Overview of Automotive Industry Sector and Route to Market

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British Embassy Thailand

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by
Tractus (Thailand) Co., Ltd
• Introduction to Thailand’s Automotive Industry Sector
  – Structure of Thai Automotive Industry

• Thailand automotive ranking against the world
  – Thailand automotive as the leading manufacturer for ASEAN

• Thailand as the current ASEAN manufacturing leader

• Thailand industry growth, drivers & advantages

• OEM’s in Thailand and total volumes

• Thailand current and future challenges
  – Skilled workers’ capabilities
  – Gap in human resources
Automotive
Thailand 2013
Thailand’s automotive industry has been continually developing for over 50 years with strong support from both the public and private sectors. Thailand has been the automotive hub of ASEAN, also dubbed as the “Detroit of the East”, with the largest automotive production among Southeast Asian countries, ranking 9th globally in 2013.

The automotive sector’s contribution to the Thai economy represents 12% of GDP as of 2013, making it Thailand’s second largest export industry.

Thailand has been long welcomed for automotive industry as it launched industry-friendly policies focused on investment privileges and excise-tax benefits, government support for environmental friendliness, and development of workforce. These factors lead the country to be the best hub for eco-car and one-ton pickup producers.

In the past couple of years the Thai automotive industry has increasingly shifted its position in the world automotive market by turning from trade partner to competitor, influencing production base relocation and creating competitive advantage development through business collaboration.
Introduction to Thailand’s Automotive Industry Sector

Structure of Thai Automotive Industry

- **Assembler**
  - (14 car makers, 7 motorcycle makers)
  - 100,000 workers

- **Tier 1**
  - (709 companies)
  - 450,000 workers

- **Tier 2,3**
  - (1,700 companies)

- **Local Suppliers**

- **Foreign J/V**
  - Foreign Majority 54%
  - Thai Majority 23%
  - Pure Thai 23%

- **LSEs**
  - Large Scale Enterprises

- **SMEs**
  - Small & Medium Enterprises
There are 4 key factors that ensuring the efficient development of Thailand automotive sector:

- Favorable government policy that create incentive and promote investment and domestic market expansion
- Change in technology by enhancing the capacity of green technology
- Increase in domestic value through improvement for parts manufacturers
- Improved quantitative and qualitative in human resource development

### Thailand automotive on world ranking 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Cars</th>
<th>Commercial vehicles</th>
<th>Total</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. China</td>
<td>18,085,213</td>
<td>4,031,612</td>
<td>22,116,825</td>
<td>14.80%</td>
</tr>
<tr>
<td>2. USA</td>
<td>4,346,958</td>
<td>6,698,944</td>
<td>11,045,902</td>
<td>6.90%</td>
</tr>
<tr>
<td>3. Japan</td>
<td>8,189,323</td>
<td>1,440,747</td>
<td>9,630,070</td>
<td>-3.10%</td>
</tr>
<tr>
<td>4. Germany</td>
<td>5,439,904</td>
<td>278,318</td>
<td>5,718,222</td>
<td>1.20%</td>
</tr>
<tr>
<td>5. South Korea</td>
<td>4,122,604</td>
<td>398,825</td>
<td>4,521,429</td>
<td>-0.90%</td>
</tr>
<tr>
<td>6. India</td>
<td>3,138,988</td>
<td>741,950</td>
<td>3,880,938</td>
<td>-7.00%</td>
</tr>
<tr>
<td>7. Brazil</td>
<td>2,742,309</td>
<td>998,109</td>
<td>3,740,418</td>
<td>9.90%</td>
</tr>
<tr>
<td>8. Mexico</td>
<td>1,771,987</td>
<td>1,280,408</td>
<td>3,052,395</td>
<td>1.70%</td>
</tr>
<tr>
<td><strong>Thailand</strong></td>
<td><strong>1,071,076</strong></td>
<td><strong>1,385,981</strong></td>
<td><strong>2,457,057</strong></td>
<td><strong>4.30%</strong></td>
</tr>
<tr>
<td>10. Canada</td>
<td>965,191</td>
<td>1,414,615</td>
<td>2,379,806</td>
<td>-3.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>65,386,596</strong></td>
<td><strong>21,863,249</strong></td>
<td><strong>87,249,845</strong></td>
<td><strong>3.60%</strong></td>
</tr>
</tbody>
</table>

Source: Organisation Internationale des Constructeurs d'Automobiles (OICA)
*note: the number has been adjusted to match the ASEAN Automotive Federation
• According to ASEAN Automotive Federation, production for motor vehicle for Thailand is still the leading manufacturer for ASEAN even though there was no significant growth between 2012 and 2013

– the industry employs over 550,000 people; the production capacity is expected to reach 3 million units by 2015. The government coordinated with the private sector to formulate the Master Plan for Automotive Industry (2012-2016) to develop Thailand as a global green automotive production base and to increase research and development for automotive technology.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PASSENGER VEHICLES</th>
<th>COMMERCIAL VEHICLES</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>925,111</td>
<td>283,100</td>
<td>1,208,211</td>
<td>1,065,557</td>
</tr>
<tr>
<td>Malaysia</td>
<td>543,892</td>
<td>57,515</td>
<td>601,407</td>
<td>569,620</td>
</tr>
<tr>
<td>Philippines</td>
<td>26,490</td>
<td>52,679</td>
<td>79,169</td>
<td>75,413</td>
</tr>
<tr>
<td>Thailand</td>
<td>1,071,076</td>
<td>1,385,981</td>
<td>2,457,057</td>
<td>2,453,717</td>
</tr>
<tr>
<td>Vietnam</td>
<td>58,629</td>
<td>35,001</td>
<td>93,630</td>
<td>73,673</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,625,198</td>
<td>1,814,276</td>
<td>4,439,474</td>
<td>4,237,980</td>
</tr>
</tbody>
</table>

Source: ASEAN Automotive Federation
• Japanese car makers have been a major investment in Thailand for decades, accounts around 80% of the Thai car market, the biggest in Southeast Asia.

• Japanese production accounts for 44.77% of the total production from Thailand and is for export to major destinations such as Australia, Indonesia and Philippines.
Since 2013, domestic sales accounted 54% percent out of total production in Thailand, while export accounted around 44%.

Thailand automotive growth is not significant between 2012 and 2013 but expected to reach 2,600,000 million vehicles in 2014, with 55% for export and 45% for domestic consumption.

Source: Thai Automotive Institute
• Production for compact cars grew 24.5% while for pick-up trucks (1 ton) production shrunk by 4.7% in 2013.
• The production of pickup trucks is around 54%; passenger cars are at 43% and other commercial cars are 2.26% of the total production.

Note: PPV is Pick up Passenger Vehicle

Source: Thai Automotive Institute
Exports in 2012 was 1,020,059 units or 484,023 million baht. In 2013, exports rose to 1,094,089 units or 509,108 million baht.

Pick-up truck (1 ton) represents majority of exports for the industry with more than 60% out of total export, followed by passenger cars at 34% and pick-up PPV at 5%.
• Toyota is still the leading exporter and accounts for more than 38% or 415,753 vehicle units of total exports. Second is Mitsubishi at 21% or 229,758 vehicle units exported.

Source: Thai Automotive Institute
Toyota is the leading brand in both production and sales performance. The company launched a new production plant in Chachoengsao in August 2013 with the capacity of additional 80,000 vehicles/year. This will increase Toyota’s production capacity to 770,000 vehicles/year.

Honda also plans to build a new plant in Prachinburi and expects to open it in 2015. With this new plant the production capacity will reach 240,000 vehicles/year.

Several Chinese auto-makers also plan to invest in Thailand such as:

– SAIC Motor Corp will joint venture with Thailand’s CP Group to establish 50,000 units assembly plant of British MG cars. Or Chinese SUV and Great Wall Motor (pick-up truck maker) announced plan to invest up to US$ 340 million in the nation.
Original Equipment Manufacturers
Thailand 2013
There are approximately 2,400 automotive suppliers in the country, about 709 of which are OEMs. Some of major foreign parts and components manufacturers in Thailand include France’s Valeo, Germany’s Bosch, US-based TRW, Britian’s GKN, Japan’s Denso, Mitsuba and Mitsubishi Electric.

Local manufacturers supply about 85% of the parts used in pick-up truck assembly, and about 70% of those for passenger cars.

For the first 10 months of 2013, OEMs for car and parts to export was worth 157,100 million baht, lower than same period of previous by 1.6%.

There were 154 projects that have been approved for the new investment in OEMs, which are worth 150,891 million baht and create 27,253 more job opportunities into the labor force.

Example of the big investments include:

- Apollo Ties (tires for truck, bus, car and SUV)
- SiamTruck Radial Co., Ltd (tires for 6 and 10-wheeled truck and bus)
- Minth Automobile Part (Thailand) Co.Ltd (Surface treatment and plastic for vehicle)
- Siam Toyota Manufacturing Co., Ltd. (Cylinder block, cylinder head, crank shaft)
• Export of the OEM is still the leading in the sector for over the past 4 years. It accounted for 189,525.21 million baht out of the total auto-parts export in 2013.

• The export of the OEM is growing around 12% per year, while the export of engines is also around 5% per year (y-o-y)

  – OEM is 79% out of total auto-part export
  – Engine is 12% out of total export
  – Spare parts are 8% out of total export

![Auto-Parts Export Value of Thailand (M.BTH)](chart)

Source: Thai Automotive Institute
50 of the top 100 global OEM parts suppliers in Thailand

- The list is the mix of Asia, North American and European multinational companies

<table>
<thead>
<tr>
<th>Robert Bosch</th>
<th>Denso</th>
<th>Continental</th>
<th>Magna International</th>
<th>Aisin Seiki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faurecia</td>
<td>Johnson Controls</td>
<td>ZF Friedrichshafen</td>
<td>Delphi Automotive</td>
<td>Valeo</td>
</tr>
<tr>
<td>TRW Automotive</td>
<td>Lear</td>
<td>Yazaki</td>
<td>BASF</td>
<td>Sumitomo Electric</td>
</tr>
<tr>
<td>Toyota Boshoku</td>
<td>CalsonicKansei</td>
<td>Cummis</td>
<td>Autoliv</td>
<td>JTEKT</td>
</tr>
<tr>
<td>Visteon</td>
<td>JATCO</td>
<td>Dana</td>
<td>Benteler</td>
<td>Schaeffler</td>
</tr>
<tr>
<td>BorgWarner</td>
<td>NTN</td>
<td>Mahle</td>
<td>DuPont</td>
<td>Tenneco</td>
</tr>
<tr>
<td>Toyoda Gosei</td>
<td>NSK</td>
<td>Brose</td>
<td>NHK Spring</td>
<td>Mitsubishi Electric</td>
</tr>
<tr>
<td>Koito Manufacturing</td>
<td>Plastic Omnium</td>
<td>Takata</td>
<td>GKN Driveline</td>
<td>Federal-Mogul</td>
</tr>
<tr>
<td>IAC</td>
<td>Goodyear</td>
<td>Michelin</td>
<td>Tokai Rika</td>
<td>Bridgestone/Firestone</td>
</tr>
<tr>
<td>TS Tech</td>
<td>Grupo Antolin</td>
<td>Honeywell</td>
<td>TI Automotive</td>
<td>Bayer</td>
</tr>
</tbody>
</table>
Opportunities in Thailand Automotive Market

- **Hi-Tech Vehicle Parts and Components**
  Projects in high-tech vehicle parts and components manufacturing are considered priority activities by the Thailand Board of Investment (BOI), which means they are exempt from machinery import duties and from corporate income tax for 8 years, regardless of location within the country. Some examples of eligible activities include electronic fuel-injection systems, ABS brake systems, substrates for catalytic converters, automatic transmissions and many more.

- **NGV Car**
  The Thai Ministry of Energy supports fuel-efficient transportation through a natural gas vehicle (NGV) initiative. This initiative includes natural gas subsidization through PTT Public Company Ltd., reduced import duty on NGV tanks from 17% to 10% in 2012, and reduced import duty on NGV control system parts and components, from 35% to 10%.

- **Eco-cars**
  It has been receiving incentives to promote the growth through duty reduction of up to 90% granted for two years, with annual review. The new measure is intended to help eco-car manufacturers by lowering their production costs and reducing their burden in sourcing parts that are not available or locally produced in Thailand. The BOI approved eco-car projects in specific models such as the Nissan March, Honda Brio, Suzuki Swift, and Mitsubishi Mirage are currently being manufactured in Thailand. Additionally, Thailand’s Ministry of Finance has reduced the excise taxes on eco-cars from 30% to 17%.
• Challenges in developing skilled workers’ capabilities
  – Thai labor market needs to urgently develop the capabilities and quality of its skilled workers before ASEAN Community in 2015; it could otherwise be risky and labor supply shortages may occur
  – Language and cultural barriers still play key factors that create obstacles; in the near future the language requirement may become a basic qualification and criteria that will be used to screen workers.

<table>
<thead>
<tr>
<th>Year</th>
<th>Automobile Production (Million Units)</th>
<th>Productivity (unit/worker/year): Constant scenario</th>
<th>Manpower required</th>
<th>Productivity (unit/worker/year) 3% improvement every year scenario</th>
<th>Manpower Required</th>
<th>Note</th>
<th>Difference between the 2 Productivity scenarios</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.39</td>
<td>3.5</td>
<td>397,000</td>
<td>3.5</td>
<td>397,000</td>
<td>TOYOTA IMV</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>1.6</td>
<td>3.5</td>
<td>457,000</td>
<td>3.5</td>
<td>457,000</td>
<td>ECO Car, Nissan, Ford Fiesta</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>1.8</td>
<td>3.5</td>
<td>514,000</td>
<td>3.6</td>
<td>500,000</td>
<td>ECO Car: Honda</td>
<td>14,000</td>
</tr>
<tr>
<td>2012</td>
<td>2.0</td>
<td>3.5</td>
<td>571,000</td>
<td>3.71</td>
<td>539,000</td>
<td>Ford (export-oriented production)</td>
<td>32,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ECO Car: Mitsubishi, Suzuki GM (export pickups)</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>2.2</td>
<td>3.5</td>
<td>629,000</td>
<td>3.81</td>
<td>577,000</td>
<td>ECO Car: Toyota</td>
<td>52,000</td>
</tr>
<tr>
<td>2014</td>
<td>2.4</td>
<td>3.5</td>
<td>686,000</td>
<td>3.93</td>
<td>611,000</td>
<td>Export &gt; 1.3 Unit</td>
<td>75,000</td>
</tr>
<tr>
<td>2015</td>
<td>2.5</td>
<td>3.5</td>
<td>714,000</td>
<td>4.05</td>
<td>617,000</td>
<td>Liberalization of labor inflow under AEC</td>
<td>97,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015-2020</td>
<td>257,000</td>
<td>5 years increase = 15.7%</td>
<td>160,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>3.2</td>
<td>3.5</td>
<td>914,000</td>
<td>4.56</td>
<td>702,000</td>
<td>Targeted to be on the country’s Top 5 ranking (export industries)</td>
<td>212,000</td>
</tr>
</tbody>
</table>

Source: IDB US Census Bureau, Population’s Forecast (NSO), compiled by SCB EIC
• Advantages of Thai workers still outweigh the alternatives when compared by wages and skill-orientation.

• Thailand is experiencing an “aging society.” This leads to low working population growth.
  – Thailand will experience only 0.5% growth of working population from 2007-2020 with increase in senior citizen population to 17% of population and decrease of young population from 22% to 17%
Thank you

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