Labor Market Intelligence Report

Developments in Philippine Automotive Industry

Technical Education and Skills Development Authority

2015

DEVELOPMENTS IN PHILIPPINE AUTOMOTIVE INDUSTRY

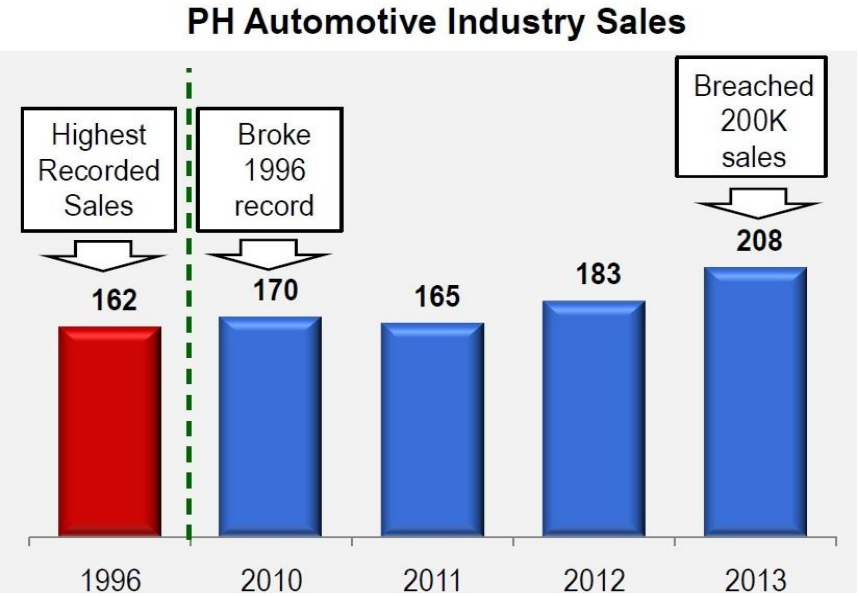
I. Introduction

The automotive industry is one of the sub-industries operating under the manufacturing industry. It is an intricate industry as it is comprised of a "large number of parts and components (textiles, glass, plastics, electronics, rubber, steel, and other metals) involving different production processes" (*Aldaba, 2014*). Characterized as highly global and technology-driven, the automotive industry is significant as it is "crucial to economic development, job generation and export growth" (*Sugata, 2014*).

The industry is a major player in the Philippine economy as it contributes to the nation's wealth. As of 2011, it accounted for three hundred sixty eight billion pesos or 3.7 percent of the country's gross domestic product or GDP.[1] Moreover, the Philippine Export Development Plan (PEDP) 2011-2013 supports this claim and mentions that the automotive industry, particularly the motor vehicle parts sector, is a growing market. As of 2010, it accounted for 3,679 million US dollars for the country's actual exports.[2]

In 2010, the automotive industry sales in the country broke the 1996 recorded sales of 162,000 units and reached 208,000 units in 2013. This was attributed to the steady economic growth of the country during the present administration. The Philippines' gross domestic product (GDP) growth rates reached 6.8% in 2012 and 7.2% in 2013, the highest GDP growth rates in Asia. In 2014, the Philippines GDP growth rate reached 6.1%

Table 1. Automotive Industry Sales: Philippines



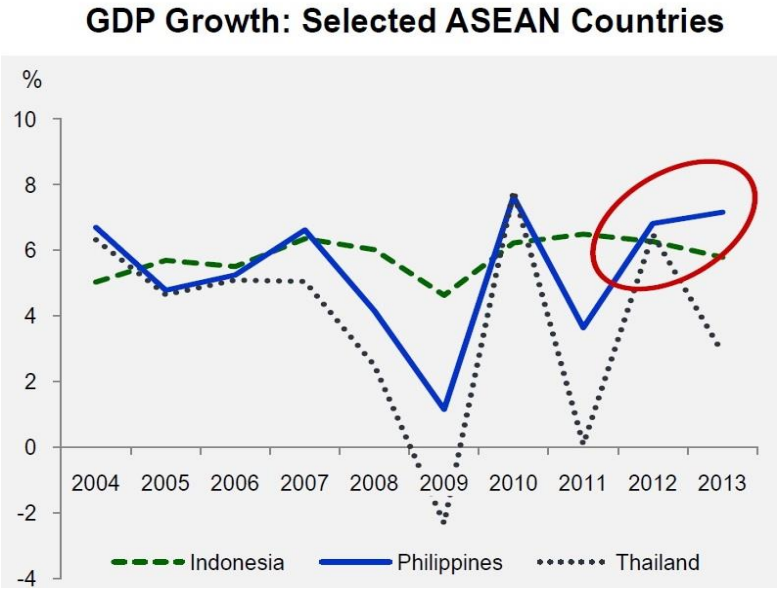
Source of Data: Chamber of Automotive Manufacturers of the Philippines, Inc.

[1 and 3] *Data from Mr. Michinobu Sugata during the "Presentation at the Japan (METI)-Philippines (DTI) Industrial Dialogue", held at the Board of Investments, Makati, last June 16, 2014.*

[2] *Raw data sources: BETP for Merchandise Exports; BSP for Services (as stated in the Philippine Export Development Plan (PEDP) 2011-2013, p.9*

Figure 1. GDP: Selected ASEAN Countries:

Philippines, Indonesia and Thailand



Source of Data: IMF World Economic Outlook Database

In terms of employment generation, the industry was able to generate 68,000 direct employment and 340,000 indirect employment.[3]

However, the country's automotive industry is far behind in comparison within ASEAN, Thailand and Indonesia, in particular. The country's automotive manufacturing industry is challenged by smaller market and low volume of production as indicated in Table 2. Strong domestic market base is a pre-requisite to expand its export activity.[4]

Table 2. Production and Domestic Sales: 2013

	2013 Production	**2013 Domestic Sales**
Philippines	79K units	208K units
Thailand	2,457K units	1,330K units
Indonesia	1,208K units	1,230K units

Sources of Data: ASEAN Automotive Federation, CAMPI

There are at least four affirmative conditions that are advantageous for the automotive industry to expand its operations and expand its exports and be at par with other car manufacturing countries: a) increasing population of the country characterized by young workforce and large consumer base; b) communication skills and fluency in English and moderate wage levels which are favorable to business environment; c) large domestic market potential because large number of the population has low vehicle ownership; and d) the steady increase of income of the Filipinos.[5]

[4 and 5] *Data from Mr. Michinobu Sugata during the "Presentation at the Japan (METI)-Philippines (DTI) Industrial Dialogue", held at the Board of Investments, Makati, last June 16, 2014.*

The abovementioned figures and statistics prove that the automotive industry is a vital force of the Philippine economy. Therefore, it will be of utter importance to scrutinize and zoom in on the current automotive industry for this will help determine the improvements needed to be done for the industry, the skills needed to be developed and the implementation of labor and employment schemes for the next years to come.

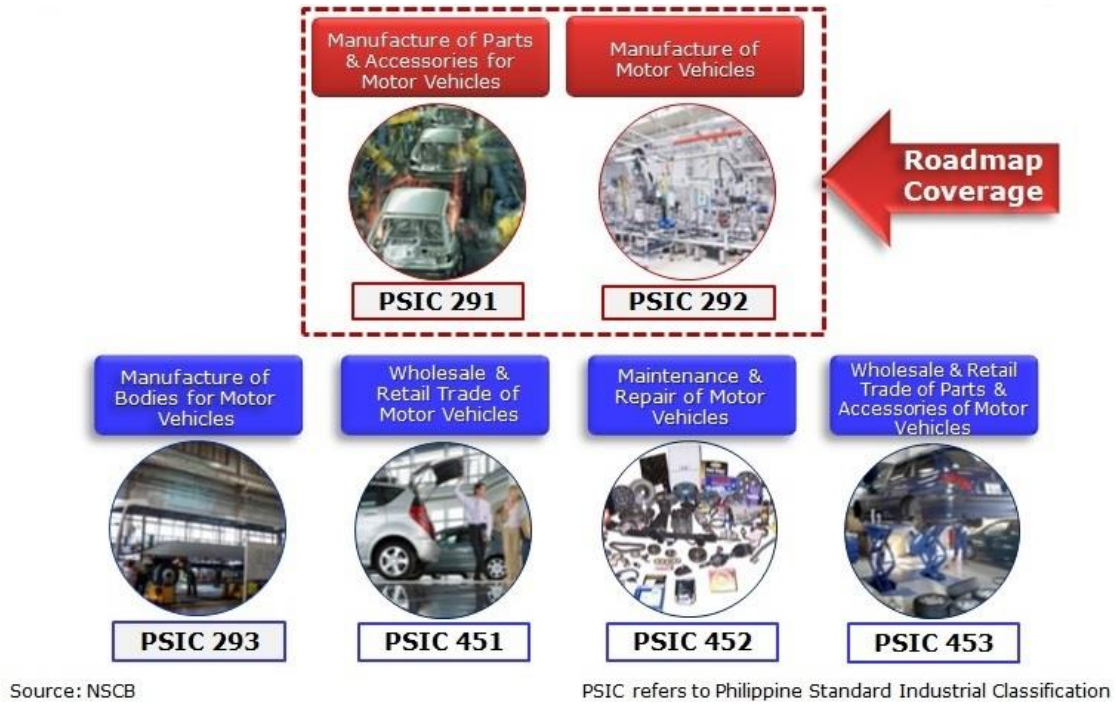
II. New Developments

A. The Philippine Automotive Industry Roadmap

The Philippine Automotive Industry Roadmap envisions the country be a **competitive manufacturing base** of motor vehicles and parts & components, serving both the **domestic and export markets**.

The Philippine Automotive Industry operates under the following structure: 1) Manufacture of parts and accessories for motor vehicles, 2) Manufacture of motor vehicles, 3) Manufacture of bodies for motor vehicles, 4) Wholesale and retail trade of motor vehicles, 5) Maintenance and repair of motor vehicles, and 6) Wholesale and retail trade of parts and accessories of motor vehicles.[6] While the said arrangement proves to be purposeful for the automotive industry, it is imperative that transformations be executed to further improve its undertakings.

Table 3: Philippine Automotive Industry Structure



Source: NSCB

PSIC refers to Philippine Standard Industrial Classification

[6] *As stated in The Philippine Automotive Manufacturing Industry Roadmap of the Philippine Automotive Competitiveness Council, Inc (PACCI).*

The Philippine Automotive Competitiveness Council, Inc (PACCI) together with the Bureau of Investment/Department of Trade and Industry (BOI/DTI) spearheaded The Philippine Automotive Manufacturing Industry Roadmap with the aim of addressing the "declining share of locally manufactured vehicles (LMV) in the domestic market and allow the industry to access and meaningfully participate in the soon to evolve ASEAN common market". [7] The Roadmap provides the strategic vision for the industry by the year 2022: That 1) The Philippines shall be a competitive manufacturing base of motor vehicles and parts & components, serving both the domestic and export markets and 2) The Philippines shall be a global hub for automotive-related human resource development and process outsourcing. Moreover, the Roadmap enumerated the industry objectives and targets for the year 2016 and 2022 in the table below.

Table 4. Automotive Roadmap Objectives and Targets

2016	2022
Increase production output to **213,000 units**	**Increase** production output to **506,000 units**
Increase Domestic CKD Sales to **195,000 units**	**Increase** Domestic CKD Sales to **350,000 units**
Attain localization levels of **more than 40%**	**Increase** localization levels with new parts mfg. capabilities
Export 18,000 vehicles	**Export 156,000 vehicles**
Increase parts export to **US$4.8 Billion**	**Increase parts export** to **US$ 7 Billion**

B. Employment in the Automotive Industry

The automotive industry is a trade that can open a myriad of employment opportunities. True enough, according to the Jobsfit Labor Market Information (LMI) Report 2013-2020, jobs in the automotive industry rank among the most in-demand for the said time frame, with automotive painter, automotive technician and calibration technician to name a few.[6] Employment to be generated for every P100B investments would be equivalent to 169,000 jobs (*Multiplier used: C. Terosa, Sept. 2010*).

Furthermore, this claim is proven to be true as recorded by 68,000 direct employment while there 340,000 indirect employments registered.[8] From the 68,000, employment is further categorized into the following: 8,000 were employed for vehicle manufacturing while 60,000 were engaged in parts manufacturing.[7] It can be inferred that the country's automotive industry relies heavily on parts manufacturing.

[7] *The objectives of The Philippine Automotive Manufacturing Industry Roadmap as explained in the article "PACCI Unveils Competitiveness Road Map for Auto Manufacturing Industry" in http://chinabusinessphilippines.com.*

[8] *The complete list of in-demand automotive jobs can be viewed in the Jobsfit Labor Market Information (LMI) Report 2013-2020.*

However, with issues on parts procurement, production and employment will have to be looked at.

In the Philippines, "automobile manufacturers can procure most of parts domestically in Thailand and Indonesia."[9] Furthermore, the country relies on imports to procure many parts and the large number of imported items and little volume of auto-production has led to high production costs. Given this analogy, it can be deduced that if imported cars are cheaper than locally-made vehicles, production will soon decrease, thus, threatening to put some strain on automotive employment.

On the other hand, the government is doing its best effort to uphold labor conditions in the country (automotive industry included). According to the Micro, Small and Medium Small Enterprise (MSME) Development Plan 2011-2016 of the Department of Trade and Industry (DTI), 2 million employments in new and sustainable jobs are targeted for the year 2016. In addition to that, economic contributions of SMEs will be raised to 40% of gross value added so that it will be at par with the share of the SME sector to GDP of other countries in the region.[10]

C. Comprehensive Automotive Resurgence Strategy Program or the "CARS" Program

Last May 29, 2015, President Benigno Aquino III signed Executive Order (EO) 182 which established the Comprehensive Automotive Resurgence Strategy Program or the "CARS Program." The CARS Program is supposed to attract new investments, stimulate demand, and implement industry regulations that will revitalize the Philippine automotive industry. It also aims to develop the Philippines as a regional automotive manufacturing hub.

The CARS program is a result of the Industry Roadmapping Project (IRP) launched by the Board of Investments (BOI)/Department of Trade and Industry. CARS seeks to enhance existing Motor Vehicle Development programs. Its goals include ensuring a resurgent automotive industry that supports innovation, technology transfer, environmental protection, and Small and Medium Enterprises (SMEs) development; and seizing market opportunities opened by the ASEAN Economic Community.

The program can facilitate the expansion of local manufacturing capabilities and improve cost competitiveness of industry players. The CARS Program is in addition to other non-fiscal measures which are provided by existing laws and regulations. Some industry players have expressed their full welcome for the CARS Program.

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[9] *The mentioned figures are stated in The Philippine Automotive Manufacturing Industry Roadmap of the Philippine Automotive Competitiveness Council, Inc (PACCI).*

[10] *Based on the Micro, Small and Medium Small Enterprise (MSME) Development Plan 2011-2016 of the Bureau of SME Development, Department of Trade and Industry (DTI).*

III. Technical Vocational Education and Training

Issues and challenges will always be around to hound the automotive industry. Opportunities abound if issues and challenges are seen in positive lens. Section 5 of the CARS Program identified various government agencies to work together to implement and to carry on the CARS Program. One of those agencies is the Technical Education Skills Development Authority (TESDA).

TESDA aims to provide direction, policies, programs and standards towards quality technical education and skill development to better the Filipino workforce. Through its technical vocational education and training (TVET), TESDA has been at the forefront in the development of the needed skills and training for automotive jobs.

A. TVET Statistics

As of July 2015, there are a total of 20,329 registered programs, all over the country. Out of this pool, TVET programs for the automotive sector accounted to 1,160 representing only 6%. Regions IX and XII have the highest registered programs with 135 (11.6%) and 124 (10.7%), respectively.

Table 5. Registered Programs in Automotive Industry
(as of July 31, 2015)

Region	No. of Registered Programs	Percent to Total
NCR	94	8.1
CAR	31	2.7
I	93	8.0
II	50	4.3
III	57	4.9
IVA	98	8.4
IVB	42	3.6
V	92	7.9
VI	45	3.9
VII	56	4.8
VIII	49	4.2
IX	135	11.6
X	84	7.2
XI	34	2.9
XII	124	10.7
CARAGA	42	3.6
ARMM	34	2.9
TOTAL	**1,160**	**100**

The number of enrolled and graduates of automotive programs were registered at 99,455 and 83,706, respectively. For the upcoming years, TESDA and its TVET partners will keep up with the changing demands and strive to improve the skills needed for the automotive industry.

TVET adheres to the principle of recognition of prior learning (RPL). TESDA recognizes the skills and competencies that the workers possessed and gained through experience and other means. Workers therefore can undergo the assessment and be certified if he/she can demonstrate the skills and competencies gained from work exposure. In 2014, there were 80,868 individuals assessed and

70,674 individuals were certified for the automotive TVET sector. This accounts to an 83% certification rate. Furthermore, this means that certified skilled workers are competent and possess the competency skills required for the jobs in the automotive industry.

Table 6. Number of Enrolled, Graduates, Assessed and Certified Candidates in Automotive: 2014

Training Regulation / Qualification Title	Enrolled	Graduate	Assessed	Certified
Automotive Body Painting/Finishing NC I	442	499		
Automotive Body Painting/Finishing NC II	673	575	5	5
Automotive Body Painting/Finishing NC III				
Automotive Body Repairing NC II	163			
Automotive Electrical Assembly NC II	374	243	147	119
Automotive Electrical Assembly NC III				
Auto Engine Rebuilding NC II	637	698	2	2
Automotive Mechanical Assembly NC II	44	100	64	54
Automotive Mechanical Assembly NC III				
Automotive Servicing NC I	12,733	10,617	9,936	8,292
Automotive Servicing NC II	34,099	29,162	29,839	25,275
Automotive Servicing NC III	528	232	111	111
Automotive Servicing NC IV	43	12	51	38
Automotive Wiring Harness Assembly NC II	288*	1,858*	467	461
Driving NC II	13,800	11,465	26,009	23,246
Driving (Passenger Bus/Straight Truck) NC III	105	105	7,966	7,451
Driving (Articulated Vehicle) NC III	125	126	186	169
Forging NC II				
Forging NC III				
Foundry Melting/Casting NC II				
Foundry Melting/Casting NC III				
Foundry Molding NC II				
Foundry Molding NC III				
Foundry Pattern Making NC II				
Foundry Pattern Making NC III				
Heat Treatment NC II				
Laboratory and Metrology/Calibration Services NC II				
Laboratory and Metrology/Calibration Services NC III				
Metal Stamping NC II				
Moldmaking NC II				
Motorcycle/Small Engine Servicing NC II	5,009	3,475	6,078	5,444
Painting Machine Operation NC II				
Plastic Machine Operation NC II	970	730		
Plastic Machine Operation NC III				
Process Inspection NC II	25	25		
Process Inspection NC III				
Tinsmithing (Automotive Manufacturing) NC II	43	74		
Automotive Servicing NC I (Amended)			7	7
Total (WTR Programs)	**70,101**	**59,996**	**80,868**	**70,674**
Automotive Courses without Training Regulation (NTR)	**29,642**	**23,710**		
TOTAL	**99,743**	**83,706**	**80,868**	**70,674**

***** *Graduates are higher than enrolment because of the spill-over of 2013 enrolment*

To date, there are 37 training regulations (TRs) for the automotive industry promulgated by the TESDA Board. It will be noted that out of 37 TRs, only 19 TRs are being utilized as indicated also in Table 6. As a matter of policy, all TRs have to be reviewed and updated after three (3) years of its promulgation to ensure that they are aligned with the requirements brought about by technology and global development. TESDA has currently reviewed the following six (6) TRs: 1) Driving NC II; 2) Driving (*Passenger Bus/Straight Truck)* NC III; 3) Driving *(Articulated Vehicle*) NC III; 4) Automotive Servicing NC I; NC II; NC III; and NC IV. Meanwhile, Motorcycle/Small Engine Servicing NC II is currently being reviewed by the expert panel.

There are a total of 404 Assessment Centers for the Automotive Industry; these are the venues for conducting competency assessment of candidates/workers. Majority of the Assessment Centers (55%) offer assessment for two qualifications: Automotive Servicing NC II and Driving NC II. Most assessment centers are privately-owned.

Table 7. Number of Assessment Centers: Automotive Industry, (as July 2015)

Training Regulation / Qualification Title	No. of Assessment Centers	Percent of Total
Automotive Body Painting/Finishing NC II	1	0.2
Automotive Body Repairing NC II	1	0.2
Automotive Electrical Assembly NC II	2	0.5
Automotive Servicing NC I	65	16.1
Automotive Servicing NC II	112	27.7
Automotive Servicing NC III	5	1.2
Automotive Servicing NC IV	3	0.7
Automotive Wiring Harness Assembly NC II	1	0.2
Driving NC II	112	27.7
Driving (Passenger Bus/Straight Truck) NC III	37	9.2
Driving (Articulated Vehicle) NC III	5	1.2
Motorcycle/Small Engine Servicing NC II	50	12.4
Automotive Servicing NC I (Amended)	3	0.7
Automotive Servicing NC II (Amended)	7	1.7
TOTAL	**404**	**100**

At present, TESDA is providing direct financial assistance to deserving TVET enrollees across all regions in the country under the two programs which aim to address equity and access and addressing the critical skills of priority sectors. The scholarship programs currently being implemented include the following:

Private Education Student Financial Assistance (PESFA). PESFA offers educational grants to qualified and deserving college freshmen both in degree and non-degree courses. The PESFA directed the beneficiaries on the choices of careers to the critical skills requirements of in-demand jobs in the labor market. It also allows for equity distribution of the opportunities made available through government subsidies.

Training for Work Scholarship (TWSP). This program provides immediate interventions to meet the need for highly critical skills shortage in priority sectors, namely: Agri-Fishery/Agro-Industrial, Information Technology-Business

Process Management (IT-BPM), Electronics, Manufacturing, Housing, Logistics, and Tourism, among others. The program has two-fold objectives:

1. To purposively drive TVET provision to available jobs through incentives and appropriate training programs that are directly connected to existing jobs for immediate employment, both locally and overseas,
2. To build and strengthen the capacity and capability of TVET institutions in expanding and improving the delivery of quality, efficient and relevant training programs that meet job requirements, including programs for higher levels of technology.

In 2013, a total of 3,965 graduates in the Automotive Sector benefited from the TWSP.

Table 8. TWSP Slots, Budget, Enrolment and Graduates for 2013

Sector	No. of Slots	Amount (in PHP)	No. of Enrolled	No. of Graduates
Agri-fisheries/ Agri-business	2,358	33,995,000	2,251	2,244
General Infrastructure	15,841	138,736,500	15,553	15,524
IT-BPM	16,485	99,555,500	16,353	16,325
Tourism	38,554	208,232,500	38,397	38,288
Trainer's Methodology	3,415	30,735,000	3,189	3,171
Language and Culture	8,472	12,708,000	8,229	8,087
Other (Health, Social & Other Community Development Services)	11,731	70,164,000	11,683	11,666
Other (Land Transportation)	1,622	7,442,000	1,622	1,620
Manufacturing	10,989	68,893,000	10,713	10,671
Automotive	4,175	22,183,500	3,965	3,945
Electronics and Semi-conductor	6,787	46,601,500	6,721	6,699
Garments & Textiles	27	108,000	27	27
TOTAL	**109,467**	**670,461,500**	**107,990**	**107,596**

The present government recognizes the need to assist the workers/trainees in acquiring skills and competencies needed by the industry. Relative to this, budget allocations for TWSP increased over the years. In particular, budget allocation for the automotive industry increased from Php 22.18 million in 2013 to Php 52.812 million in 2014, and Php 61.04 million in 2015 with the corresponding slot allocations of 8,518 and 9,845 for 2014 and 2015, respectively.

Table 9. Budget allocation for Automotive Industry, 2014 and 2015

Year	Budget Allocation	Number of Slots
2014	Php 52.812M	8,518
2015	Php 61.04M	9,845

Note: budget was computed at P6,200/slot.

TESDA, in collaboration with the Philippine Chambers of Commerce and Industry (PCCI) and the Board of Investment/Department of Trade and industry (BOI/DTI), conducted the Sectoral Industry Consultation on February 26-27, 2015.

The consultation was aimed at identifying priority skills to be developed for 2015-2017. Representatives from the automotive industry have identified the following job titles as priorities in the development of competency standards:

- Automotive Servicing - Hybrid Vehicles *(Hybrid Specialist)*
- Mechanical Design
- Plastic Mold Design
- Deburring Operations - *(Deburring Technician)*

These skills are on top of those covered by the existing Training Regulations (TRs).

Auto parts: tool and die: design, tool making, prototyping, molding, die & casting are initially identified in the Roadmap. Further consultation with industry champions and other stakeholders would define, identify and finalize the said priority skills occupations that need to be developed for the industry.

IV. Moving Forward

With the 2015 ASEAN Integration and the engagement of the country in various free trade agreements (FTAs), and the aspiration of the Philippines to be the Training Hub of ASEAN in Services, there will be significant changes over time in the automotive industry. The country has to be more competitive and make the world our market.

Skilled and qualified workers are needed in order to sustain the development and growth of the automotive industry. Thus, planning and strategic actions need to be done to meet industry demand and requirements. TESDA, in particular has to ensure that skills and competencies requirements needed by the automotive industry has to be addressed.

Continuous and wider consultation with the industry and key stakeholders is essential to identify job/qualifications needed by the trade. Also, to further improve the industry, human resource development and training programs shall be designed to help improve skills and at the same time, establish tie-ups with universities and training institutions.[11] With these efforts, workers shall be equipped with the necessary knowledge and training needed to adapt to the trade.

TESDA is continuously reviewing and updating the existing training regulations for the automotive industry. Moreover, new training regulations shall be developed, in consultation with the industry experts. In order to achieve such, it is critical to properly identify competent experts who are willing to partner with TESDAS. Experts from the prominent automakers in the Philippines can be invited to attend in the industry consultations and to serve as expert panels, such as representatives from Toyota, Ford, Mitsubishi, Nissan, Honda, and other key players.

Upgrading the capabilities of existing trainers is critical in the development of skills and competencies of workers in the automotive industry. This could only be done through partnership with the automotive companies allowing trainers to

undergo industry immersion for them to be exposed in workplace best practices and on the state of the art technology. Public-private collaboration and coordination could be successfully applied to the automotive manufacturing industry.

Lastly, scholarships and other training assistance should be focused further on critical skills, hard to fill skills and higher-level qualifications as identified by the industry.

[11] *Measures on how to improve industries, including automotive, as discussed in The Philippine Manufacturing Industry by Rafaelita M. Aldaba, p.74.*

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