

TestBedUK

“The UK has an extraordinary story to tell on automotive. Its unique and myriad strengths are fusing with a focus on the future to make the UK the place to be. If you’re not here already, you’re missing the opportunity to be a part of, and benefit from, the world’s most vibrant, dynamic and forward-facing auto industry.”

The UK’s story...

The hard figures:

- Our auto sector has undoubted critical mass. 180,000 people, or 6% of the entire UK manufacturing workforce, are directly employed in over 3300 unique automotive businesses.
- A further 200,000 are employed in the wider economy, supplying essential parts and services to the sector, with a further 550,000 employed in the auto retail and service areas.
- We have seven of the world’s volume vehicle manufacturers here, supported by 19 of the world’s top 20 suppliers. The list reads like the who’s who of the industry: BMW (MINI), Ford, GM (Vauxhall), Honda, Jaguar Land Rover, Nissan, Toyota, Aisin, Calsonic, Dana, Delphi, Denso, GKN, Johnson Matthey, Pilkington, Siemens VDO, TRW and Visteon.
- And we have an unparalleled number of niche/premium manufacturers: Aston Martin, Rolls-Royce (BMW), Caterham, Connaught, Gibbs, McLaren, Morgan, Lotus and Bentley (VW).
- Vehicle production is at levels not seen since the 1970s. With 1.65 million units produced each year.
- Our export performance is outstanding. 78% of cars, and 62% of commercial vehicles, made in the UK are sold abroad. Auto is our No1 export. 2008 trade data shows UK auto exports were worth £27bn, up 7% (12.1% of UK manufactured exports) and imports were down 6% to £39.5bn (13.3% of UK manufactured imports).
- The sector is worth over £10 billion to our economy – or 0.7% of the UK’s GDP.
- The UK ranks 4th in Europe (and 12th in the global) output league - and is responsible for 2.4% of global output in terms of numbers of vehicles (2008 data) made.
- Productivity in the sector has risen by over 80% in cash terms from 2000 to 2007. Eurostat data shows the UK overtook France and Italy in 2007, with only Germany achieving greater productivity in terms of value/head. However, Germany has a much higher total labour cost than the UK.
- Separately, the UK construction equipment sector produces over £8.5 billion worth of equipment annually, of which 70% is exported, and employs over 50,000 people. The UK-owned JCB brand is world renowned.

But, behind those headlines, did you know also know that:

On automotive R&D/engineering...

- Close to £1 billion is spent every year in the UK on automotive R&D.
- We have two of the most globally renowned development facilities anywhere in the world: Millbrook and MIRA.
- We are a centre for Jaguar Land Rover and Ford R&D. But we are also at the cutting edge of developments within the supplier community (e.g. Delphi's advanced, world-leading diesel injection systems are not just made here but also designed and developed here).
- Our contract engineering specialists are second to none (e.g. Lotus Engineering and Ricardo) – with global reputations that precede them.
- There are more than fifty independent automotive design engineering companies based here, who collectively handle close to 20 per cent of the entire global demand for independent vehicle design engineering services.
- And the UK is also home to the new flagship 'innovITS – ADVANCE', one of the world's most advanced R&D centres. The facility will enable customers from the automotive, telecommunications and electronics industries, as well as highways authorities and operators, to develop, test and validate future transport technologies in a safe and highly controlled environment. By facilitating innovation in cooperative vehicle, highway and telecommunications technologies, 'innovITS – ADVANCE' aims to reduce accidents, improve environmental efficiency and help to alleviate traffic congestion through the efficient and intelligent interaction of vehicles and highway infrastructure.

On generic R&D and innovation...

- The UK has a dedicated government agency for funding research and training in engineering and the physical sciences: EPSRC. Investing more than £800 million a year in a broad range of subjects – from mathematics to materials science, and from information technology to structural engineering. The EPSRC meet the needs of industry and society by working in partnership with universities to invest in people, scientific discovery and innovation. The knowledge and expertise gained maintains a technological leading edge, builds a strong economy and improves people's quality of life. Their work is complementary to other research investors including other research councils, government agencies, industry and the European Union. EPSRC actively engages in and encourages partnerships and collaborations across disciplines and around the world. Whilst our centres of research excellence (Innovative Manufacturing Research Centres) work with industry in different areas of manufacturing, including the automotive sector.
- We have the second strongest research base in the world behind only the USA.
- And the UK has the 4th highest concentration of the world's top 1,250 international companies for R&D expenditure, including companies such as Ford, Pfizer, Airbus, Eli Lilly, Nokia, Syngenta, Merck and Motorola.

- Expenditure on R&D in the UK was £25.4 billion in 2007, with 63% of R&D being undertaken by the private sector, 25.6% undertaken by higher education, 4.7% by the Government and 6.7% from other sources.
- R&D investment in the UK is spent more efficiently, with UK researchers producing 19 research papers per US\$1 million of research funding, compared to an average of 12 research papers across other major global economies. The UK produces 9% of the world's scientific papers and has a citation share of 12%, second only to the US.

On engines...

- We are a global centre of excellence for engine design and development (Ford).
- And also a leading location for engine production (Ford and Toyota), with over 3m units produced every year.
- 75% of that production is exported.
- Whilst 25% of all Ford engines worldwide are made in the UK.
- And over 50% of all Ford diesel engines are made here.

On 'premium'...

- The UK is the world's second largest (after Germany) manufacturer of premium brand cars.
- Rolls Royce, Bentley, Aston Martin and Jaguar Land Rover are all homed here.
- But so too are some of the most emotive names in the sports segment: Aston Martin, Lotus and McLaren to name but a few.
- The location of these brands in the UK is fuelling development of cutting edge technology and innovation within our sector.

On motorsport...

- Eight out of the twelve Formula 1 teams are based here.
- They are here to take advantage of the technology and engineering expertise uniquely available in the UK.
- The UK's "Motorsport Valley" employs over 25,000 world-class engineers, while more than 15 universities offer motorsport engineering and management degrees.

On low-carbon

- The UK is determined to be at the forefront of this technological step-change, albeit recognising that to do so will be both a challenge and an opportunity.
- Notably, the UK already has successful advanced niche manufacturers of ultra-low carbon vehicles (e.g. Modec, Smiths and Tesla).
- And we have a research base with expertise in electrochemistry and hydrogen storage, existing battery manufacturers and a highly successful manufacturer of charging posts.
- Government is also playing its part, having announced a comprehensive set of policies worth over £400m to encourage demand, support suppliers and make

electric and hybrid vehicles a reality on UK roads (as set out in the summer 2009 policy document Ultra Low Carbon Vehicles).

- And, in the biggest project of its kind, over 340 low carbon vehicles will be trialled on UK roads over the next 18 months.
- Additionally, £250m has been allocated for consumer incentives and infrastructure development.
- And a further £19m competition to support industry-led collaborative projects for low carbon R&D (£10m from the Technology Strategy Board and £9m from the Department for Transport) has been launched.
- Whilst, £12m of investment by the Technology Strategy Board in sixteen proof of concept studies and six R&D projects is also ongoing.
- An additional £30m has also been set aside in the Strategic Investment Fund. Options to access these funds may include R&D, demonstrations and public procurement for low carbon fuels and vehicles.
- The 2012 Olympics will be the 'greenest' ever - and provide a unique opportunity to showcase electrified transport.

On creating the conditions for business success...

- In an assessment of 178 countries, the World Bank ranks the UK as the leading major European economy and fifth globally, for ease of doing business, significantly higher than countries such as Switzerland, France, Holland and Germany.
- We have received more investment from foreign companies than any other country in Europe.
- We are also the easiest place to set up and run a business in Europe. Setting up in the UK takes 13 days; the European average is 32 days.
- We also have one of the most open, competitive and transparent tax, security and regulatory environments in the world.
- And one of the most flexible labour market amongst all the major European economies.
- Additionally, the UK has one of the most supportive legal systems in the world for business.
- We are committed to delivering the best qualified workforce (e.g. Train-to-Gain initiative).