strategies, which requires visits to their development headquarters in Paris, Stuttgart, Munich, Wolfsburg, Gothenburg, Turin or Birmingham.

Because of the huge potential offered by new mobility concepts, including zero-emission and connected vehicles, this knowledge-intensive industry is supported by government R&D grants and financing facilities from SNCI (Société Nationale de Crédit et d'Investissement), a public law banking institution. The Luxembourg Automotive Campus, a new, dedicated science park for mobility, is adding to the attractiveness of the country's automotive ecosystem.







BUSINESS OPPORTUNITIES FOR MOBILITY **INNOVATORS**

Europe.

As a truly international country in Europe, Luxembourg counts approximately 48% foreign residents and about half of the workforce consists of commuters from Belgium, France and Germany. Cross-border thinking is thus a national trait, with a unique and mobile workforce composed of international and highly skilled experts, mainly recruited from the Greater Region with its 11.5 million inhabitants and no less than six established international universities. Their language and cultural competencies make them well suited for operating in an international high-tech business environment such as the automotive sector.

The Luxembourg AutoMobility Cluster (LAC) is a member of the international automotive cluster autoregion e.V., thereby covering the sector's interests in the Greater Region, which is formed of Luxembourg, Rhineland-Palatinate (D), Saarland (D), Lorraine (F) and Wallonia (B).

Global sourcing strategies and fewer TIER1 suppliers are re-defining the rules of engagement in the automotive business.

Traditional component suppliers are evolving into technology and service providers. In return for long lasting relationships and recurring business, OEMs expect an early involvement in the development of new vehicles, new systems (e.g. new energy powertrains), and new service concepts.

WE THINK CROSS-BORDER

To build such relationships, companies must understand "the voice of the customer", a challenging requirement considering the cultural and linguistic differences in



A WIDE RANGE OF EXPERTISE

Numerous global players such as Delphi, Mahle, SAIC, Goodyear, IEE, Carlex, ArcelorMittal and CEBI International have come to appreciate the advantages of a Luxembourg-based European Sales and R&D headguarters. Some combine R&D with manufacturing or end-assembly activities. Luxembourg offers several excellent logistics options, and the cost of labour is among the lowest in Western Europe, due to a moderate tax structure and low social contributions.

In terms of systems and service expertise, Luxembourg automotive and mobility players are active in the fields of:

- Comfort and convenience. Human Machine Interface (HMI)
- Active and passive safety, Advanced Driver Assist Systems (ADAS)
- Vehicle connectivity and infotainment
- Vehicle dynamics, body and chassis
- New energy powertrains,
- Fuel management and emission control

The result is a strong economic cluster with significant expertise in components, systems and services, development processes, manufacturing processes, process automation and logistics.

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"NUMEROUS GLOBAL PLAYERS HAVE COME TO APPRECIATE THE **ADVANTAGES OF A** LUXEMBOURG-BASED EUROPEAN SALES AND **R&D HEADQUARTERS**"



CROSS-BORDER VEHICLE CONNECTIVITY

The Luxembourg automotive landscape is evolving from being components-focused towards greater expertise in full systems.

Luxembourg-based companies with a global presence have been active in systems development for many years. Recently, smaller companies with a more regional orientation have entered the market by participating in R&D consortia. These combine the individual expertise of different component suppliers, thereby enabling the development of complex automotive systems. Such development teams are strongly supported by the Luxembourg AutoMobility Cluster as well as by the Luxembourg Institute for Science and Technology (LIST) and the Interdisciplinary Centre for Security, Reliability and Trust (SnT), a division of the University of Luxembourg.

A unique feature of the Luxembourg AutoMobility Cluster is the wide range of expertise with numerous fields of common interest between individual members. This provides many opportunities for joint R&D and open innovation projects. A good example is the implementation of a cross-border connectivity testbed by an international consortium of companies and research institutes from Luxembourg. Lorraine and Saarland to develop and test smart infrastructures and multiple communication technologies such as cellular 5G and Wi-Fi

Helping the automotive industry stay dynamic, innovative and competitive in a constantly evolving environment is a priority.

One of Luxembourg's landmark projects, the Automotive Campus that is currently under construction, will host the research and innovation activities of several automotive companies, including Goodyear and IEE. Built on the principles of open innovation and technology exchange. the campus will offer shared infrastructure such as conference rooms, start-up incubation facilities and exhibition areas. Its close proximity to Goodyear's test circuit will offer potential synergies for prototype testing and validation.

AUTOMOTIVE CAMPUS



INTERNATIONALISATION AND BUSINESS DEVELOPMENT

The Luxembourg automotive sector benefits from exposure to various national and international platforms. In particular, small and medium-sized companies jointly display their products and capabilities at international trade fairs such as the IAA in Frankfurt. In addition. trade missions abroad are organised around sectorspecific programmes.

Foreign investors who look to establish an R&D or manufacturing operation in Luxembourg will be put in touch with private and public organisations that can provide any type of service for any type of activity. Support is also available to help with the recruitment of high-level professionals. Most importantly though, experts will introduce newcomers to automotive engineering communities in Luxembourg and across Europe.

Our sector experts frequently visit international trade fairs and congresses, in developed as well as emerging markets, ensuring that business development and internationalisation activities are aligned with regional and global trends. Leading consultancy firms are at hand to help thanks to their global networks and sector-specific insights and market analyses.

"OUR SECTOR EXPERTS ENSURE THAT STRATEGIC R&D PROJECTS RELATE TO REGIONAL AND **GLOBAL MARKET TRENDS AND FUTURE BUSINESS OPPORTUNITIES.**"

GATEWAY TO EUROPE: EUROPEAN HOMOLOGATION

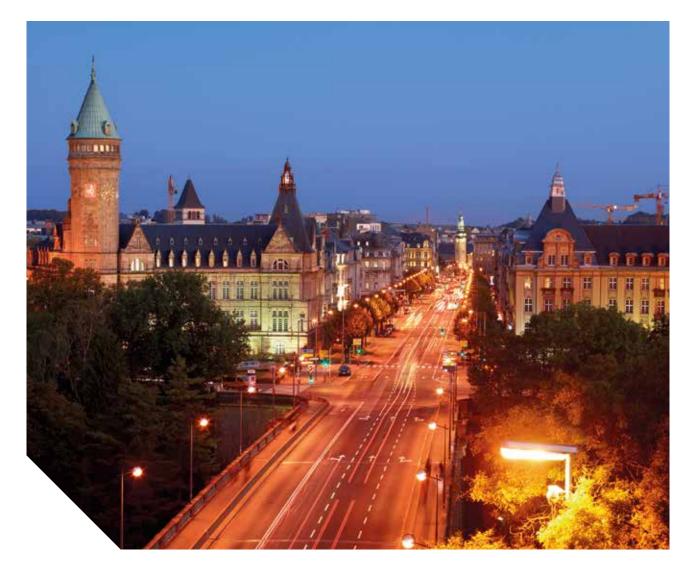
time to market.



Receiving recognition for technical expertise is an important step in obtaining acceptance by the European market for automotive components, systems and vehicles.

Luxembourg offers automotive-specific homologation and certification expertise from Luxcontrol (a partner of TÜV Rheinland) and ATEEL. Both companies operate in global networks and are officially registered as a "technical service" by the United Nations Economic Commission for Europe and the European Commission. The services provided in close cooperation with the national homologation authority, the SNCH, is one of the reasons why Luxembourg's homologation and certification process is considered to be one of the fastest in Europe. This is a significant factor in reducing

WHY LUXEMBOURG?

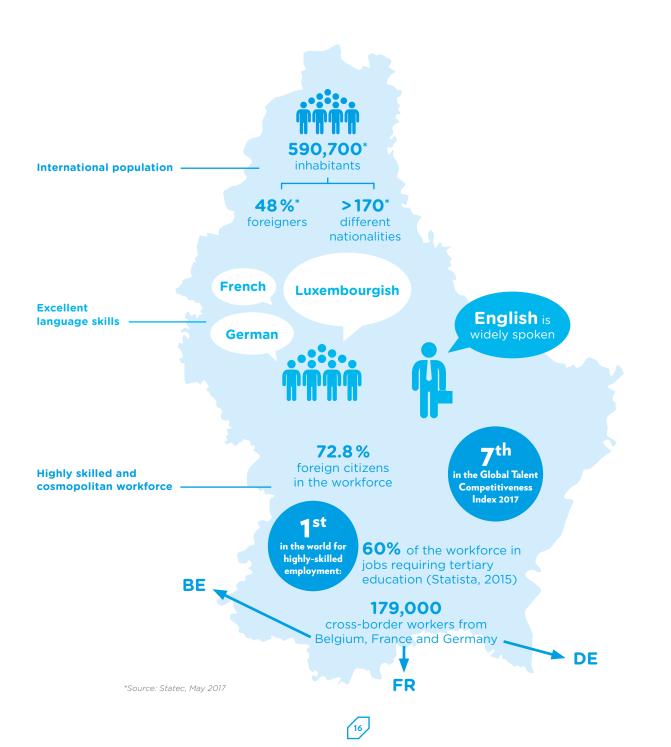


Luxembourg is the ideal location to launch new products and services in Europe and beyond. Highly multicultural and diversified, yet relatively small in size, the triple A rated country is a great living lab to develop innovative concepts and test new offerings. With easy access to European markets, a stable and business-friendly environment, the most multilingual country in Europe has indeed much to offer:

International and highly skilled workforce

The Luxembourg automotive sector can draw on a talented, experienced and motivated workforce that is acknowledged for its ability to tackle all kinds of challenges from technology and quality issues to supply or commercial aspects. Designing solutions together with the customer, in their own language whilst understanding their cultural background is part of the DNA of our workforce.

"DESIGNING SOLUTIONS TOGETHER WITH THE CUSTOMER, IN THEIR OWN LANGUAGE WHILST UNDERSTANDING THEIR CULTURAL BACKGROUND IS PART OF THE DNA OF OUR WORKFORCE."



Networking and open innovation

Luxembourg, one of the founders of the European Union, is a country of networkers, a skill that has enabled Luxembourg-based people to hold key positions in European politics and industry. The Association of Luxembourgish Automotive Suppliers (ILEA) represents the political interests of the automotive industry in Luxembourg and Brussels. Under the umbrella of Luxinnovation, a key player in the development of the Luxembourg economy, the AutoMobility Cluster maintains strong relationships with both regional automotive clusters and national clusters for ICT, space, environmental and health technologies, materials and logistics. With joint R&D teams and the concept of open innovation, the Luxembourg AutoMobility Cluster helps component suppliers to develop strategic partnerships in new technologies, systems development and services.

An exceptional business environment



Luxembourg's economic policies reflect the importance of innovation allied with private initiative. A free market approach gives businesses broad freedom of action. Luxembourg is a country where business can thrive without much red tape. The Government provides tailormade solutions for investment and R&D projects.

A diversified economy and exceptional quality of life

Luxembourg has a strong industrial tradition reaching back to the late 19th century. More recently, in a bid to diversify its economy, Luxembourg has encouraged the development of an innovative high-tech manufacturing industry alongside its successful banking and financial services sector. Industrial conflicts are very rare owing to a strong culture of social dialogue between trade unions, employers and the Government. Such multitude of strengths has resulted in a safe and cosmopolitan country with one of the highest living standards in the world.

HOW WE CAN HELP YOU

Would you like to find out more about Luxembourg and how your company can benefit from the opportunities offered here? We have extensive experience with supporting international companies and can provide you with useful information and customised assistance.

In-depth information

Please contact us for fast, reliable information on all aspects of doing business in Luxembourg.

Tailor-made Luxembourg visits

We can set up tailor-made visit programmes that will enable you to meet all relevant contacts – government officials, service providers and potential partners – in just 2 days. You will particularly appreciate the availability of authorities and their willingness to collaborate.

Introduction to key networks

Our sector specialists will help you identify and introduce you to potential customers as well as business, innovation and R&D partners.

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THE GOVERNMENT OF THE GRAND DUCHY OF LUXEMBOURG Ministry of Foreign and European Affairs

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