



BOSCH

Robert Bosch (Australia) Pty.
Ltd
Locked Bag 66
Clayton South VIC 3169
Visitors:
1555 Centre Road
Clayton VIC 3168
Tel +61 3 9541 5555
www.bosch.com.au

27th November 2013

PC Review of Australian Automotive Manufacturing

Robert Bosch Australia (RBAU) is the regional subsidiary of the Bosch Group, a leading global supplier of technology and services. In 2012, the Bosch Group employed more than 305,000 associates worldwide, and generated revenues of 52 billion Euros from sales of automotive and industrial technology, consumer goods, and building technologies.

In 2012 RBAU employed more than 1200 people with revenues in excess of 698 million Australian dollars.

RBAU has had an Australian presence in automotive component supply dating back to 1907, and continues to be active in the engineering and manufacture of automotive components and systems for domestic and international automotive markets. RBAU's business was historically heavily weighted toward the automotive components sector, with significant and continuous component manufacturing since 1955. Bosch automotive products contribute to clean and economical driving (injection systems, drive systems, sensors), as well as safe and comfortable driving (active and passive safety systems, driver assistance systems, semiconductors and sensors).

The Rise and Fall of RBAU's Automotive Components Business

By the early 1950's, a favourable policy environment and a growing automotive industry gave the Bosch group the confidence to found a wholly owned subsidiary and make its first large scale investments for automotive



component manufacturing and engineering in Australia. This confidence was maintained over a period of more than 40 years with continuous investments in new facilities and capabilities. From 1991 through 2007, RBAU's automotive components division achieved enviable results. Turnover grew from \$177 million to \$676 million, exports grew from zero to \$400 million. Global responsibility (engineering and manufacturing) for the product group "Vehicle Security Systems" was won. Investments for automotive diode production, first as support for the lead plant in Germany, and later as the "sole" plant, were secured. Global production for "Steering Angle Sensors", an essential component in a Vehicle Stability Control System and one in which Bosch has a 35% global market share, was consolidated to RBAU. Parallel to these achievements, Bosch made continuous investments for the manufacture and engineering of vehicle safety systems, to bring the latest safety technologies (ABS, then ESP) to the local vehicle producers.

27th November 2013
Page 2 of 4

Over the course of the last 60 years, RBAU has built up a significant competence in the engineering and manufacturing of mechanical, mechatronic, and electronic components and systems, able to meet or exceed the requirements and standards of this most challenging of industries. RBAU also developed the capability to design and produce the production equipment required for the products produced. This too resulted in export orders from international Bosch plants as they commissioned RBAU to build the equipment needed to produce similar products.

The picture today is very different however.

In 2009, thanks to the Global Financial Crisis, the parent company board had an increased appetite to take difficult decisions. This, combined with policy and market conditions that undermined the Board's confidence in the long term prospects for the Australian automotive industry, excess capacities around the globe, limited capital for necessary new investments, and a rapid rise in the capability of the "low cost" locations resulted in the perfect storm for RBAU's automotive components business. Consequently, most of the Australian manufacturing was transferred to overseas plants, with only Diode production (sales of \$43 million p.a., 100% export, 79 employees) able to be saved.

For the same reasons, capability in engine management system development and application was given up and the engineering facilities closed.

Engineering for automotive electronics (120 engineers) and vehicle safety systems (62 engineers) for domestic customers (~20%) and export customers (~80%) remains.

Our automotive turnover declined from \$676 million in 2007 to \$221 million in 2012. During the same period employees numbers reduced from 1244 to 385.

**Was the Fall inevitable?**

27th November 2013
Page 3 of 4

No. Had one or a number of the conditions described not occurred, a greater level of manufacturing could have been maintained.

For example:

Had the Australian dollar remained at or below the long-run average exchange rate against the currencies of key trading partners, the case for relocating manufacturing would not have met the payback criteria. Manufacturing would likely have continued in Australia.

Had there been less excess capacity in the overseas plants, the payback criteria would likely not have been met, again more manufacturing could have been retained.

Bosch maintains a strong preference of "local for local". That is, having production and engineering present in the countries where its customers have vehicle production. A domestic vehicle industry with an outlook for combined volumes in excess of 400,000 units per annum would likely have enabled a greater level of manufacturing to be retained, and would even have allowed new investment proposals for local manufacturing to be put to the board.

What has industry support received by Bosch helped deliver?

The various forms of support received directly and indirectly by RBAU has been decisive in securing investments totalling more than \$339 million (period 1999 to 2007) and generating export revenues exceeding \$3.1 billion (period 1999 to 2007).

At the peak, this support underpinned the employment of 900 employees in manufacturing, engineering and services.

High levels of process methodology, "Lean Manufacturing" know-how and problem-solving skills have been developed. Many Bosch production and process engineers have moved outside the automotive sector to successfully apply these skills in consulting and organizational roles within finance, mining, aerospace, and FMCG sectors, improving efficiencies across the economy.

Competencies developed in automotive fields are already being applied to improve efficiency and enhance safety in rail vehicles, mining equipment, materials handling, and industrial applications.

Our Vehicle Safety System (ABS & ESP) engineers have worked tirelessly with the RACV, TAC, VICROADS, MUARC, their equivalent interstate organizations, local automotive manufacturers and ANCAP to lower the road toll through application of technology and improved awareness of safety technologies.

In the future, an Australian developed "Back-Over Avoidance" system could be deployed into global markets with potential to protect the most vulnerable of road users. Our local presence and the availability of skilled engineers to



apply and develop a system for local cars provided an early understanding of specific technological issues related to Australian conditions.

27th November 2013
Page 4 of 4

RBAU is applying its know-how in production equipment design, manufacture and process optimization to improve the manufacturing performance for external customers across various sectors.

Bosch's Position regarding ongoing and future investments.

Bosch would take a more positive stance toward ongoing and future investments in automotive component manufacturing and engineering if the environment enabled Australian vehicle manufacturers to achieve reasonable scale, and with a substantial level of local engineering and value-add.

Future Policy.

Bosch Australia recommends that future policy focuses on:

- 1) Measures which will genuinely assist Australian vehicle manufacturers to achieve scale. Only with scale in domestic vehicle manufacturing will the majority of the component sector have opportunities.
- 2) Maintaining a high level of support for component sector R&D, but decoupling this from a sales cap related to manufacturing. Engineering is valuable in its own right, independent of manufacturing.
- 3) Extending R&D support to include innovations which are for the automotive aftermarket.
- 4) Avoiding trade agreements with trade partners that treat Australian automotive manufacturing and engineering inequitably.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'G. Smith', written over a horizontal line.

Gavin Smith
President
Robert Bosch (Australia) Pty. Ltd