Truck Industry Council

TRUCK INDUSTRY COUNCIL
SAFER GREENER ESSENTIAL

Fleet Report 2015

TODAY'S TRUCKS

TIC

Council members, comprising local truck manufacturers, distributors and major component suppliers, are today meeting global standards for safety, emissions and productivity.

It is a truism that: "Todays trucks are safer, greener and essential for a modern Australia".

TIC members throughout 2014 continued their commitment to meeting the challenges, not only of today, but of the future for road transport.

An opportunity exists for government to adjust policy levers that will encourage the modernization of the nation's truck fleet and the take up of innovative technologies.

This document is available at www.truck-industry-council.org. Please refer to this website for the latest version.

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Executive Summary

The aim of the 2014 Truck Industry Council (TIC) Fleet Report is to provide the reader with an understanding of the nature and scope of the Australian Truck Market, in particular, noting trends in sales and the issues that are currently faced by the sector.

A number of key points emerge from this report that have an impact on the future of economic, transport and social policy development by Governments at both the Federal and State levels.

At the end of 2014 the industry sees that sales of trucks have not yet recovered from the highs experienced pre the Global Financial Crises (GFC). In fact new trucks sold in Australia for calendar year 2014 were recorded as 30,804 units. This figure highlights that since 2012 growth in sales has stalled and means that the industry is still experiencing in 2014, six years after the GFC, a twenty percent downturn when compared to the industry sales highpoint of 2007, some 38,131 units. Such a result has profound consequences for not only the industry but also the wider society.

It follows that if the national truck fleet is not renewing itself then the age of the Australian truck fleet will become older. When compared to those first world nations that traditionally Australia would compare itself, Australia has an old truck fleet with an average age of 13.84 years. This is almost twice the age of countries like the France 6.4 years; and North America 6.7 years; while the average age of trucks in the U.K. is 7.8 years; and 9.2 years in Canada and Japan.

The age of the truck fleet is an important point for public policy development given the additional telling statistic that the Australian truck fleet comprises thirty percent of vehicles (174,543 trucks) that are pre 1996 models, meaning that these trucks were not required to meet any exhaust emissions standard at all. The majority of these vehicles are known to be operating in the urban precincts of greater Sydney, Melbourne and Brisbane.

This Fleet Report notes that since 1996 trucks manufactured domestically or imported into Australia have supplied to the market the latest in safety and environmental technologies.

For example, it would take SIXTY of today's trucks to emit the PM (black soot) emissions of ONE pre 1996 truck.

This is quite a revealing statistic and testament to an industry willing to work with Government for the benefit of society; reduced emissions means less adverse health impacts, such as, asthma and heart attacks.

Trucks sold today employ more advanced safety features than earlier models making travel on the nation's road networks safer for all. Trucks today are also quieter than earlier models.

Put simply, the trucks sold today are *Safer, Cleaner, and Greener* and most importantly *Essential* for the efficient and effective operation of the society in which we all live.

Very few Australians would appreciate that the Australian truck market is one of the most competitive markets in the world. This is due to positive Government regulation which since the mid-1990s has been supported by both sides of politics. This bipartisanship facilitates a business environment that makes it possible to market in this country trucks manufactured from Europe, America and Asia principally Japan. Currently there are nine truck manufacturers in Australia representing seventeen brands. As a result, Australian purchasers of these trucks have the widest available choice from which to choose, making it possible for them to conduct their business efficiently and effectively. In addition to the truck manufacturers TIC membership consists of a further three engine and component suppliers.

The Truck Industry Council (TIC) prides itself on being an independent, not-for-profit organisation representing the united views of truck manufacturers, truck importers, diesel engine companies and major component suppliers to the Federal Government, State and Territory Governments, Local Government, Industry and Business Associations and the general public.

Today the truck industry is designing, engineering, testing, developing and manufacturing trucks at three major locations in Australia **without Federal Government assistance.**

The companies involved, and their locations, are:

- VOLVO GROUP AUSTRALIA
  manufacturing Volvo and Mack brand trucks at Wacol, Queensland;
- PACCAR AUSTRALIA
  manufacturing Kenworth trucks at Bayswater, Victoria;
- IVECO TRUCKS AUSTRALIA
  manufacturing IVECO trucks at Dandenong, Victoria.

These three plants are necessary to meet the specific requirements of Australian operators who work in conditions unique to anywhere else in the world and with truck importers ensure the efficient transportation of the nation's growing freight task. The three plants combined produce about fifty percent of all heavy duty trucks sold in Australia, and close to one hundred percent of the heavy haulage vehicles used in Australia's mining industry. In addition, the majority of the road trains that service outback Australia are also designed and built in Australia. Truck manufacturers in Australia are major employers of skilled and semi-skilled people (trade, engineering, electronic and information technologies) with total employment of

approximately 36,000 employed in disciplines such as local truck manufacturing, import and distribution of foreign trucks, sales, service and parts, as well as body builders and equipment suppliers.

TIC members are well advanced in the design and manufacture of alternatively fuelled trucks, particularly Liquefied Natural Gas (LNG) for heavy duty long distance transport, and Compressed Natural Gas (CNG) and Ethanol mainly for urban distribution work. Equally manufacturers are producing hybrid trucks that are available today for the Australian market with the immediate benefit of reducing noise levels and consumption rates of diesel and alternative fuels.

The Truck Industry Council has conducted research into the public's perception of trucks. One conclusion from the research was that issues surrounding the role of trucks, current safety standards and environmental impacts are of significant public interest. Of particular interest to policy makers is the conclusion that there was substantial public support for the implementation of stricter standards as they relate to trucks especially in built up areas. Almost sixty percent of respondents believe that all trucks should have to comply with strict environmental standards before being allowed into built up areas while seventy-five percent believe that a minimum standard of safety features should exist on every truck that operates within cities.

From this research it is clear that the public want to see cleaner and quieter trucks operating in urban areas. The public fully accepts the need for trucks on our roads, but is no longer willing to accept trucks emitting black smoke/soot or excessive noise. Truck manufacturers, in conjunction with Federal and State Governments have, over the past eighteen years implemented a program of reducing both exhaust emission levels and noise levels.

Yet despite this collaboration the age of the Australian truck fleet is getting older.

The Truck Industry Council believes that there is much to be gained from a program with the objective of modernising the Australian truck fleet. To facilitate a younger, safer, cleaner and greener Australian truck fleet TIC calls upon the Federal Government to financially incentivise operators of trucks to modernise their fleets, initially, with a focus on pre 1996 trucks. The aim is to accelerate the adoption of new ADR 80/03 diesel only trucks and the adoption of new alternatively fuelled and powered (ADR 80/03 PLUS) trucks into the Australian market.

By better utilisation of the fuel tax credit rebate scheme, as it relates to on-highway trucks, this investment allowance program can be either fully funded (revenue neutral) or majority funded resulting in $4.7 B in benefits between 2015 and 2024. By doing so the Australian population will benefit through improved health outcomes (reduced noxious air pollutants), improved environmental outcomes (greenhouse gas emission savings – up to twenty five percent for alternatively fuelled and hybrid vehicles), improved road safety outcomes and improved efficiency and effectiveness of the nation's distribution channels through increased vehicle productivity brought about by a younger truck fleet.

I commend the 2014 Truck Industry Council Fleet Report to you. Should you wish to discuss the contents further please do not hesitate to contact the TIC secretariat by phone on (02) 6273 3222.

Yours sincerely

Phil Taylor
President
Truck Industry Council

The Truck Industry Council in brief

The Truck Industry Council (TIC) was formed in 2001 as an independent organisation to represent the united views of local truck manufacturers, importers of trucks, diesel engine companies, and major component suppliers, to governments, political parties, other industry groups as well as the general public.

Prior to its formation, for 30 years the TIC existed as the Commercial Vehicle Committee within the Federal Chamber of Automotive Industries (FCAI).

TIC maintains regular contact with the Australian Federal Parliament and relevant government departments in Canberra. Close relations are also maintained with State Transport Ministers and their authorities.

Vision

The vision of the Truck Industry Council is described through its positioning statement:

Today's Trucks:
Safer, Greener, Essential

The trucks sold in the Australian market today are safer and greener because of the advanced technologies being employed by manufacturers that make sharing the road safer for all road users and more environmentally friendly for all people. The majority of the general public appreciates and understands the essential need for trucks on Australian roads, the role trucks play in the economy and in the individual's day-to-day living.

Mission Statement

The Mission of the Truck Industry Council is to:

Promote the community benefits of modern truck technologies, while achieving the goals of continued growth, positive image and profitability of a successful truck and major components industry in Australia.

This is achieved through co-operation with governments and industry groups, by reinforcing the positive aspects of modern trucks. TIC assists governments to develop policy and programs that will offer the best possible solutions to achieve economic growth, truck productivity and enhanced safety outcomes, while simultaneously reducing the environmental impact of road-based freight transportation.

Governance

Today, the Council comprises 12 member companies. These companies represent 17 truck brands, 2 engine companies, and a heavy vehicle major component supplier. The Board of the TIC comprises the Chief Executives of member companies and meets three times a year.

Co-operation and Partnerships

The heavy vehicle expertise and practical experience represented by TIC's membership, has seen TIC acquire the reputation of being the principal source of technical and regulatory advice to Governments regarding the nation's truck fleet. Council works co-operatively with all governments to ensure that the Standards and Regulations being proposed for heavy vehicles are technically feasible, cost effective, and provide the world's best safety and environmental benefits.

TIC is represented on a wide range of committees and working groups, including:

- Performance Based Standards (PBS) Policy Committee
- Intelligent Transport Systems (ITS) Industry Reference Group
- Department of Infrastructure and Regional Development (DIRD) Strategic Vehicle Safety and Environment Group (SVSEG)
- DIRD's Technical Liaison Group (TLG)
- Energy Reduction Fund - Transport Working Group
- Alternative Fuels for Transport Implementation Advisory Group
- NSW Road Freight Industry Council
- National Transport Commission Industry Advisory Group
- National Heavy Vehicle Regulator (NHVR) Advisory Committees

Industry Membership by Business Activity

Unlike passenger vehicles, new trucks released into the Australian marketplace, in almost all cases, require some form of local intervention, additions or modification, in order to become complete/ fit for service. Other than for locally manufactured prime movers and a small number of light duty dump trucks, typically from Japan, trucks will almost always need to have bodies (or other equipment) fitted by a second manufacturer, before they enter service.

The TIC comprises members concerned with the following activities:

- Manufacture of trucks comprised of imported and locally manufactured components, to produce a fully built-up truck.
- Importing and distribution of fully built-up trucks (referred to as CBU – completely built units).
- Importing and distribution of partially built-up trucks (referred to as CKD – completely knocked down).
- A combination of any or all of the above activities in order to produce finished trucks.
- Importing and distribution of major truck components, such as engines, axles and transmissions. Such businesses may also engage locally, in partial assembly and or modification of these components to meet local conditions and/or customer requirements.
- Distribution of trucks and or major components at a Retail level (i.e. Dealership sales, service and spare parts operations).

Corporate Citizenship

The participation of trucks in road transport operations means that trucks interface with almost the entire community at some time, almost every day. The TIC and its member companies take matters of social responsibility as being a core value, and work diligently towards improving the available truck technologies and systems designed to enhance that social interface.

A key function of the TIC is to provide advice to government on technical and regulatory matters. Council works co-operatively amongst members to ensure that the Standards and Regulations being proposed for heavy vehicles are technically feasible, cost effective, and provide the world's best safety and environmental benefits.

Achievements During the Year

A number of milestone events were passed by the TIC during 2014. Throughout this phase, several submissions were tendered to government departments and the TIC played a significant role formulating industry position statements in advisory groups. These include:

2014 Review of the Motor Vehicle Standards Act (MVSA) 1989.

TIC lodged a comprehensive submission to the Department of Infrastructure and Regional Development Discussion Paper regarding potential changes to the MVSA 1989. Key elements of the Council's submission included support for the adoption of UN-ECE standards where applicable to Australia's unique road transport sector, operating and climatic conditions and the attendant reduction of Australian specific ADR's where such design rules are negated by UN-ECE regulations.

Council rejected any proposal that reduced the safety and/or environmental performance of any motor vehicle imported into Australia to levels lower than that of existing Australian regulations.

Council also rejected proposals that would allow the importation of trucks that are not "fit for purpose" in the unique Australian transport industry and/or Australia's unique climate and operating conditions.

TIC Policy on Heavy Vehicle Speed Limiters

The important message from TIC was that members were already producing speed limiters that comply with the appropriate regulation ADR65/00. A further message was that it takes a conscious act on behalf of the vehicle's driver or owner to perform some modification/s designed to over-ride the speed limiting system.

Heavy Vehicle Charging and Investment Reform

TIC provided a response and feedback to the project office for this reform initiative. A key element of the response was to highlight the feasibility of improving outcomes by integrating a vehicle's emission standard with heavy vehicle charging schemes such as Road User Charges (RUC) and Mass Distance Location (MDL) charging.

Heavy Vehicle Road Worthiness (HVRW) Review

TIC was a prominent member of the HVRW Review Technical Working Group (TWG). This group was tasked with providing technical comment and feedback to the joint NTC and NHVR review of heavy vehicle roadworthiness. Key areas where the TWG provided comment and guidance included the effectiveness and consistency of current heavy vehicle inspections and test equipment, the heavy vehicle inspection manual, key safety systems that could compromise heavy vehicle safety, the safety implications of using non-genuine spare parts and heavy vehicle road worthiness inspections frequency and type established on a risk based methodology. The HVRW Review is expected to continue well into 2015.

National Heavy Vehicle Combination Braking Advisory

TIC is representing the views and expertise of truck manufacturers in the industry and government collective that is reviewing heavy vehicle combination braking. The aim of the group is to develop an advisory, or guide, for industry (primarily truck operators) to use when configuring various truck and trailer combinations that have brake systems utilizing differing brake technologies and/or compliance to various versions of ADR35 (truck braking systems) and ADR38 (heavy trailer braking systems). The advisory will aim to guide operators through the steps required in identifying heavy vehicle brake systems and combining individual units to produce a heavy vehicle combination that has stable and consistent braking performance. The groups aim is to have this work completed and the advisory published by the latter part of 2015.

Senate Enquiry into Australia's Transport Energy Resilience and Sustainability

TIC's submission to the Senate Enquiry detailed that:

- The Australian Government does not currently mandate any minimum transport fuel stock levels to be held by industry nor mandate the reporting of actual industry fuel stockholding levels.
- Australia fails to meet its International Energy Agency stockholding obligations.
- Increased domestic production of cost-competitive alternative transport fuels such as Natural Gas would strengthen Australia's liquid fuel security by diversifying supply.
- The recent abolishment of the Fuels Standards Consultative Committee within the Department of Environment has derailed the completion of the B20 Fuel Standard for bio-diesel and has put in doubt the development of all future bio-fuel standards.

Further TIC's submission detailed the development of a self-funding plan for renewing the Australian truck fleet and in doing so would provide both increased vehicle safety and better environmental outcomes over that of the existing truck park. This plan features incentives for trucks that are powered by alternative energy sources, thus reducing Australia's reliance on imported fuels. TIC provided a copy of this document, the TIC National Truck Plan, to the Senate Enquiry. This plan is discussed later in this Fleet Report.

National Environment Protection Monitoring (NEPM)

The Federal Government is conducting a review into the National Environment Protection Monitoring (NEPM) of particulate matter (PM), both PM10 and PM2.5 in Australian air. TIC's response to the NEPM discussion paper highlighted the following issues:

- No country or government in the world legislates for PM2.5 exhaust emission levels for motor vehicles.
- No practical technology exists to remove PM2.5 from a motor vehicle's exhaust.
- Over 30% of heavy vehicles on Australian roads are pre-1996 and are not required to comply with any exhaust emission standard. Typically these older trucks operate in urban areas.
- Just one pre 1996 truck emits 60 times the PM of a 2007, or later truck (due to today's advanced exhaust emission technologies).
- The NEPM should consider recommending that the number of HV's that pre-date any emission regulation (pre 1996 trucks) should be reduced by government regulation, or incentives.

Statistical Data

An important function of the Council's secretariat is to maintain an updated historical database on all heavy vehicles sold into the Australian marketplace.

Council provides data information services to related industry parties and stakeholders on a regular basis. Such data is released and marketed under the registered brand name "T-Mark".

Industry Performance

Freight in Australia

In a recent report commissioned by the ATA, Pricewaterhouse Coopers Australia (PwC) outlined a range of influences freight, and in particular road transport freight, has on the Australian economy (PwC, March 2013). The report states inter alia "Freight transport underpins the functioning of the national economy by connecting producers, wholesalers and retailers in capital cities and regions of Australia".

"The cost of moving freight is directly reflected in the prices of the goods we consume and the competitiveness of our exports. The vastness of the Australian continent and the geographic dispersion of Australia's major towns and cities mean that efficient freight networks are critical to our national productivity". (PwC, March 2013)

The Bureau of Infrastructure, Transport and Regional Economics' Freightline 1 - Australian Freight Transport Overview (2014) sets out the current scope (in terms of volumes) of current transport activity. The report states "In FY 2011-12 the domestic freight task totalled almost 600 billion tonne kilometres. That is equivalent to about 26,000 tonne kilometres of freight moved for every person in Australia"

The modal split of the freight task is:

- Rail transport accounts for approximately 49% (iron ore and coal exports accounting for over 80% of this mode)
- Road Freight about 35% of the total freight
- Coastal sea freight 17%, and
- Air freight less than 0.01% of total freight by weight.

- **When coal and iron ore is discounted from rail's volume, road freight is the main mode of transport for the majority of commodities produced and/or consumed in Australia.**
- **Notwithstanding their contribution to the freight task, however, freight vehicles account for less than 10% of total road use.**
- **B-double heavy vehicle combinations are now the most significant road freight vehicle combination, accounting for around 40% of total road freight.**

Road Freight Characteristics

- **Trucks tend to carry high-value non-bulk freight, such as consumer goods, over short distances.**
- **Over 95% of Australia's road freight is carried in heavy vehicles (>4.5T).**
- **Over one fifth of the total road freight occurred in capital cities.**
- **Other urban areas comprised a further 10%.**
- **Intercapital road freight accounts for an approximately 18–19% of total road freight movements.**
- **50% comprises freight transported between capital cities and regional areas and other inter- and intrastate freight.**
- **Articulated trucks account for 78% and rigid trucks approximately 18% of the total road freight task.**

Emissions Contribution

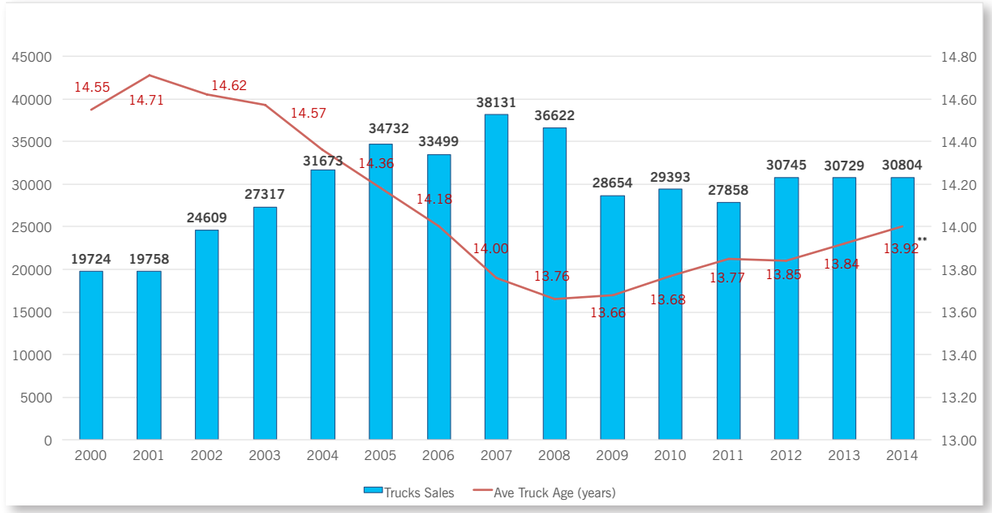
In 2012 total transport contributed 16% of total domestic emissions. It is projected that by year 2020 road transport will be the largest sub sector, emitting 85% of the total transport sector's emissions (RARE Consulting as cited by NTC, Reducing transport carbon emissions, last updated April 2012).

Australia has had road vehicle emission standards for new vehicles (cars) in place since the early 1970s, and for heavy vehicles (trucks) since mid-1996. These standards have been progressively tightened over the ensuing years. The current standards reflect Australia's commitment to harmonise with the vehicle standards developed by the UN-ECE wherever possible.

Since January 2011, all new trucks introduced into the Australian marketplace must meet the stringent Euro 5 (or equivalent Japanese, or USA) emission standard. Whilst a new standard, Euro 6, has come into effect in the EU, it is yet to be gazetted for introduction into the Australian marketplace. However, a number of TIC member companies are already offering product that meets this new standard to customers.

Whilst there is an availability to the market of trucks that meet the latest standards in diesel emissions, a slowing economy and a lack of confidence by operators to purchase a new truck has seen the overall truck park age in recent years (13.84 years in December 2013). These older vehicles make a disproportionately large contribution to gross emissions. Graph 1 details the new truck sales volume and the average age of the Australian truck fleet from 2000 to 2014 inclusive. It can clearly be seen that during years of new truck sales growth the average age of the truck park fell, while in more recent years with static or reducing sales the Australian truck park is growing older.

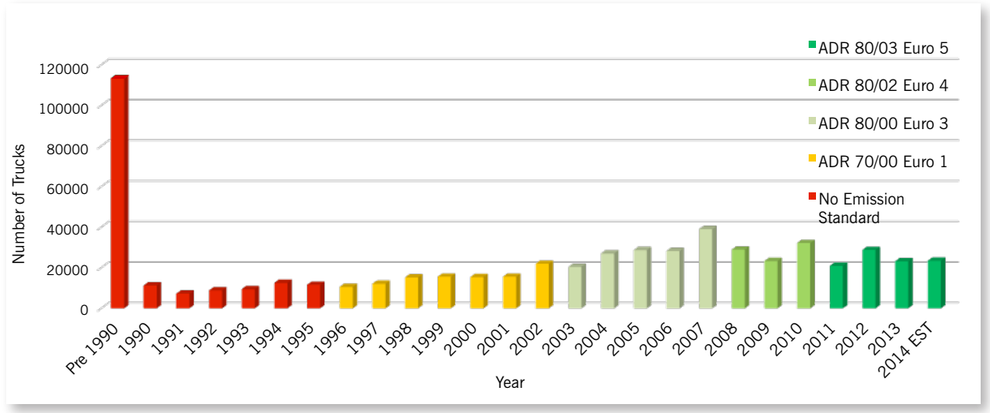
Graph 1: Australian New Truck Market (all above 3,500kg GVM)



Sources: Average truck age – Australian Bureau of Statistics, Motor Vehicle Census, January 2014
**Average truck age 2014 – Truck Industry Council estimate, January 2015
New truck sales volume – Truck Industry Council T-Mark data, January 2015

Graph 2 summarises the engine exhaust emission standards of Australia's truck park. The key messages are that the largest segment, totaling some 30% of Australia's trucks, pre-date any emission standard, while the cleanest trucks on our roads, those complying to the ADR80/03 (Euro 5) emission standard make up the smallest segment, having just 12.5% representation.

Graph 2: Australian Truck Fleet Age by Engine Emission Standard (above 4.5t GVM)



Source: Australian Bureau of Statistics, Motor Vehicle Census, January 2014

Industry Challenges

Over time, Council members have been able to closely meet the needs of road transport operators and other truck users. Satisfying demand occurs in a competitive environment, with a diverse range of brands able to supply world class products closely matched to local requirements. Those local requirements are oftentimes more challenging than those existing in other countries. Such special requirements include:

- High operating ambient temperatures combined with;
- Long-haul demand;
- Higher gross combination weights;
- Higher maximum speed (100km/hr); and
- Operator skills shortages

At the same time, the truck industry earned approximately $A51Bn in revenues during 2013 (IBISWorld, Apr 2014). The industry's ability to meet its challenges, directly affects the Australian economy across a range of other industry sectors.

Of the total road freight revenue, approximately 60% was sourced from just 3 sectors, namely: manufacturing (27%), retail (19%), and wholesale and freight forwarding (13%) (TIC, Australian Truck Industry Snapshot, 2013).

Productivity Improvements

Industry forecasts for the Freight Task continue to show an increase in demand for road transport that is ahead of forecast economic growth. Infrastructure Australia (2011) predicts that between 2010 and 2030, road freight will double. As a result, over time the number of trucks on our roads will continue to increase.

Some offset against the number of vehicles can be achieved through a range of industry initiatives and improvements, better access and congestion regulations, as well as improvements to road freight corridors and higher productivity vehicles.

For TIC members, the challenge is to provide heavy vehicles giving the maximum capacity in freight mass and/or volume, whereby such vehicles are developed within the regulations extant for heavy vehicle mass and length limits.

To this end, TIC members have been able to successfully bring to market trucks that, whilst meeting regulatory standards current throughout the world, offer significant productivity benefits in our unique operational settings. Examples include; B Doubles, B Triples, Road Trains and Performance Based Standards (PBS) vehicles.

Whilst the productivity gains from these developments have contributed in mitigating the growth in truck numbers, further opportunities other than growing the numbers of those above are now scarce under the current regulation framework.

TIC members intend to continue to work with jurisdictional agencies in order to consider how truck dimension and weight schemes may be improved, together with improvements in infrastructure such as bridge limits, accommodating the swept paths of heavy vehicle combinations, and appropriate pavement capacities, on selected freight corridors.

The TIC has to-date made a number of significant contributions towards the development of ideas in this sphere (including sponsorship of the Moving Urban Freight 2008 Symposium, Homebush, NSW) and remains committed to being a leading participant in transport reform.

Regulatory Impacts

An important industry challenge is for jurisdictional agencies to continue towards both the rationalisation and the further introduction of vehicle regulations that are closely aligned to standards being met in the primary manufacturing home markets (i.e. EU, USA, and Japan).

As an industry body, TIC recognises that the introduction of any local regulations and/or standards for heavy vehicle compliance, that are unique, would work against a more broad availability of customer choice, and limit the overall productivity of the transport sector.

For the most part, UN-ECE regulations and standards will continue to inform our local authorities on how to proceed in these matters, and it remains a constant for the TIC to have a voice in these critical outcomes to ensure that Australia's at times unique road transport requirements are suitably considered.

Fleet Renewal

As an industry, trucking faces a significant image problem. The settings in which the industry operates, necessitates an almost absolute majority of its operational activities are tightly integrated with those of the general community. Road commuters in passenger vehicles and buses, parents conveying children to and from school, holiday makers, intra and interstate road travellers, all on a daily basis contend with heavy vehicles on our roads. Traffic accidents and other events including emissions output, involving trucks, are a constant source of media scrutiny, public and political comment.TIC members are currently making available to the market trucks that are equal to world's best practice in terms of environmental responsibility (fuel efficiency, noise, emissions, recyclable components), as well as enhanced safety, and operator comfort.

The take-up of these leading technologies will result in improved outcomes for operators, including improvement in the industry's image deficit moreover.

The TIC has developed a blueprint for fleet renewal entitled The TIC National Truck Plan (outlined later in the Fleet Report). Member companies intend to foster opportunities through the TIC, whereby there are improved outcomes for road user safety, the environment and the general economy, for all stakeholders affected by truck operations.

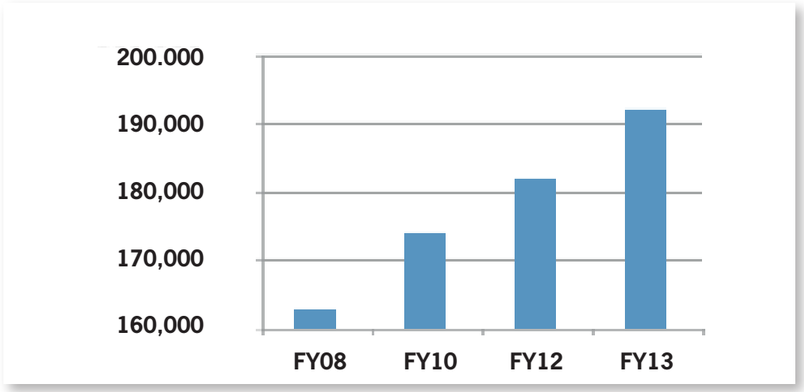
FY2013/14 experienced significant economic and financial pressure on two of the industry's primary revenue sectors (i.e. manufacturing and retail). However, average profitability across the total sector was 6.2% (TIC Australian Truck Industry Snapshot, 2013). The design of the TIC's National Truck Plan, together with these results, indicates that there is scope for the uptake of these new technologies, without creating drag on industry performance.

Employment

The truck industry directly employed more than 192,662 people across 42,942 businesses in FY2013 (IBISWorld, Apr 2014), which represents a 20% increase in industry employment over the past five years.

Total Truck Industry Employment

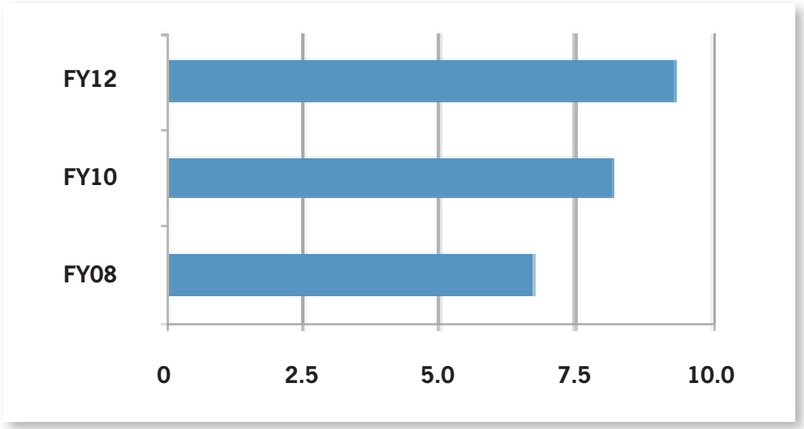
Graph 3 shows the rise in industry employment. In the FY2013, 192,662 Australian workers is an average year-on-year gain of approximately 4.3% since FY2010 (IBISWorld, Apr 2014).



Graph 3

Growth in Industry's Household Income

It is estimated that industry employment generated $A9.3Bn in household income in 2012, an overall increase of over 13% on 2010 (TIC Fleet Snapshot 2013). This is illustrated in Graph 4.



Graph 4

Industry Segments

Number of Employees:

Local Truck Manufacturing 4,230	Truck Manufacture	3,450
	Manufacture of local components	560
	Distribution	220
Importing and Distribution of Trucks 1,080	Inbound shipping & Point of Entry activity	890
	Wholesale distribution	190
Equipment and Body Builders 3,610	Truck bodies & trailers	2,580
	Other equipment & installations	1,030
Sales, Service and Spare Parts 27,142	New truck retailing	1,140
	Used truck retailing	692
	New & Used truck spare parts	7,650
	New & Used truck servicing	17,660
Transport Services 156,600	Road transport services	130,700
	Road transport related services	7,300
	Road freight logistics & warehousing	18,600
Total		**192,662**

Integrated Activities

In order to meet local transport industry and customer demands, as well as to keep final costs down, member companies engage in a broad range of local installations and fitments, before a truck is fit for sale. Many of the items are unique to Australian requirements. As such, a network of suppliers exists in Australia, in order to augment the members' core business of vehicle manufacturing, body assembly and distribution.

Materials Supply

Over time, local manufacture and body assembly of a diverse range of truck products has developed. This development has occurred in order to meet: support for local truck manufacturer's requirements; specific local design needs; reduce the vehicle's shipping envelope (for imported trucks); access local content tariff opportunities and the completion and/or modification of imported trucks to reduce overall costs and satisfy local customer requirements.

Principal Materials and Components Used in Local Manufacturing

- Diesel fuel and alternative fuel storage and delivery equipment
- Audio, communications, and navigation/ positioning telematic systems
- Bull bars and FUP installations
- Mudflaps, spray suppressant, mandatory warning and clearance equipment
- 5th wheel/turntables, on-board refrigeration systems, trailer connections
- Cabin glass, sunvisors, weathershields, air deflectors
- Transmission and axle assemblies
- Suspension assemblies
- Body manufacture and fitment

Financing

For truck owners and operators, financing of equipment becomes a critical element of their business planning. Member companies and their customers have available a diverse choice of financing options for truck equipment. During FY 2012/13, Australian Equipment Lessors Association reported the Truck and Trailer segment of Equipment Finance amounted to $A5.7Bn, or 17% of total Equipment Financing (AELA, 2013)

Commercial Vehicle Finance Operations

Finance products are available to transport operators via a range of providers. A number of member companies offer branded finance, in competition with specialist providers including banks. Financial products on offer include:

- Finance Leasing
- Operating Lease
- Hire Purchase
- Chattel Mortgage

Operator Leasing and Rental

Rental markets provide an important adjunct to transport operators and the available fleet park. A robust and stable rental market, for short and medium term contracts, works towards optimizing capacity rates during vehicle off the road situations and demand peaks. An estimated $A.3Bn in heavy vehicle and equipment rentals were entered into during FY2013/14.

Leasing and Rental Operations

Specialist commercial vehicle and equipment lease and rental operators have developed over time. These operations are contributing towards higher service and productivity levels from transport operators. Providers include:

- 8 major National Rental Organisations; and a
- Myriad of local rental firms - mainly short-term offerings

Insurance

Commercial vehicle insurance products are supplied by a number of specialist providers, with 6 predominate insurers/underwriting agencies (some based offshore) servicing the Articulated truck and trailer and top end Heavy Rigid segments. A far greater number, approximately 30 companies, offer truck insurance products to service the up to 12.0 tonne GVM Rigid segments.

Heavy Vehicle Truck and Trailer Insurers

- The heavy vehicle insurance industry annual turnover in 2014 was approximately $800,000,000 (truck, trailer and ancillary) and the industry directly employs in the vicinity of 600 persons (excluding repairers).
- Over the past 10 years truck insurance claims have decreased, whilst over the same period the average claim cost has remained basically the same (only a marginal increase in claim costs).
- The latest industry information suggests that less than 3 major crash incidents occur per 1,000 heavy vehicles.

Training

In the context of the automotive landscape, truck operations require a deep pool of industry skills. The very nature of heavy vehicle operations and regulation, demands diverse skill sets, able to engage successfully in areas defined by:

- Larger than usual capital investments, financing and asset management requirements
- Equipment size and capacity, as well as safety and technical support systems, that are more far-reaching than those generally applying to other segments of the automotive sector.

Whole of life Training: Industry and Operators

- Industry skills - technical, sales and marketing, OH&S, business, succession planning
- Industry regulatory compliance
- Operator driver training
- Operator maintenance systems
- Competence in new vehicle technologies

Innovation

Despite their most pressing constraint, being low volumes and without Federal Government assistance since the 1980's, the industry over a sustained period has managed to survive and grow. Even in many much larger markets, there is not the history and sustained performance that has existed here in Australia of a truck industry.

The Australian truck market is a mix of high expectation for vehicle features and benefits, in line with other first world expectations, and one of limited infrastructure characteristics (investment, long distance, geography) compounded by a relatively small population and therefore low sales volumes.

The industry's ability to innovate has been an enduring and signature characteristic of its members.

Vehicle Compliance

In order to meet an appropriate set of operating standards for vehicles in Australia, over time Australian Design Rules (ADR's) have been developed under the Federal Department of Infrastructure and Regional Development (DIRD). Conformity to these rules is mandatory for all new vehicles being introduced onto Australian roads. In the case of heavy vehicles, this situation has been further complicated by State jurisdictions having some regulations for trucks that are in addition to ADR's. It is hoped that with the adoption of the National Heavy Vehicle Law under the control of a single national organization, the National Heavy Vehicle Regulator started in February 2014, that individual State based regulations will be phased out over time.

Against these local settings, heavy vehicle builders and their product planning engineers need to husband home market (EU, USA, Japan and Asia) product regulations and adapt these to suit the Australian market. In this context, TIC works with DIRD to harmonise external regulations and standards under the ADR umbrella.

This approach is unique, and a signature success of the TIC as a leading participant in shaping the commercial vehicle landscape.

Given the range of vehicles being both manufactured, and imported into Australia, the industry's innovative approach has successfully addressed hurdles in:

- Complexity arising out of multiple local jurisdictions with non-harmonised regulations
- Low volume constraints
- Government resource ratios for legitimate full volume importers/manufacturers versus personal and low volume "grey market" importers
- The creep in environmental and safety regulations, despite a lag in real-time end user adoption
- Advancing practical solutions involving non-prescriptive vehicle regulations
- Seemingly low recognition and no financial support/incentives from government, for member efforts in delivering innovative and technically advanced solutions

New Vehicle and Component Flows

When compared to the primary manufacturing markets (being mainly; Japan, USA, the EU, and more recently Korea and China), Australia is a relatively small market (~ 30,000 HV units sold pa). Currently spread across 23 commercial vehicle brands, with distinct market segments (LDV, LD, MD, and HD), volumes for discrete models are small. Local manufacturers and distributors have developed truck specifications for Australia from those existing in the home market (or a close derivative of their home market model).

As hurdles for safety and emissions compliance continue to creep, it is not feasible to have a brand's parent company develop for example, an engine with an emissions standard that would be unique to the Australian market. Particularly if the Australian government allows local vehicle regulation to fall behind those of these primary manufacturing markets.

TIC members are therefore required to; in the first place, ensure there is a harmonisation of design rules (be they Japanese, US or EU), so that they can reasonably comply with the specifics and intent of any new ADR. Over time member companies have developed innovative skills in being able to husband their brands' available product features to meet both local customer demand, and within the framework of Australia's at times unique design rules and regulations.

Manufacturing and Distribution

Local manufacture of heavy vehicles has not been recognised in the same way as has happened with passenger vehicle (PV) manufacturing. Concurrently, whilst output may have been more modest (due to limited market size), success in meeting local market expectation has remained strong (in difference to local PV manufacturing).

Today the following TIC Member companies locally manufacture and/or fully import new trucks, engines and heavy vehicle systems:

Cummins South Pacific Pty Ltd

2 Caribbean Drive
Scoresby Vic. 3179
www.cummins.com.au

Eaton Vehicle Group

33-35 Garden Street
Kilsyth Vic. 3137
www.eaton.com

Hino Motor Sales Australia Pty Ltd

6-10 Parraweena Road
Caringbah NSW 2229
www.hino.com.au

Isuzu Australia Ltd

858 Lorimer Street
Port Melbourne Vic. 3207
www.isuzu.com.au

Iveco Trucks Australia Ltd
LOCALLY MANUFACTURES MOST HEAVY DUTY MODELS

1-27 Princes Highway
Dandenong South Vic. 3175
www.iveco.com.au

Mercedes Benz Australia/Pacific Pty Ltd (Mercedes-Benz, Freightliner and Fuso)

44 Lexia Place
Mulgrave Vic. 3170
www.mercedes-benz.com.au
www.freightliner.com.au
www.fuso.com.au

Navistar Auspac Pty Ltd

1 Caterpillar Drive
Tullamarine Vic. 3043
www.cattrucks.com.au

PACCAR Australia (Kenworth and DAF)
LOCALLY MANUFACTURES KENWORTH MODELS

64 Canterbury Road
Bayswater Vic. 3153
www.paccar.com.au
www.kenworth.com.au
www.daf.com.au

Penske Commercial Vehicles (Western Star, MAN, Dennis Eagle)

72 Formation Street
Wacol Qld. 4076
www.westernstar.com.au
www.man.com.au
www.denniseagle.com.au

Penske Power Systems Inc. (Formerly: MTU Detroit Diesel Australia)

488 Blackshaws Road
Altona North Vic. 3025
www.penskeps.com

Scania Australia Pty Ltd

212-216 Northbourne Road
Campbellfield Vic. 3061
www.scania.com.au

Volvo Group Australia Pty Ltd (Mack, UD and Volvo)
LOCALLY MANUFACTURES MACK and VOLVO MODELS

L1/20 Westgate Street
Wacol Qld. 4076
www.volvotrucks.com.au
www.macktrucks.com.au
www.udtrucks.com.au

The National Truck Plan

Synopsis

Given the significant interface between truck operations and day to day social and economic activity, as well as other industry impacts from trucks such as environmental and safety outcomes, infrastructure utilisation, and the freight task moreover, the Truck Industry Council (TIC) has developed a comprehensive industry document entitled The TIC National Truck Plan. This is a detailed document that serves to inform Government and jurisdictional agencies, as well other stakeholders, of the historical and current impacts of trucks on our roads, of future implications, as well as suggestions for how the impacts from trucks on our society and economy may be best addressed.

The National Truck Plan is a keystone document for the Industry that gathers together important real-time facts and historical data, in order to address how best to plan for future road use, road safety outcomes involving trucks, and the reduction of environmental impacts from truck operations.

The Truck Plan is a 'live' document being updated on a regular basis (typically annually), and appropriately distributed to stakeholders. Copies are available to relevant parties upon request from the Truck Industry Council.

Fleet Renewal – the key drivers

In order to better understand and inform the debate on truck operations, in 2013 the TIC undertook the development of a paper entitled 'The Australian Truck Industry Snapshot'. This paper addressed knowledge gaps in relation to the national truck fleet which included a national truck customer survey. A total of 198 truck customer responses were received. These responses were analysed to identify truck industry priorities from the perspective of Australian truck market customers.

Whilst commentary on truck operations from the general population, media, and politicians is oftentimes in relation to safety and environment, TIC's investigations show that these factors are subordinate to others when owner/operators are considering the composition of their fleets and associated vehicle purchases.

The primary concern of purchasers is up-time for their vehicles. Those elements of decision making that contribute towards maximising the vehicle's time on road outweigh other considerations including driver comfort and environment. Given that fuel is a major operating cost, performance in this area also ranks highly.

Influencing Factors towards New Truck Purchases	
Repair and Maintenance Costs	87%
Whole of Life Costs	86%
Positive Experience with Vehicle Brand	82%
Fuel Consumption Benefits	81%
Nationally available Brand Support	80%
Vehicle Safety Features	77%
Purchase Price	77%
Versatility of Vehicle's Operation	75%
Positive Local Dealer Relationship	74%
In Cabin Features and Comfort	73%
Likely Resale Value	69%
Vehicle's Power Rating	63%
Compatibility with Existing Trailers	61%
Vehicle's Emissions Performance	49%
Greenhouse Emissions	39%
Alternative Fuel Option	21%

When choosing to purchase a used vehicle, the range of discrete elements of the purchase decision are less differentiated; however price becomes a far more significant criteria.

From an industry council perspective, without incentives the benefits of fleet renewal cannot be fully realised.

Influencing Factors towards Used Truck Purchases	
Repair and Maintenance Costs	57%
Whole of Life Costs	54%
Positive Experience with Brand	50%
Fuel Consumption Benefits	53%
Nationally available Brand Support	42%
Vehicle Safety Features	44%
Purchase Price	55%
Versatility of Vehicle's Operation	48%
Positive Local Dealer Relationship	38%
In Cabin Features and Comfort	44%
Likely Resale Value	37%
Vehicle's Power Rating	44%
Compatibility with Existing Trailers	43%
Vehicle's Emissions Performance	39%
Greenhouse Emissions	22%
Alternative Fuel Option	13%

Fleet Age

The national truck fleet comprised 582,029 vehicles in January 2014. Over half of these trucks were heavy rigids (between 4.5 and 18.0 tonnes GVM), while articulated trucks (all weight classes) accounted for just 16.1% of the total fleet (Australian Bureau of Statistics, Motor Vehicle Census, January 2014).

The average age of Australia's light rigid truck fleet (3.5 to 4.5 tonnes GVM) is approximately 11.1 years and the average age of the heavy rigid truck fleet (4.5 to 18.0 tonnes GVM) is 15.6 years. While non-freight carrying trucks (special purpose trucks) have an average of 14.4 years. By comparison, the average age of articulated trucks (no significant load area, and fitted with a turntable) is 11.4 years, giving an average age across all truck types of 13.84 years (Australian Bureau of Statistics, Motor Vehicle Census, January 2014).

In comparison, in the UK the average age of the heavy vehicle fleet is 7.8 years (R.L. Polk 2009), in the USA it is 6.7 years (Bloomberg, Nov 2010) and in Japan 9.2 years (JAMA, The Motor Industry of Japan, 2010).

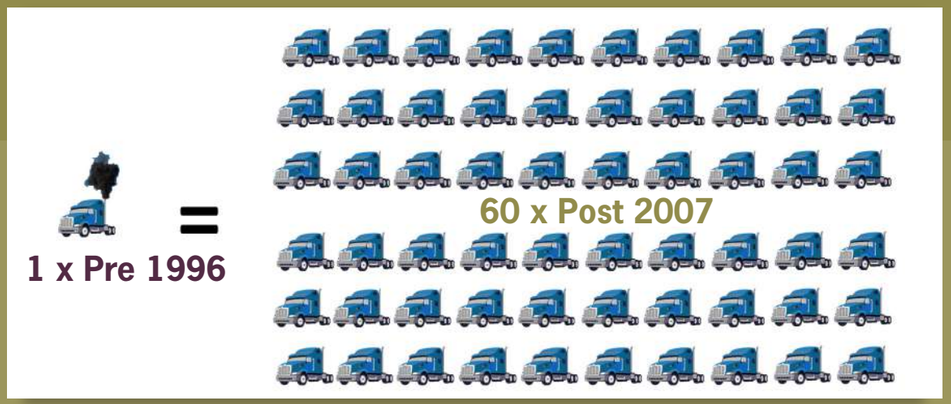
Environment

The impact on the environment can be graphically displayed by the image below; whereby just 1 truck built prior to the introduction of emissions standards in 1996 emits the equivalent in harmful exhaust Particulate Matter (black soot) as does a total of 60 trucks built after the introduction of Euro 4 emissions standards in 2007.

Clearly, the number of older trucks still operating on Australian roads are having a disproportionately higher impact on the road transport sector's emissions contribution.

Further, approximately 30% of trucks currently on our roads were first registered prior to 1996 signifying that these vehicles were manufactured before the introduction of diesel emission standards in Australia. This high proportion of non-emission control vehicles is significant given that the vast majority of these vehicles are likely to be operating in Australia's capital cities – as opposed to travelling in sparsely or un-populated areas between cities.

Today, transport accounts for 16% of total emissions in Australia, and road transport accounts for over 85% of that sector's emissions (RARE Consulting as cited by NTC, Reducing transport carbon emissions, last updated April 2012). An accelerated reduction in pre-1996 vehicles is clearly desirable in terms of improving environmental outcomes for Australia.



Safety

Across the range of brands being offered to the Australian market, TIC member companies are offering new trucks with the latest active technologies to prevent accidents from happening, as well as a suite of passive technologies to protect vehicle occupants and other road users. These advanced safety features were not available in pre-1996 trucks.

Human Resource Impacts

In a 2013 submission to the Australian Workforce and Productivity Agency, the Australian Trucking Association (ATA) advised that the average age of a truck driver is now 43 years. Further, they advise that 'by 2016, close to 20 percent of drivers will be at retirement age'. (In Australia, the current average for occupations overall is 39 years)

The TIC members see the provision of advanced technologies in new trucks as being integral to improving the image of the industry. The ATA submission advised that the heavy vehicle industry is 'under pressure from severe driver shortages and a negative image problem'. Clearly, the 'office environment' of today's truck driver must compete with a range of career options. Many of which are not burdened with the lack of work/life balance, health problems, and limited training opportunities that exist in the trucking industry.

New and Emerging Safety Technologies

- **Autonomus Emergency Braking Systems**
- **Lane Departure Warning Systems**
- **Driver Attention Support**
- **Blind Spot Monitoring and Lane Change Assist**
- **Electronic Stabilty Control**
- **Cabin Strength**
- **Front Under-run Protection Systems (FUPS)**

Social

The industry's transport operators play a unique role within the social fabric. It is the most prominent industry in which the actual business activity interfaces with nearly all forms of social endeavour on and around public roads. Trucks deliver the goods that are taken for granted in our homes and workplaces, and the services upon which the business community relies. Many of our essential community services are also carried out by trucks. Courier services, emergency services, waste management, are all performed by commercial vehicles. Parents taking children to school, families travelling on holiday, workers daily commuting, almost everyone at some time of the day will be next to a truck carrying out its business task.

Utilising the best available transport equipment in order to fulfill these tasks is seen as a means to enhancing the social contract between the general public and transport operators.

Without government inputs, be these in the form of Regulatory and/or Legislative, or Financial Incentives, it would seem that there will remain a high degree of inertia on the part of Operators, towards fleet renewal. (TIC, Australian Truck Industry Snapshot, 2013)

Productivity

As shown in the TIC survey results for new truck purchase decisions, time on the road, known in the industry as “up-time”, is a primary consideration. Service delivery by the road transport operator is enhanced by a number of factors, including:

- Vehicle suitability for the task
- Vehicle reliability, both day-to-day and over whole of life
- Truck and Truck/trailer carrying capacity – High Productivity Vehicles
- Operator knowledge and skills

Given that each of these factors are more likely to be met using the best available equipment and technologies that can only be found in newer trucks, it is axiomatic that productivity outcomes for the industry are enhanced via a more modern fleet.

Key Recommendations

Non-Freight Trucks

Another significant sector is non-freight trucks, which in recent times has been in decline in terms of fleet renewal. The average age of this section of the truck park has grown from 13.9 years in 2008 to 14.4 years by 2013.

- Trucks are employed in many non-freight sectors, including:
- Emergency services
- Airport services
- Street sweepers
- Off-highway drilling platform
- Mine services
- Military

Non-freight trucks that do not operate on public roads are not required to meet current emissions or safety standards and regulations, as apply to public road-going vehicles. Many of these off-highway specialist trucks operate in urban environments, such as building construction sites as well as domestic and international airports. Although environmental impacts in high density urban areas are compounded by such off-highway trucks, the TIC has not specifically included recommendations in the National Truck Plan for this segment. However the incentives proposed in the TIC Plan could be adjusted to suit the renewal of such vehicles.

The National Truck Plan proposes a Federal Government Investment Allowance to stimulate demand for new trucks, while at the same time offering a budgetary netural financing model through the re-deployment of the existing Fuel Tax Credit scheme. The Fuel Tax Credit scheme would be changed and linked to the environmental performance of the truck. The savings generated from cutting the Fuel Tax Credit to no and poor emission compliant trucks would then fund the Investment Allowances.

Two tiers of Investment Allowance are proposed in the TIC’s Plan, one for the purchase of new diesel powered trucks meeting the current ADR80/03 exhaust emission standards and a higher Allowance for the take-up of alternative fueled or powered trucks, or new trucks that meet a higher emission level than mandated, so called ADR80/03 Plus trucks.

As detailed earlier in this section, copies of the TIC National Truck Plan are available to relevant parties upon request from the Truck Industry Council.

Truck Sales Results 2014

Truck Sales - Volume

From the year 2000, truck sales in Australia had been growing at a compound rate of 5% year on year, through until 2008. Sales in 2007 peaked at 38,131 units, afterwhich the impacts of the 2008 Global Financial Crisis (GFC) began to take effect.

Factors contributing to this strong growth up until 2008 included the introduction of diesel emissions standards in 1996, and a further emissions reduction for new vehicles introduced in 2003. As well, the Australian economy was enjoying a boom in exports as well as other general economic improvements.

Since the downturn in late 2008, the industry has struggled to regain strong growth. Results from 2009 to 2010 saw a modest increase, 2011 saw a fall before a gain in 2012. For the past three years, 2012 to 2014 the market has been flat with no growth.

A direct result of no increase or only modest increases in year on year new truck sales is the trend for the total truck park to age further, as was discussed earlier and shown clearly in Graph 1.

Truck Sales - By State

Over time there has been little significant shift in the share of total sales between most states. Australia's three mainland Eastern states account for the lion's share of total volume.

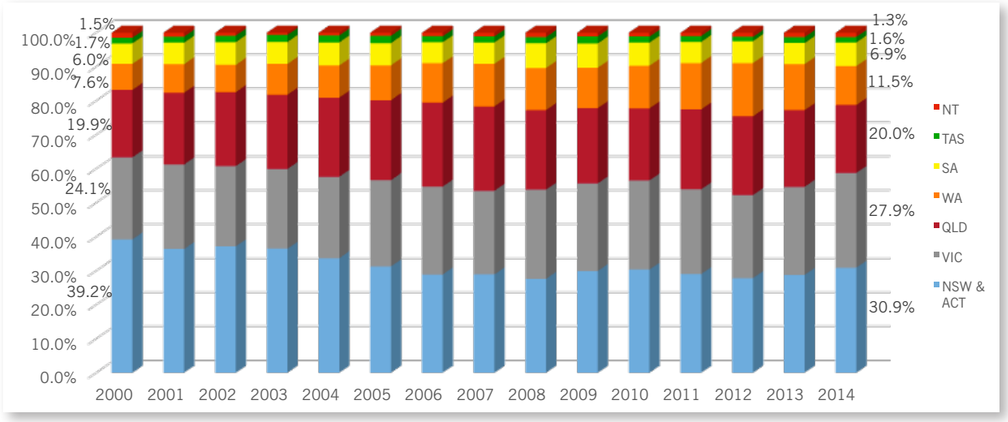
The ebb and flow of the mining and resources sector provides a direct link to results year on year, particularly in Western Australia and Queensland.

Other factors that have historically affected state share of the total market include business and licensing charges for operators. With the establishment of the NTC National Road User Charging Scheme industry has seen largely uniform licensing charges for some time now and this is no longer an influencing factor.

For transport operators, the availability of suitable staff and overall business costs (including real estate) does create opportunities whereby some will migrate from a traditional base to other states.

To support the above statements Graph 5 shows that Western Australia has had the most significant growth of any state over the past 15 years, due mainly to the expansion of mining and associated industries. Growth in that state has gone from 7.6% in year 2000, to 11.6% at the end of 2014. An increase of almost 66% over the 15 years. While the largest fall has occurred in New South Wales which in 2000 held almost 40% of the national total, today their share has fallen to just over 30% by the end of 2014. Higher costs of labour and real estate for warehousing, along with a heavily congested road infrastructure in and around the state's capital Sydney and the somewhat fragmented port infrastructure that sees container vessels docking at either Port Botany in Sydney or Port Kembla in Wollongong has no doubt led to many road freight distribution organisations setting up their East coast operations at either end of Australia's busiest freight corridor, in Brisbane or Melbourne, rather than at the mid-point, Sydney.

Graph 5: Australian Truck Market: Sales Percent by State



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Truck Sales - Total Market by Segment

The Australian truck market has, for many years, comprised three primary segments, being:

- Heavy Duty (HD)
- Medium Duty (MD)
- Light Duty (LD)

More recently, a further segment has now grown in importance:

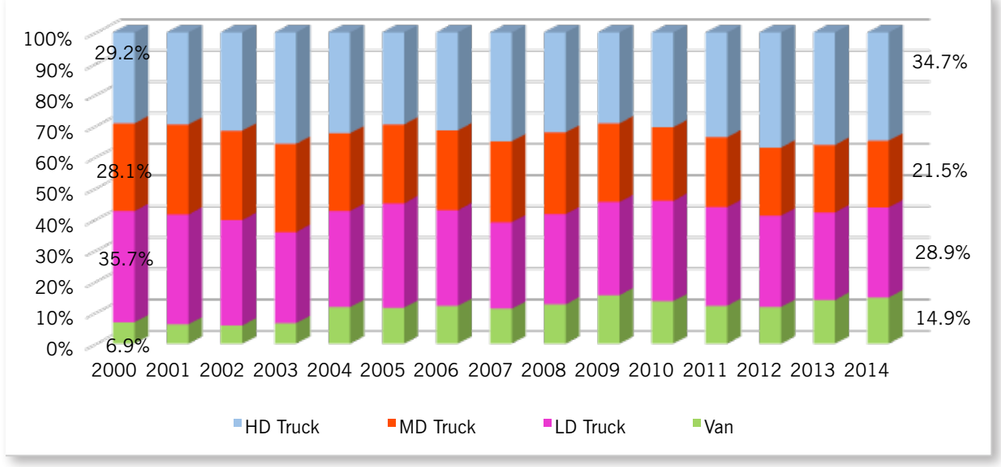
- Van, or Light Duty Van (LDV)

These segments are defined primarily by load carrying capacity (see Abbreviations), and align with operator licensing types.

Graph 6 shows that over time, the most significant shift in segment share has been the decline in Medium Duty (down 23% since year 2000). The main drivers for this change have been productivity and retail behaviour.

With respect to productivity, Medium Duty trucks are being overlooked in favour higher capacity Heavy Duty units (19% growth), and retail behaviour has shifted somewhat from 'in-store' to 'in-home'. This has brought about a more devolved delivery system encouraging the uptake of home delivery Vans (116% growth since year 2000).

Graph 6: Australian Truck and Van Sales by Segment

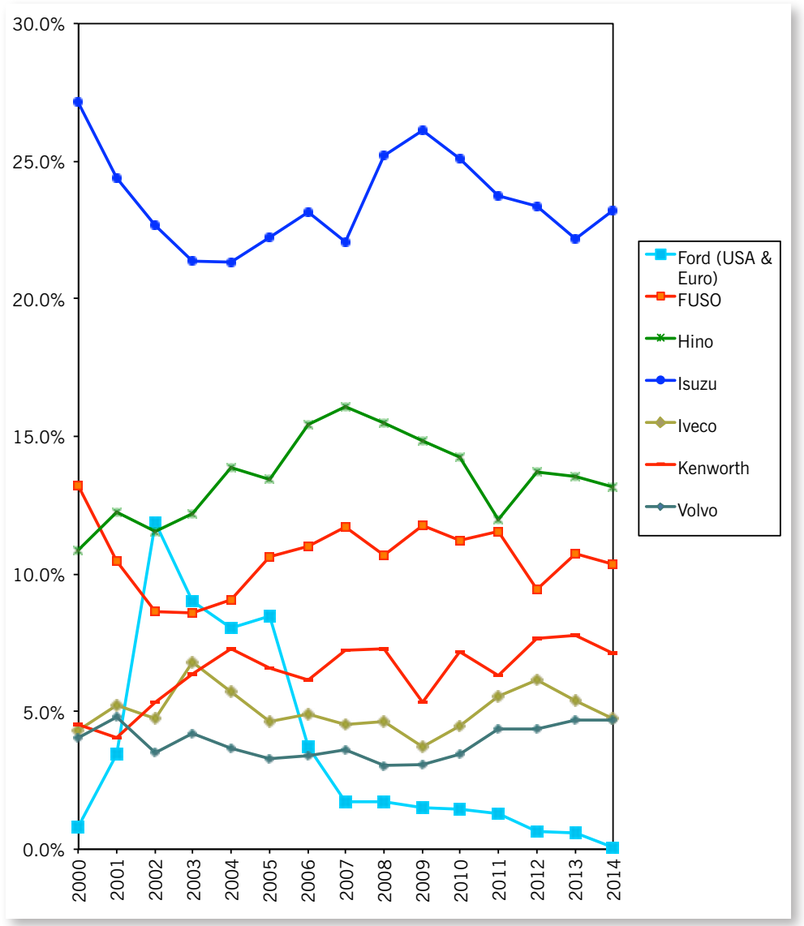


Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Truck Sales - Total Market Share by Brand

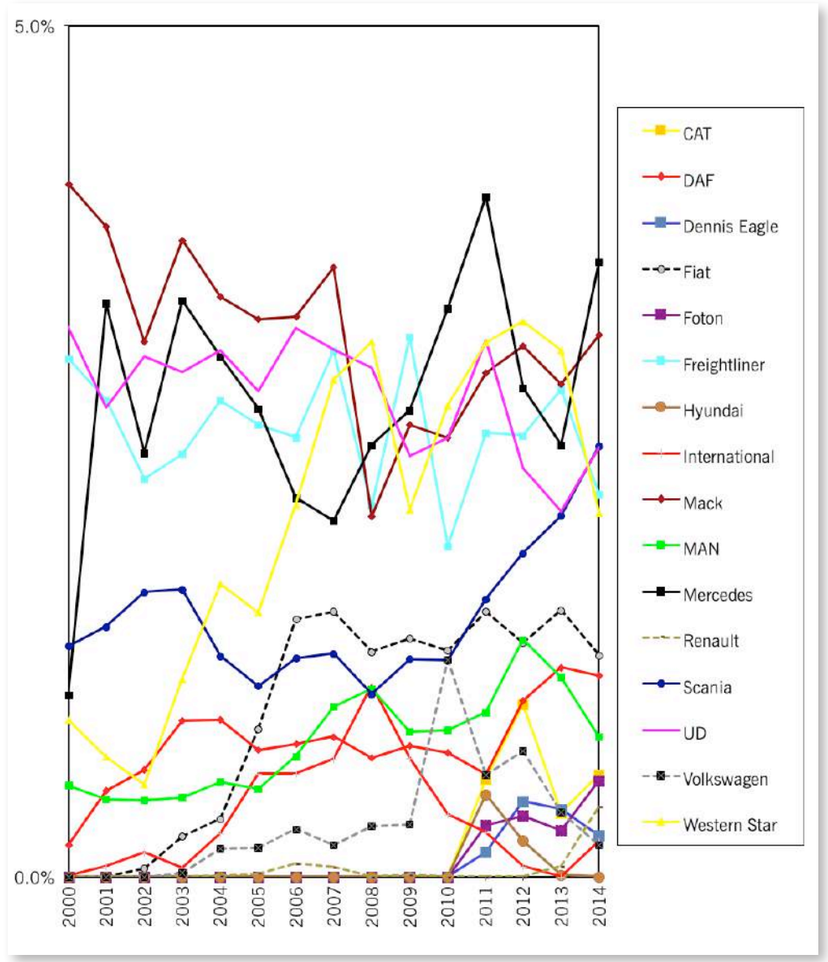
There are currently 23 truck brands vying for a share of the Australian truck market. Given that average annual sales over the past 5 years have been below 30,000 units annually, it is considered to be a congested market, presenting the expected pressures on pricing and margins for both local manufacturers and distributors. Graphs 7A and 7B show relative total market share by brand.

Graph 7A: TOTAL Truck Market: Above 5% Market Share



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Graph 7B: TOTAL Truck Market: Below 5% Market Share

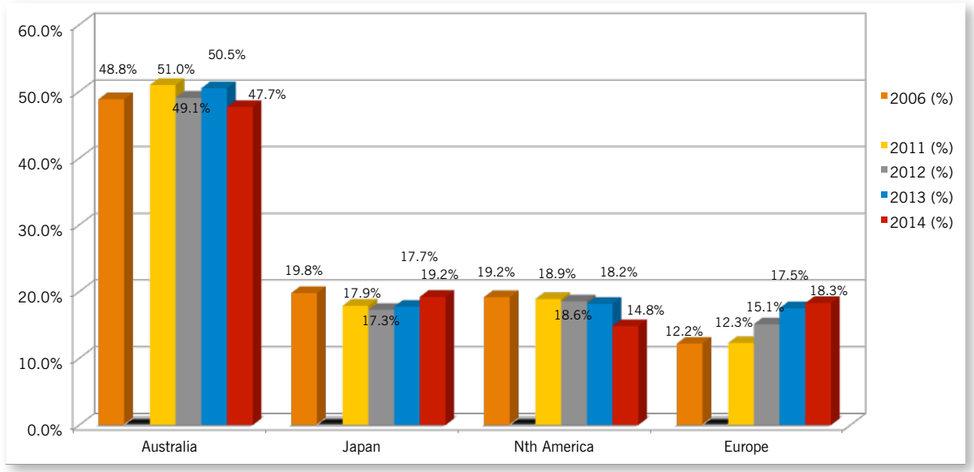


Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

During the same period graphed above, an additional four brands have entered then departed the market (Daihatsu Delta, Mazda Trader, Toyota Dyna, and Stirling). These results are not shown.

Truck Sales – Heavy Duty Market Share by Origin

Graph 8: Australian HD Truck Segment by Source

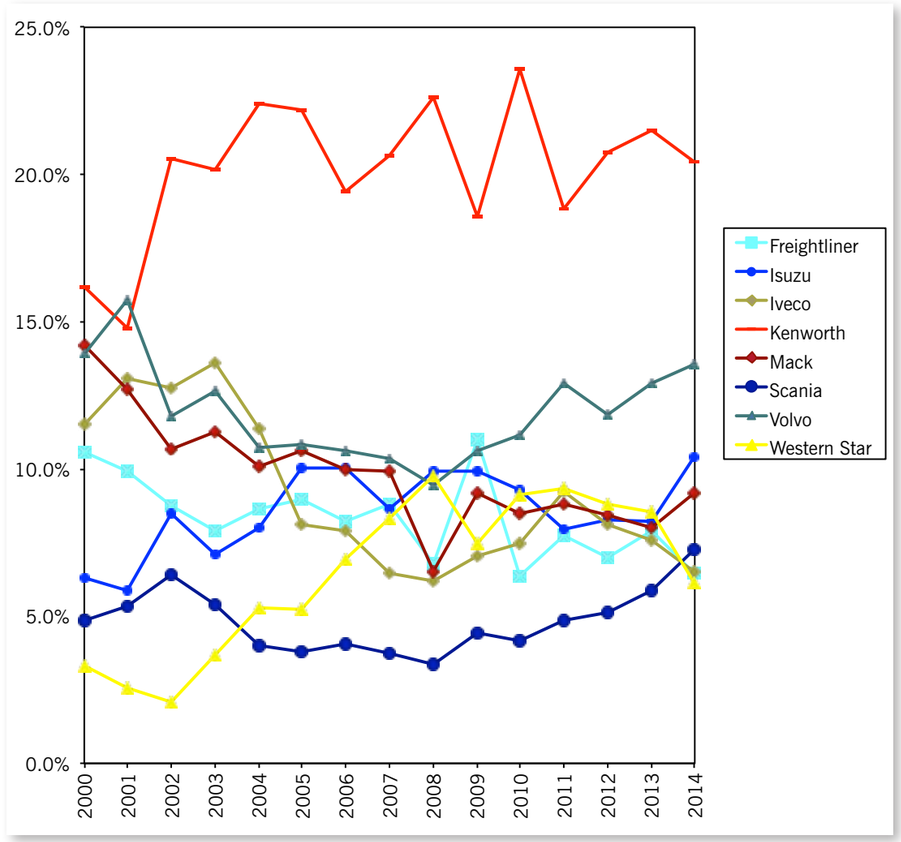


Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Truck Sales - HD Market Share by Brand

Given some of the unique operating conditions in Australia (including long distance, high ambient temperatures, and productivity demands/high gross combination masses), it is in the sphere of heavy duty applications in which local design and content is most important. Graphs 9A and 9B show relative heavy duty market share by brand.

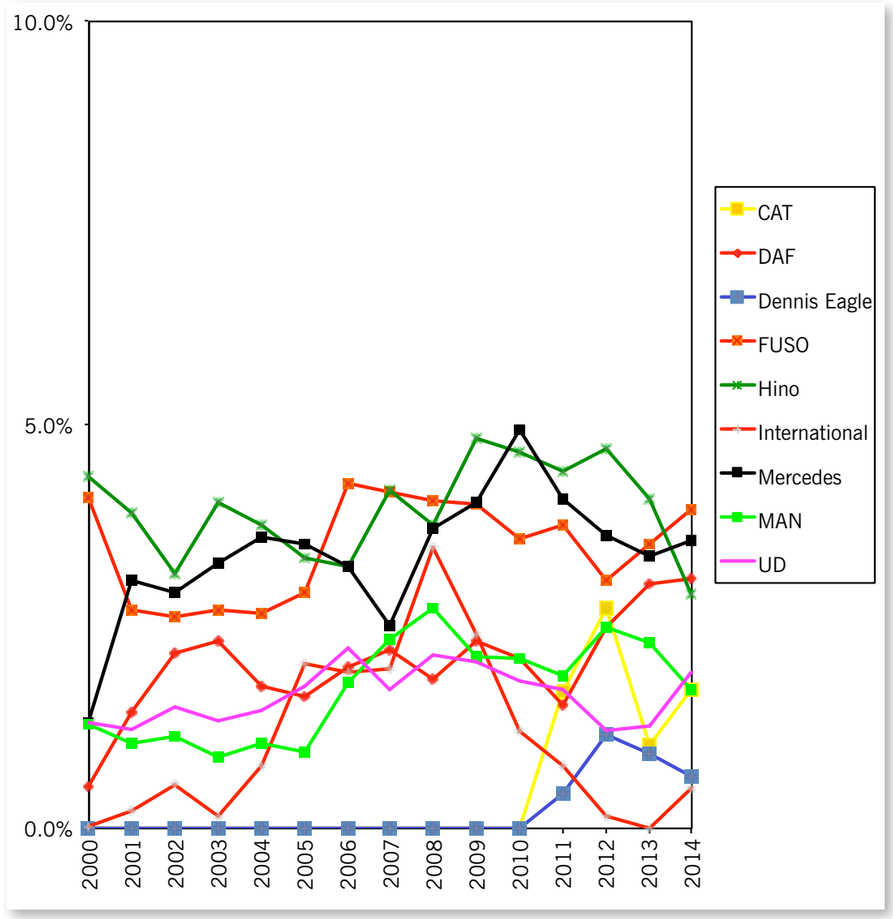
Graph 9A: HD Truck Market: Above 5% Market Share



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

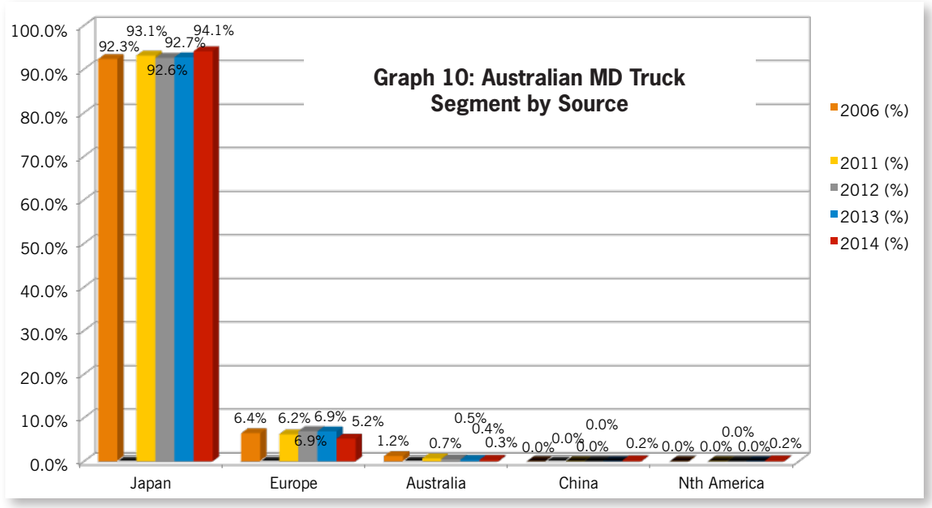
The top selling brands by volume are shown in the Graph 9A, with a local manufacturer Kenworth (PACCAR Australia) a clear leader since 2001. Of those brands, only 3 are imported as CBU units. The remainder all benefit from a degree of local design and content including either partial or full manufacturer. Graph 8 highlights the success that locally developed and manufactured trucks enjoy in Australia.

Graph 9B: HD Truck Market: Below 5% Market Share



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Truck Sales – Medium Duty Market Share by Origin



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

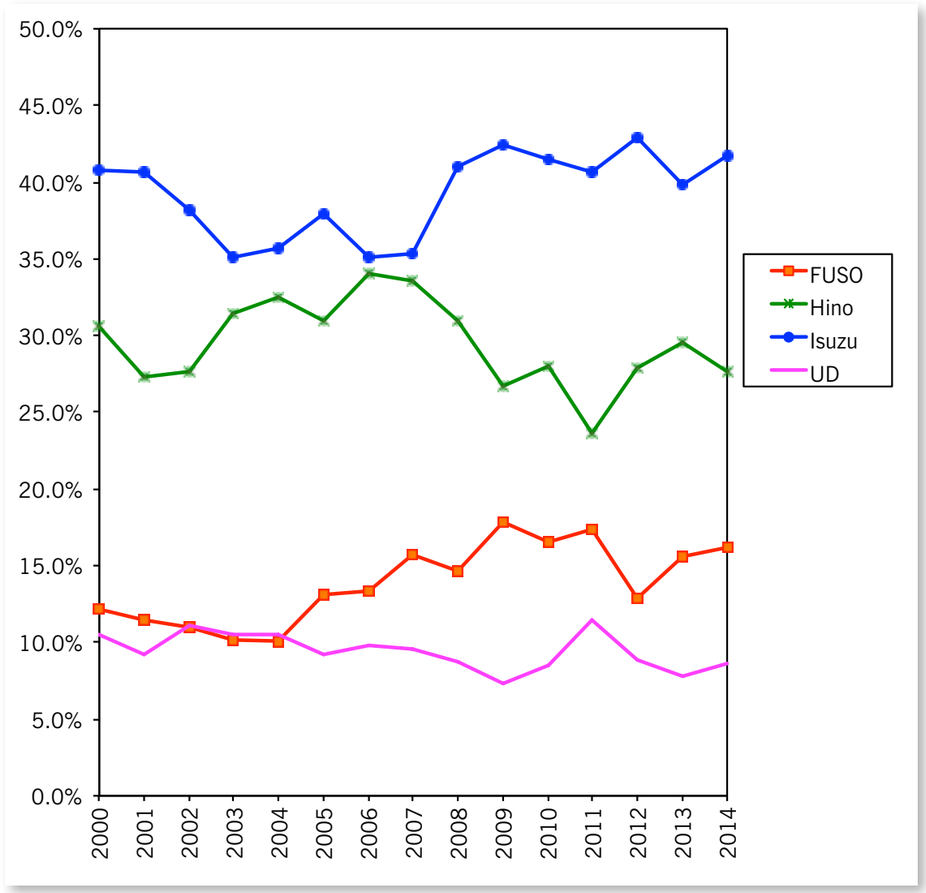
The above graph clearly indicates that the aggregate of brands from Japan have a clear dominance in this segment of the Australia market.

New entrants from the US and China have yet to establish any significant numbers of sales, and in year 2014, they accounted for less than 1% of the segment.

Truck Sales – Medium Duty Market Share by Brand

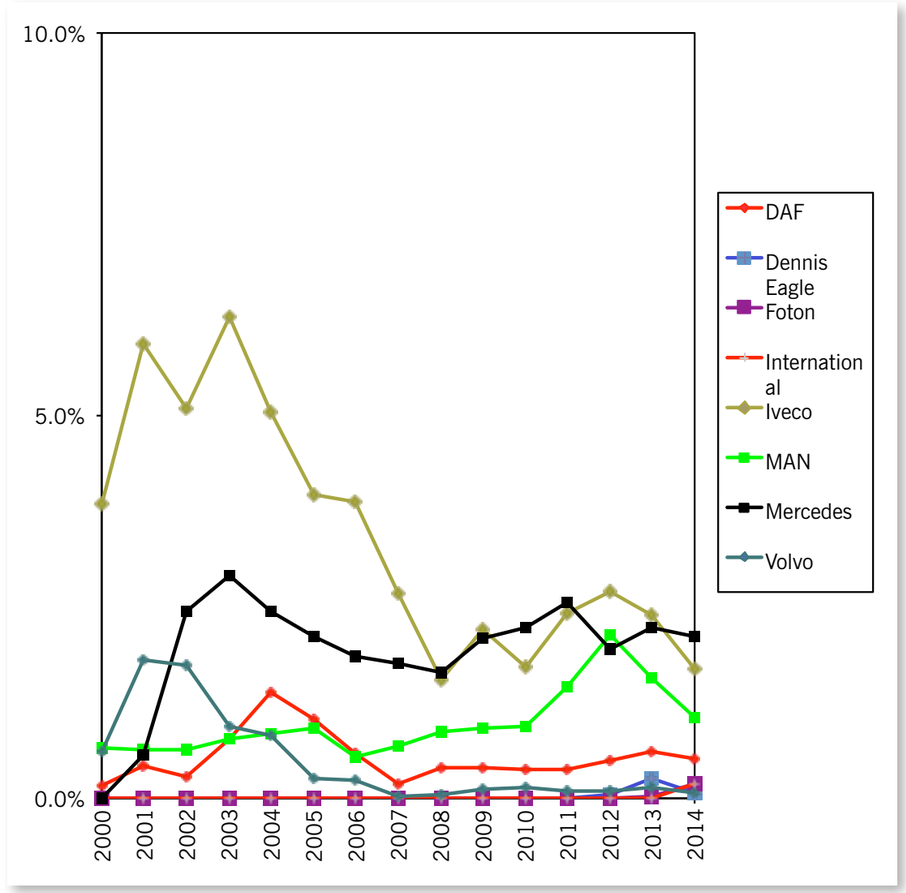
For the past 2 decades, four Japanese brands (Graphs 11A and 11B) have completely dominated truck sales in the MD sector (averaging ~ 93% of the total market), as can be seen in Graph 10.

Graph 11A: MD Truck Market: Above 10% Market Share



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

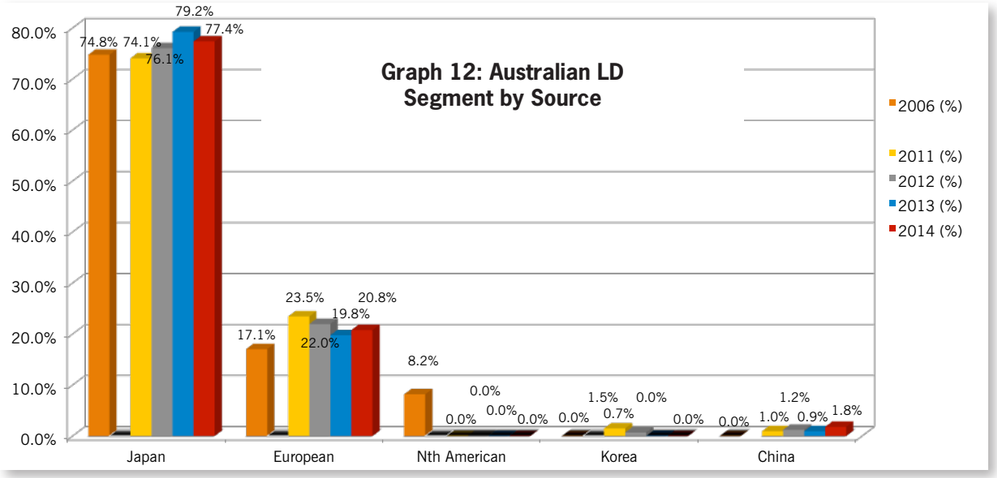
Graph 11B: MD Truck Market: Below 10% Market Share



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Analysts conclude that as client demand for GVM and particularly GCM increases, the market becomes more differentiated. Conversely, in the MD and especially LD sectors, product is further commoditised. As with passenger vehicles, Japanese manufacturers have been able to produce truck products well matched to Australian client demand for specification and price.

Truck Sales – Light Duty Market Share by Origin



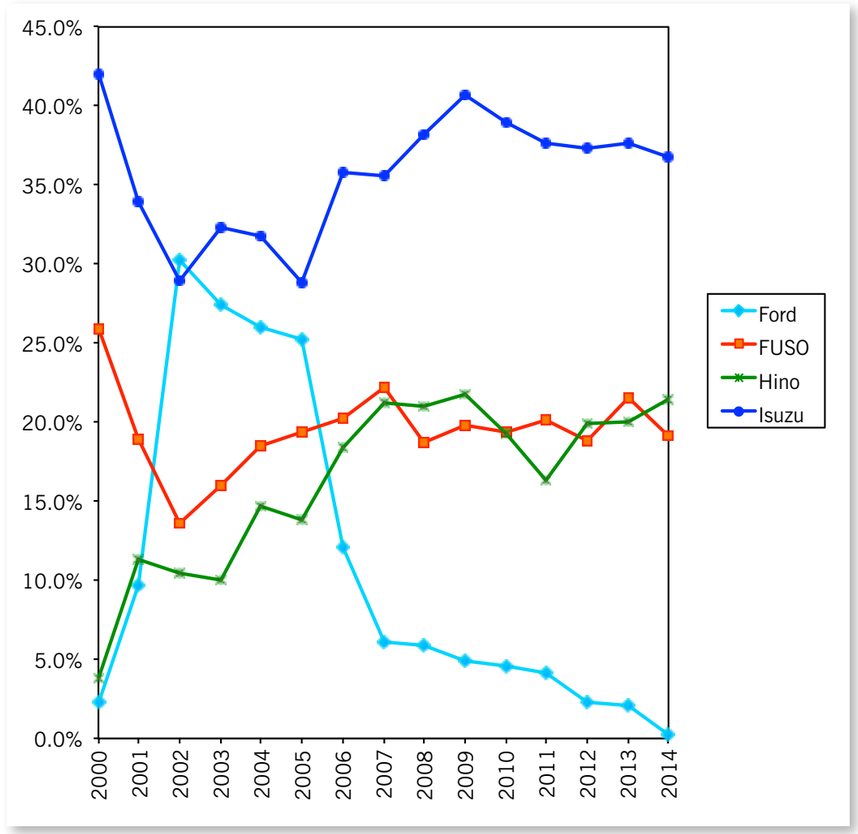
Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Graph 12 further illustrates the Japanese domination of this segment. Since 2006, three Japanese brands have accounted for an average 76% of the total market, with the balance being mainly EU products. During year 2014, new entrants from Korea and China represented less than 2% of the segment.

Truck Sales – Light Duty Market Share by Brand

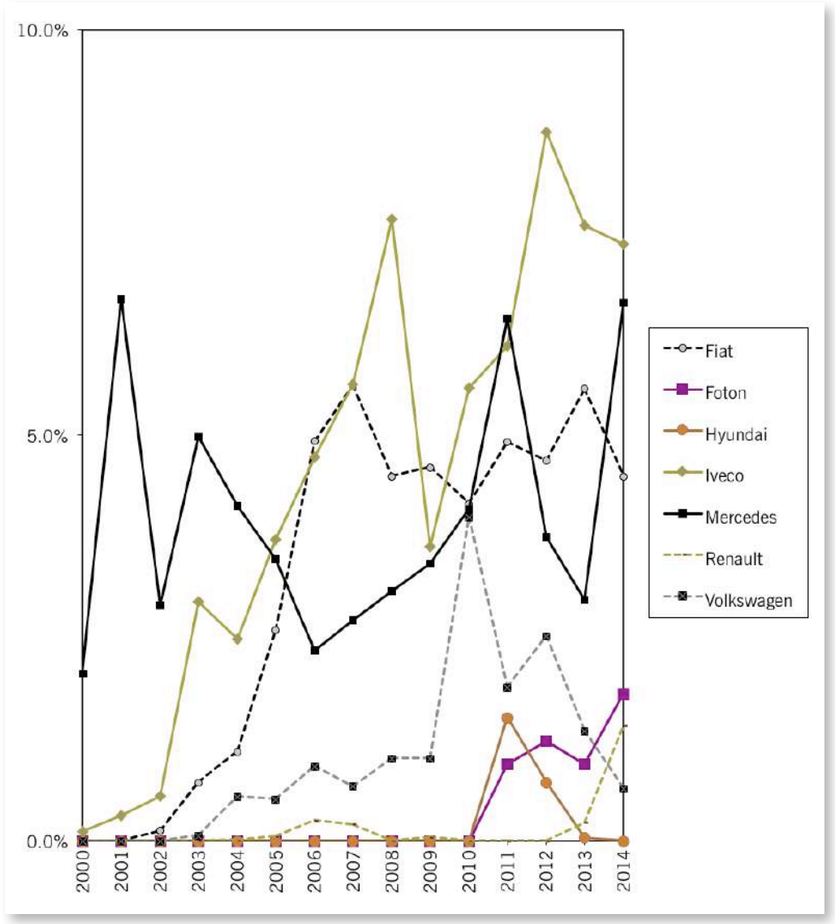
Considered the 'entry level' for truck manufacturers wanting to enter the Australian market, Japanese manufacturers have thus far, been the most successful in interpreting Australian market needs as shown in Graphs 13A and 13B.

Graph 13A: LD Truck Market: Above 10% Market Share



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Graph 13B: LD Truck Market: Below 10% Market Share



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Being the entry level segment, LD is where new entrants are most likely to introduce their products into the Australian commercial vehicle market. Over recent years manufacturers from Korea and China have introduced new LD trucks.

Given the rather stringent hurdles for safety, emissions, and ADR compliance moreover, Australia has been a difficult market for new entrants to approach. The matter is further compounded by our requirement for right hand drive vehicles and relatively low volume opportunities.

Commercial vehicle purchasing requires that new entrants need to launch with reasonably high levels of specification, as opposed to simple price motivators. Owners and operators require reasonably sophisticated levels of product support, moderate to low costs of ownership, and reasonable residual values when considering their truck purchase. All of which present significant barriers to entry for prospective new entrants to this segment.

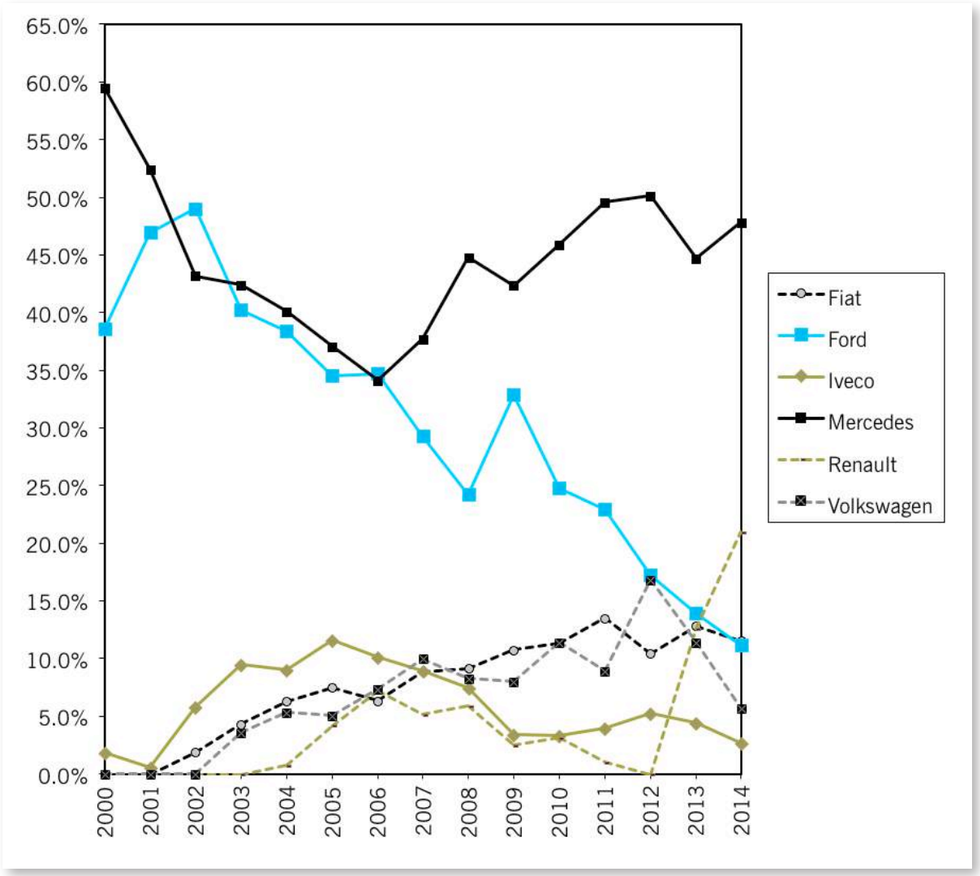
Truck Sales – Light Duty Van Market Share by Brand

Enclosed vans in the 3.5 to 8.0 tonne category are a relatively new segment of the Australian commercial vehicle market. However, demand for this class of vehicle is steadily rising. Online purchasing, ratcheting up traffic congestion, lower investment and skills requirements for new owner/operator entrants, are some of the factors contributing towards the LDV segment's growth.

Graph 14 illustrates that this segment is exclusively contested by European brands. Whilst Ford (EU) and Mercedes (EU) originally dominated the market, Ford's presence has steadily declined (in 2014 down to approx. 10%).

Japanese and US manufacturers do not have product offerings in this segment.

Graph 14: LD Van Market: All



Source: New truck sales volume - Truck Industry Council T-Mark data, January 2015

Publications and Useful Links

Publications

Freight Transport in a Carbon Constrained Economy: National Transport Commission (NTC), Discussion Paper, July 2008.

Analysis of Initiatives to Reduce Heavy Vehicle Carbon Emissions: Rare Consulting, Draft Report, December 2011.

Australian Trucking Association: A future strategy for road supply and charging in Australia, PwC, March 2013.

Heavy Vehicle GHG Emissions Study: Rare Consulting, Presentation, 25th February 2012.

A National Truck Plan for Australia (V4.0): Truck Industry Council (TIC), Updated 30th July 2013.

Skilled Occupation List for 2014: Australian Trucking Association (ATA), Submission to Australian Workforce and Productivity Agency, 12 December 2013.

Links

Australian Trucking Association

The peak body representing trucking operations. The ATA's members include major logistics companies, transport industry associates and businesses with leading expertise in truck technology.

www.atatruck.net.au

Bureau of Infrastructure, Transport and Regional Economics

(Commonwealth) Provides economic analysis, research and statistics on infrastructure, transport and regional development issues to inform both Australian Government policy development and wider community understanding.

www.bitre.gov.au

Department of Infrastructure and Regional Development

(Commonwealth) Role, responsibilities and services include assisting the Government to promote, evaluate, plan and invest in infrastructure; foster an efficient, sustainable, competitive, safe and secure transport system.

www.infrastructure.gov.au

Federal Chamber of Automotive Industries

(Represents light vehicle and motorcycle manufacturers in Australia

www.fcai.com.au

National Heavy Vehicle Regulator

(Established by Transport Ministers to administer one heavy vehicle rule book for the road transport sector in Australia).

www.nhvr.gov.au

National Transport Commission

(Commonwealth) National regulatory and operational reform and implementation strategies for road, rail and intermodal transport.

www.ntc.gov.au

State and Territory Roads and Transport Site Links:

Queensland

www.tmmr.qld.gov.au

New South Wales

www.transport.nsw.gov.au

www.rms.nsw.gov.au

Victoria

www.vicroads.vic.gov.au

Tasmania

www.transport.tas.gov.au

South Australia

www.transport.sa.gov.au

Western Australia

www.mainroads.wa.gov.au

Northern Territory

www.nt.gov.au/transport

Australian Capital Territory

www.tams.act.gov.au/move

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http://www.bitre.gov.au/publications/2014/files/Freightline_01.pdf [
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TRUCK INDUSTRY COUNCIL.
Australian Truck Industry Snapshot 2013 Edition (2013)

Abbreviations

ABS	Anti-lock Braking System
ADR	Australian Design Rule
ATA	Australian Trucking Association
BITRE	Bureau of Infrastructure, Transport and Regional Economics
CV	Commercial Vehicles
DIRD	Department of Infrastructure and Regional Development
ECE	Economic Commission for Europe
FCAI	Federal Chamber of Automotive Industries
FUP	Front Underrun Protection
GCM	Gross Combination Mass (comprising the total mass or weight of the vehicle in combination with other laden equipment, e.g. a semi-trailer combination)
GFC	Global Financial Crisis
GVM	Gross Vehicle Mass (comprising the total mass or weight of vehicle when fully ladened)
HD	Heavy Duty (class of truck having a] 3 or more axles; or b] 2 axles, a GVM >8.000 Tonnes, AND a GCM of >39.000 Tonnes)
HV	Heavy Vehicle (class of vehicle being =>3.5 Tonnes GVM)
LDV	Light Duty Van (class of vehicle being an enclosed van, non passenger carrying =>3.501 Tonnes and =< 8.000 Tonnes GVM)
LD	Light Duty (class of truck being =>3.501 Tonnes and =<8.000 Tonnes GVM)
MD	Medium Duty (class of truck being >8.000 Tonnes but with a GCM of =<39.000 Tonnes GVM)
MDL	Mass Distance Location
NHVR	National Heavy Vehicle Regulator
PBS	Performance Based Standards
PV	Passenger Vehicles
RUC	Road User Charges
TIC	Truck Industry Council
UN	United Nations
UN ECE	United Nations Economic Commission for Europe
USA	United States of America

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