



# GROWING THE UK AUTOMOTIVE SUPPLY CHAIN

THE ROAD FORWARD – 2012 UPDATE

Compiled and produced by the Department for Business, Innovation & Skills in collaboration with: Stephan Schramm and Dr Matthias Holweg, University of Cambridge, and the Industry Members of the Automotive Council



## automotive B S Department for Business TRADE & Innovation & Skills INVESTMENT





#### **GROWING THE UK AUTOMOTIVE SUPPLY CHAIN**



**Rt Hon Dr Vince Cable MP -** Secretary of State for Business, Innovation & Skills and President of the Board of Trade and Co-chair of the Automotive Council

Manufacturing is central to the Coalition Government's strategy for growth, providing half of our exports, a high proportion of our business R&D and much of the productivity growth of the economy.

The automotive sector is positioned at the forefront of manufacturing and is hugely important to the UK, where in 2011 we built over 1.4 million cars and 2.5 million engines, exporting in excess of 80% of our production.

Over the last 18 months, global automotive investors have pumped around £5.5 billion of new investment into the UK, from R&D to state-of-the-art production facilities, delivering new skills into the work place and making the UK one of the most dynamic and flexible automotive manufacturing locations in the world. This achievement is all the more striking given the problems in the Euro zone and what's happening in our economy. With expectation that we will be producing some 2 million vehicles by 2015, this increase in production provides a once in a lifetime opportunity to install a step change of capacity in the supply chain, through home grown investments and also looking at investors overseas to take a renewed look at the UK.

The Automotive Council has responded to this challenge. Last year, its ground breaking report 'Growing the Automotive Supply Chain – The Road Forward', set out the size and scale of the UK opportunity. This unleashed a significant appetite for new and more localised UK content. This new report identifies at least £3 billion worth of additional contractual opportunities available for our UK based supply chain companies or for those who are willing to invest in and set up within the UK. Delivering these opportunities is undoubtedly a challenge. With government and industry working collaboratively together through the Automotive Council, I am confident that we will seize every opportunity to bring back some of the supply chain which has gone offshore. I would also like to thank all the Council members and others who have contributed to this work.

Vince Cable



#### Introduction

The UK's automotive industry is a manufacturing sector of national importance and one of the most diverse in the world. More than 40 companies manufacture vehicles in the UK from passenger cars through to specialist vehicles and niche marques, as well as van, truck and bus builders.

Last year the UK produced 1.4 million vehicles. Over 80% of current production is exported to markets around the world. Exports are up 10% in the year to date and we have seen the value of vehicle exports exceed the value of vehicle imports over a 12 month period for the first time since 1975.

Over the last 18 months global vehicle manufacturers have committed over £5.5 billion to projects in the UK. Some of these recent announcements include:

- BMW investing a further £250 million in its three UK sites. This is on top of the £500 million it announced in 2011. BMW also revealed that the new 3 cylinder engine for their hybrid sports car, the i8, will be built at Hams Hall.
- GM's decision to build the next Astra at Ellesmere Port followed months of hard work and is a prime example of the Government's industrial strategy in action.
- Jaguar Land Rover is planning to invest more than £2 billion in new products in the 2012/13 fiscal year as the company embarks on the most ambitious investment programme in the company's history, inclusive of a new engine plant in the West Midlands. This investment programme has already generated 8,000 new jobs at its five UK sites over the last 2 years, including an additional 1,100 jobs announced for Jaguar, Castle Bromwich, in July 2012. The company is also to spend another £1 billion with UK suppliers in addition to the £2 billion of UK contracts it awarded in 2011 following continued global demand for the Evoque.
- Nissan confirmed production of two new models for Sunderland which they
  estimate together represent over £250 million of investment and will create
  around 3,000 new jobs at the plant and UK supply chain. Both projects are
  being supported by the Regional Growth Fund.

Against this background it is seen as critically important to grow capacity in the automotive supply chain to meet this increasing demand. This is an issue of the highest priority for the UK Government and the automotive industry who are working closely together in the Automotive Council to develop a strategic focus on building stronger supply chains both now and into the future, particularly as new low carbon technologies come to market.

The Automotive Council last year published a 'sourcing roadmap' (http://www.automotivecouncil.co.uk) to provide an overview of current and prospective sourcing patterns in the UK automotive industry. The aim was to serve as the empirical basis for determining and prioritising activities by the Automotive Council with the results revealing a significant opportunity to build, repatriate and retain supply chain capabilities in the UK automotive sector.



#### Key findings of the 2011 report

The combined UK purchasing spends of the UK-based automotive, commercial vehicle and vellow goods manufacturers is £7.4 billion per annum.

The amount purchased in the UK equates to around 36% of their global purchasing spend.

About 80% of all component types required for vehicle assembly operations can be produced by UK suppliers.

In terms of value-added at supplier level, on average 74% of UK-based suppliers manufacture in the UK (as opposed to those who assemble, late configure, or distribute components); this ratio is lower at first tier suppliers where 65% manufacture, while virtually all second-tier suppliers operate manufacturing facilities in the UK. The average supplier serves six customers (median), with a strong bias towards those Original Equipment Manufacturers that operate vehicle and engine assembly plants in the UK.

'Proximity' was identified as the key competitive advantage of UK suppliers: in operational terms, proximity allows for

- (1) lower logistics cost, a better support for UK-built vehicles,
- (2) the responsive configuration of parts, as well as
- (3) for more flexibility to adjust to volume and product mix fluctuations.

In strategic terms proximity also acts as

- (4) a general proxy for risk reduction the supply chain, as well as
- (5) a hedge against currency fluctuations.

The key reason why UK suppliers have lost business is that their unit cost was not competitive. The OEMs further state that secondary reasons for not sourcing from UK suppliers were, in order of prevalence,

- (1) the general lack of accredited suppliers.
- (2) required processing capabilities that were not available,
- (3) quality and
- (4) logistics that were not competitive.

While it is not possible to identify any specific patterns here, the main reasons however can be summarised as (1) operational execution (QCD), as well as (2), financial aspects (availability of finance, concerns over supplier size and stability).

When UK supply business is lost, about one third stays within the UK and Western Europe, one third goes to low-cost countries, while the final third show no clear pattern. The risk of losing business to low-cost regions rises however considerably for second-tier suppliers. Nonetheless, there exists a sizeable opportunity to win significant fractions of this business back into the UK.



Following the 2011 report, automotive businesses have been pursuing these opportunities on a commercial basis with many making public statements about increasing local content. However the results also indicated a strategic opportunity to look beyond individual company demand to look at the aggregated purchasing power of the UK as a means to attract further investment. In order to take this forward the Automotive Council commissioned an update to the original report to take account of the significant recent investments by the sector and increased UK output.

The basis of this new survey was to establish a robust list of critical parts - components and assemblies - which UK-based vehicle manufacturers were actively seeking to source from the UK.

#### 2012 Survey Update

The survey results are detailed in the table 'UK sourcing opportunity' below. In summary, since the original report UK based vehicle makers have seen an upturn in demand, while at the same time their spend with UK suppliers has increased by at least £1 billion from the £7.4 billion identified in the first survey. UK suppliers are continuing to win new business with UK vehicle makers, and export sales of UK automotive parts are also rising, but the survey has revealed a very considerable opportunity for further increased local sourcing.

In total, the new survey reveals at least £3 billion per annum of new purchasing opportunity for UK-based manufacturing enterprises. This would bring the total value of business placed by UK vehicle makers with UK suppliers to well in excess of £11 billion.

The Component table summarises the opportunity by component, together with an estimated total value. Respondents include almost all of the major UK road vehicle, engine, and construction equipment manufacturers.

#### **Next Steps**

The Automotive Council will actively pursue this £3 billion of new business by proactively raising awareness of the scale of the demand and facilitating and encouraging engagement with prospective suppliers. These will include existing UK-based automotive suppliers, UK suppliers in other sectors looking to diversify into the automotive market and overseas-owned companies including existing investors and potential new or re-entrants to the UK.

The Manufacturing Advisory Service (www.mymas.org) is disseminating this information to various UK trade associations. They also have an additional £7 million to deliver supply chain activities over the next three years.

Through the Government's overseas Trade and Investment network, we are alerting potential global suppliers of the opportunities of doing business in the UK.

Interested suppliers are invited to **contact the Automotive Council Supply Chain Mailbox** (<a href="mailbox">acsupplychain@bis.gsi.gov.uk</a>) who will pass the information to the survey participants.



### UK sourcing opportunity

Component	Value opportunity
	£ millions
Engine castings	370
Steering systems	220
Trim (door cards, headlining, plastics etc)	170
Harnesses	160
Seating	150
Tyres	140
Alloy wheels	140
Lighting	130
Electronics (ECU, ESP, ABS, PDC)	110
Engine forgings	170
External plastics (bumpers, trim)	100
Entertainment/Navigation	90
Bearings	80
Instrument clusters	80
Glass	70
Hinges	70
Hot Stampings	70
Welded assemblies	70
12V lead/acid battery	60
Cast aluminium sub-frames	60
Brake callipers	50
Drive shafts & CVJs	50
Engine accessories (alternator, starter, aircon)	50
Fuel tanks	50
HVAC assembly	50
Chassis Suspension Module	40
misc assemblies (pedals, mirrors, roof rails, grilles etc)	40
Shock absorbers	40
Heat shields	30
Oil pans	30
Small pressings	30
Transmission components	30
Large/medium pressings	30
Steel wheels	20
Carpets	20
Suspension springs	10
Switchgear	10



#### **Future Technology Opportunities**

The focus of the latest survey is aimed at today's commodity sourcing opportunities. However, a strong element of the Automotive Council's work is looking at the transition to low carbon transportation and new supply chain opportunities this will bring with for example increased electrification of the vehicle drive train. The Automotive Council technology roadmaps and related capability assessments show that UK technology providers are well placed to benefit from growing demand for low and ultra low carbon systems incorporating the following technologies:

- Electric machines and power electronics
- Energy storage and energy management
- Internal combustion engines
- Light weight vehicle and powertrain structures
- Intelligent mobility

The Automotive Council held a *Meet the Engineer* event on 15 May 2012 to introduce vehicle manufacturers to technology providers working in these fields with a view to generating new research and development collaborations leading to possible commercial relationships.

#### **Automotive Council Meet the Engineer event on 15 May 2012**

90+ attendees

30 technologies presented, majority by Small and Medium sized Enterprises 45 + Engineers from 20 Original Equipment Manufacturers and Tier 1 advanced engineering teams represented.

Other sectors attended including rail and bus

60+ "meetings" at the event

100 + new connections requested in feedback forms

Vast majority of Presenters and Engineers were very satisfied or satisfied with the event and would take part in an Automotive Council event again.

Over 50% of presenters said they were likely to have new technology in the next 12 months

Full details of the Meet the Engineer event including presentations can be found at (www.automotivecouncil.co.uk/low-carbon-technology/meet-the-engineer/). If you are interested in participating in the next Meet the Engineer event in 2013, please contact Dave Yuill at dave.yuill@bis.gsi.gov.uk



#### **Investing in the UK Automotive Sector**

Why the UK: "The UK remains Europe's top FDI destination.....UK attractiveness lies in solid infrastructure, skilled workforce and pro-business environment" – Ernst & Young's 2012 European Attractiveness Survey.

- Low corporation tax (reducing to 22% by 2014)
- Lowest labour cost in Western Europe, and a highly flexible workforce
- Over 100 tax treaties to avoid double taxation
- Leading location for research & development
- 130% tax credit on R&D spend
- Patent Box reduces corporation tax to 10%
- Competitive personal taxes
- Most extensive air transport system in Europe and over 100 ports
- Leading ICT infrastructure

**How UKTI can help:** UK Trade and Investment is the national government agency that offers free support and independent advice to foreign companies looking to invest or locate in the UK.

- Help you understand the benefits of locating and growing in the UK
- Support in developing your business strategy for the UK
- Sector specialists to help you find the right location and establish you in the UK sector
- · Advice on skills and recruitment
- Guidance on taxation and setting up a UK company
- On-going support before, during and after investment, to sustain and grow your business
- Help to navigate through government to find the right contacts and funding opportunities for you

To find out more about investing in the UK contact James Reeves, Advanced Engineering Specialist: James.Reeves@uktispecialist.com

#### Crown copyright August 2012

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. Visit

<u>www.nationalarchives.gov.uk/doc/open-government-licence</u>, write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: <u>psi@nationalarchives.gsi.gov.uk</u>.

This publication is also available on our website at <a href="www.bis.gov.uk">www.bis.gov.uk</a>
Any enquiries regarding this publication should be sent to:

Department for Business, Innovation and Skills 1 Victoria Street

London SW1H 0ET Tel: 020 7215 5000

If you require this publication in an alternative format, email <a href="mailto:enquiries@bis.gsi.gov.uk">enquiries@bis.gsi.gov.uk</a>, or call 020 7215 5000.

Cover photograph courtesy of Aston Martin.

**URN 12/1010**