

Submission on the Australian Automotive Industry

Some observations on the Australian Automotive Industry and it's future.

1. Overview

I believe we must consider the Auto industry in two parts. The future is not simply a single option of 'all or none'.

Two sub-industries:

- **Volume Production activities** - Component manufacture, vehicle assembly and associated functions.
- **Pre-volume production activities** – Market research, Product research, Design, Engineering, Planning, Program Management, Business Analysis etc.

2. Auto Industry #1 - Volume Production

What is the minimum production volume for a sustainability industry?

Most observers agree that the Auto Industry contributes to the greater good of general manufacturing in Australia. Accepting this position, what is the minimum scale of auto industry annual production volume that will still provide these flow-on benefits? Do we require – 100k, 250k, 500k? Can it be in one State only?

Given the economic challenges for Australia to remain competitive in global auto assembly, once we have determined the minimum level of Auto production necessary to still generate the flow-on benefits to the broader manufacturing sector, the Government should target support to maintain a production volume at or above that minimum level. I refer to the FAPM position in their submission which has covered demand development.

The inherent disadvantages of adopting common global programs.

Under the current scenario the Australian Industry faces a massive on-going challenge to achieving a satisfactory business model for Australian production when producing common model variants in Australia at relative low volume (<50k), competing against the same variants that are produced in high volume (>100k) in low labour countries (China, Thailand).

Under this current scenario, the locally produced global models tend to have insufficient volume to allow viable localisation, therefore the vast majority of components will be imported from the Asian suppliers that support the high volume China or Thai plants.

This results in a poor business model where many components are imported in individual packaging and freight cost (possibly collectively more expensive than importing a complete vehicle), then assembled by Aust labour in a plant with inferior economies of scale.

Both GM Holden & Toyota are currently planning to build common global platforms that have no major differentiation from the vehicles being produced in higher volume in lower labour markets. This commonality is efficient for the OEM global planning, but doesn't allow any opportunity for the Australian product to command any form of premium pricing position to compensate for the higher Aust production costs, or capture a niche export market.

Aust production could be more sustainable if we produced vehicles that target a less price sensitive market positioning, so that the additional production costs (compared to Asia) can be absorbed in a premium pricing position, eg Volvo, or in an export capable market niche, eg EVs (Volt) or specialised Commercial vehicles. In theory the Camry Hybrid could have been a unique opportunity, however Toyota choose to also produce the variant in Thailand thereby excluding export markets opportunities for Toyota Aust.

I see no future for the Auto industry in GM Holden producing the proposed second global vehicle platform in low volume in Australia. Instead, as an alternate I would rather see the Aust Gov pressuring GM to move the global production of the next generation of the GM Volt to Australia. This is a highly technologically advanced vehicle with dual powertrains and advanced driver aids. In the global pursuit for increased fuel efficiency, vehicles such as this attract significantly more R&D and vehicle development. (For example, spending more resource on light-weighting in these vehicles yields a higher return as it directly results in a better fuel economy). Entice GM to design the next Volt with optimised commonality to complement the localisation of components in the next Cruze.

It's an unavoidable reality that all of the current (and potential) OEMs are owned and controlled by overseas companies. It has been many years since the local Executives of these OEMs have been Australian. In prior years, the local representatives (Geoff Polities, Rob McEniry, John Nigro) would endeavour to get the best outcome for the country as well as the business. This is evident in the home countries of major OEMs, such as VW in Germany or Renault in France or all Japanese and Korean OEMs). In the current situation, from my experience, the OEM Executives are on assignment as a stage in their career growth path and have no interest in challenging the corporate master plan. If the current structure was in place ten years ago, the Ford Territory would not have been created and Ford's market situation would be considerably worse.

Targeting of Specialised or Niche vehicles, produced at the strategic optimum production volume.

The ideal vehicle producer compatible with Australia's on-going requirements may not be Toyota or GM! Australia may be able to entice one or two new OEMs that can allocate the global production of an appropriate niche variant to a new Aust operation eg. SAIC for it's London Taxi, Geely for an EV variant of a Volvo, IVECO for a specialised commercial vehicle.

This phase of vehicle production represents a majority of Australian auto jobs in both the OEMs and the supplier base. It also drives quality practices and mentality (eg <5 defects per million parts) that are unheard of in other industries.

3. Auto Industry #2 – Pre-Volume Production

The second, and to me, the more beneficial to Australia's future overall growth is the capability and skills flow-on resulting from the many activities that are undertaken before volume production commences.

Examples of professions utilised in the Pre-Production phase:

- Market Analysis
- Design Innovation
- Product Planning
- Program Management
- Research & Development
- Advanced Purchasing
- Prototyping
- Material Development
- Quality Planning
- Testing
- and many more

An example of flow-on benefits from Auto.

One example of the transference of skills from auto – several year ago Air International was approached by an entrepreneur wishing to apply auto industry skills (of program management, supply chain optimisation, component modularisation, cost value analysis etc.) to a renewable energy business opportunity. Whilst after a lengthy investigation Air International chose not to pursue this non-auto business direction, three senior managers with expertise in the Pre-Production tasks elected to leave Air International (with AI's blessing) to establish a new company Green Thermal Energy Technology (gTET) specialising in the conversion of waste heat energy into electricity.

I'm confident gTET will be very successful in this new clean and green industry. I expect they will grow into a sizable Australian company that will minimise energy consumption for many local companies and provide export business opportunities.

Life for an Australian auto industry without local production

If in the worst-case outcome both Toyota and GM choose to cease local vehicle production, Australia must fight to retain these Pre-Production capabilities. These roles and experiences provide the greatest flow-on skills and capability benefit to the wider Australian business environment.

Australia's neighbouring auto markets of China, India, Thailand, Indonesia, Malaysia may all have greater production volumes and low labour costs than

Australia, but none have the experience and vehicle development facilities available in Australia. A clear example of this is Ford. Whilst they have several Technical Centres in China and thousands of engineers in Asia Pacific, they will still rely on the Australian capability and excellent development facilities for at least another six years. Australia should do everything possible to ensure Ford retains its Asia Pacific base here.

We must also encourage Holden to retain Pre-Production capability in Australia regardless of what they do in Adelaide.

A scenario I feel worth pursuing is to strategically create a specialisation in design and development of light commercial vehicles. Ford has based the Ranger T6 Engineering team in Australia. This team has done a wonderful job of developing the Ranger and Everest for production in Thailand, South Africa and South America and successful sales in many global markets.

GM produces a similar series of vehicles (Colorado and Trailblazer) in similar global markets. Currently these vehicles have their development 'Home-Room' in Brazil. The Australian Government should pressure GM to relocate the Colorado homeroom to Melbourne. This idea has already been proposed to Holden and rejected. GM will fight against this move, but it would be in Australia's interest to build a centralised specialised SUV/Pick Up truck capability here. Given that Thailand represents one of the major production centres for these vehicles, the relatively small time zone difference would be manageable.

If we could create a specialised design and development capability for SUV & Pick Ups, I expect we could also build a supplier network that could design and develop the unique components that are required for these vehicles. These format vehicles are traditionally not as advanced as passenger vehicles in areas such as safety and fuel efficiency given Australia an opportunity to utilise local skills to this effect. Further, these relatively unique parts may allow Australian suppliers to build business partnerships with emerging local suppliers in the new markets where these vehicles are manufactured.

4. In summary

The key message I wish to convey is that the Australian auto industry has many facets and forms of contribution to the betterment of Australia. If local vehicle production cannot be maintained we shouldn't immediately assume that all aspects that make up the Australian auto industry must be sacrificed.

Allan Robins
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Author's background

- Obsessed with all forms of auto vehicles and aircraft as a child and teenager.
- Joined GM Holden as a trainee Draughtsman in 1971.

- Obtained Engineering qualifications through part time study.
- Joined Nissan Manufacturing in 1976, progressed through many roles in Engineering, Design Dept. Administration.
- Transferred to Nissan Motor Co in role of Product Planning in 1992, following the closure of Nissan Manufacturing.
- Joined Australian Tier 1 supplier Air International in 1996 responsible for business with General Motors. Air International won two GM 'Supplier of the Year' awards on 1998 & 1999, and started to supply GM North America in 2000.
- Transferred to a global Business Development role in 2003.
- Held positions of Co-Chair of GM's Asia Pacific Supplier Council, Chair of China-Victoria Auto Cluster and Industry Leader of multiple Auto Trade Delegations to China, India and other Asian markets.
- Air International Thermal, whilst founded in Australia, now has approximately 1,600 employees internationally and approximately 20 manufacturing locations globally. The Australian portion of AI's business represents less than 10% of Air International's global business.
- Recently left Air International and now providing consultancy support to Australian companies wishing to enter new markets.