EU-ASEAN
BUSINESS COUNCIL

ASEAN –
An Emerging Global Automotive Hub in the Making

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Executive Summary

The EU-ASEAN Business Council has brought forward the publication of this paper looking at the automotive industry in ASEAN following the encouraging comments made by ASEAN Economic Ministers during our meeting with them in April 2015 in Kuala Lumpur. This paper is designed to advance and stimulate debate amongst policy makers and industry stakeholders on how best to develop the automotive industry in South East Asia with the aim of producing a globally competitive and active automotive industry that can capacity build both the local workforce and the technological developments in the local industry; contribute positively to economic and social development within ASEAN; and, ultimately, allow ASEAN to move into a more export orientated mode in its automotive industry.

This paper takes a look at the current state of play of the automotive industry in the region, within the context of the forthcoming ASEAN Economic Community, likely future developments, and what we, as European industry, believe ASEAN should be looking to do collectively to elevate the industry in the region to make it more globally relevant and competitive.

One of the key objectives of the AEC is to create a "single market and production base"[1] within the region. The EU-ABC applauds this goal and the full intent of the AEC. However, we recognise that ASEAN is someway from achieving it: the targets of a free flow of goods, services, skilled labour, investment and a freer flow of capital will not be achieved in full this year. This is especially true in the automotive sector where a plethora of non-harmonised rules and regulations coupled with differing national policies across the region have meant that the industry is dis-jointed, leading to inefficiencies that are inevitably holding the region back from being globally more competitive.

It is the view of the EU-ABC that if ASEAN were to move collectively on the recommendations set out in this paper, then the region, taking advantage of its geographical position, growing urbanisation, relatively low cost base, improving connectivity, and increasingly better educated and young population, could quickly become the fourth largest producers of automobiles in the world. It is a goal that is worth achieving and one that is within reach should policy makers and stakeholders from across the ASEAN region work together.

The recommendations in this paper cover, *inter alia*, the following key areas:

- Changes to National Automotive Policies
- Introduction of CO_2 based or similar taxation regimes
- Adoption of internationally recognised technical standards
- Alignment of approval and homologation processes and standards
- Measures to improve the availability of a skilled workforce

As ever, the EU-ABC is ready and willing to participate in a meaningful dialogue and consultation with ASEAN and the ASEAN Member States on the issues raised in this paper. We look forward to such a discussion happening in the near future.

[1] Article 6 of the AEC Blueprint, November 2007

Introduction

With the ASEAN Economic Community (AEC) due to be implemented at the end of 2015, now is the time to evaluate where the region is in that process, and what needs to be accomplished for a smooth implementation of a common market and single production base for the automotive industry over the next couple of years. The progress made with the AEC is already truly remarkable, for which the ASEAN Member States should be rightly applauded, but the issues that the automotive industry face in the region only serve to highlight the amount of work that remains to be done to achieve the stated goal of a single production base.

In this paper the EU-ABC looks at the issues that are holding back the development of the automotive industry in ASEAN; issues that are preventing the region from truly becoming a global automotive powerhouse and assuming the position of the fourth largest producer of vehicles in the world.

EU-ABC hopes to be involved in a meaningful consultation exercise with ASEAN on how to best tap into the economic potential of the automotive industry in the future for the wellbeing of the people and economic growth in ASEAN, as mooted at its last meeting with the ASEAN Economic Ministers in April 2015. In this paper we have set out a number of policy recommendations that we believe are worthy of serious further detailed discussion with the ASEAN Member States and which, if implemented, would advance the automotive industry in the region to the benefit of consumers, manufacturers and national economies.

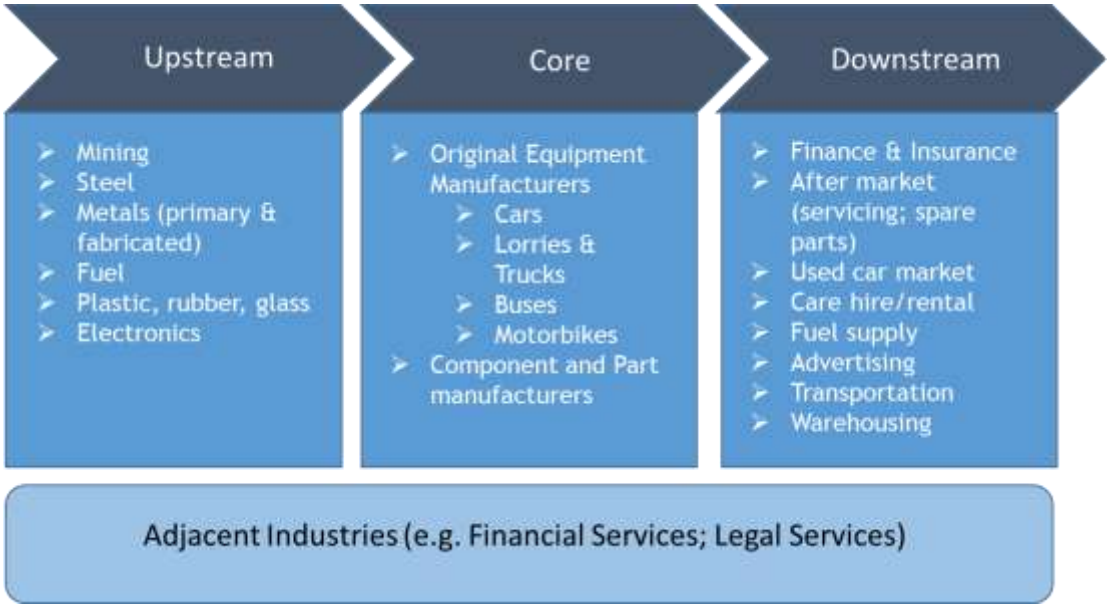
ASEAN governments themselves have identified the automotive industry as a key sector which can help drive the industrialisation of the region. The automotive industry should be seen as crucial to:

- The creation of well-paid employment;
- The development of technical and cutting edge training;
- The fostering of research & development;
- Attracting Foreign Direct Investment; and,
- Generating substantial fiscal revenue for governments.

According to independent studies[2], the automotive industry supports a wide range of other industries and business segments throughout the value chain – from producers of steel, rubber, electronics and software to insurance, financing, parts business and advertising (see figure 1 below). For each job within the automotive industry, several jobs are created in supporting segments like the metals industry, parts suppliers, and dealerships. For example in Korea, for each job within the core automotive business, five jobs are created in supporting industries.

[2] See, for example, https://www.atkearney.com/documents/10192/2426917/The+Contribution+of+the+Automobile+Industry+to+Technology+and+Value+Creation.pdf/8a5f53b4-4bd2-42cc-8e2e-82a0872aa429

Figure 1: The Automotive Value Chain[3]



In order to raise the global competitiveness of the ASEAN automotive industry and move ahead in a volatile environment, some key questions need to be answered:

- How to best stimulate innovation and the global competitiveness of the ASEAN automotive industry?
- How can ASEAN boost workforce skills in the automotive industry and improve per capita income?
- How can ASEAN continuously improve the environmental friendliness of the automotive sector and, simultaneously increase the vehicle safety in ASEAN?

In this paper, the EU-ABC has identified key challenges and recommendations that will determine ASEAN's path of becoming a key global automotive hub in the future.

[3] After AT Kearney Report "The Contribution of the Automotive Industry to Technology and Value Creation".

Table of Recommendations

Topic	Recommendation
National automotive policies	➢ Future automotive policies to focus on innovations and setting high environmental and safety standards. ➢ Create a level, competitive playing field among all auto makers and not pick winners and losers by incentivising certain vehicle types, segments or technologies. ➢ Facilitation of cross-ASEAN regional value chains to encourage a broader spread of economic wealth, and allow for economies of scale by automotive suppliers. This in turn would help with the establishment of areas of excellence that can supply multiple OEMs. ➢ Introduction of higher fuel quality and emission standards as prerequisite for a broad introduction of environmental-friendly low emission technologies in the market and as an enabler for further growth in the export business. ➢ Introduction of mandatory safety and environmental standards for cars and regular mandatory technical check-ups ("TUV"). ➢ Midterm completion of trade agreements with major automotive markets (Europe, USA).
CO_2 based vehicle taxation systems	➢ Introduction of technology-neutral taxation schemes that are based on CO_2 or fuel consumption. This will incentivise the use of clean technologies independent of their power train technology.
International technical standards	➢ Implementation of the 19 prioritised UNECE regulations on national levels by the end of 2016 through the establishment of public-private sector working groups. ➢ Agreement on ASEAN wide identical testing procedures using the same methodologies, standards and application regulations.
Homologation processes and definitions on local content requirements	➢ Alignment of approval and homologation processes and standards to improve time, cost efficiency and international competitiveness. ➢ Recognition of approvals as equivalent to local testing requirements that are based on agreements of the World Forum for Harmonisation of Vehicle Registration (WP29) and tests performed by qualified foreign parties. ➢ Harmonisation of the procedures for local content and rules of origin application to facilitate exports across the region.
Availability and quality of skilled workforce	➢ Installation of public/private partnerships in engineering and technical training to ensure that the workforce meets industrial demands. ➢ Liberalisation of the job market to free movement of skilled labour within ASEAN. ➢ Incorporation of practical industrial training schemes as part of the academic curriculum.

The Automotive Industry in ASEAN

The ASEAN Growth Story

As a grouping of 10 very divergent economies, ASEAN has grown rapidly over the 5 decades it has been in existence. Today it represents a combined GDP of USD 2.5 trillion (2014)[4], the seventh largest in the world. The automotive market itself is the 6th largest in the world and is likely to climb to the 5th spot by 2020 (See Table 1 below). With some further changes in policies across the region ASEAN has the potential to move to the number four position globally.

Table 1: Global Top 10 Automotive Markets 2014 vs 2020[5]

2014 Global Sales (Actual)			2020 Global Sales (Projected)		
Rank	Country	Sales (millions)	Rank	Country	Sales (millions)
1	China	23.5	1	China	34.5
2	USA	16.8	2	USA	17.4
3	Japan	5.6	3	India	7.7
4	Brazil	3.5	4	Brazil	4.9
5	Germany	3.4	5	ASEAN	4.5
6	ASEAN	3.3	6	Japan	4.3
7	India	3.2	7	Russia	3.6
8	UK	2.8	8	Germany	3.4
9	Russia	2.6	9	UK	2.8
10	France	2.2	10	France	2.6

The growth opportunities in the auto sector are being driven by steady economic growth in the region (see Table 2 below – ASEAN wide GDP growth rates are predicted to be between 5% and 6% through to 2019), translating into fast growing mobility needs of the more than 600 million population especially as urbanisation rates in the region continue to climb. The low motorisation levels coupled with increasing purchasing power constitutes a natural growth engine that is fueling explosive and unparalleled market growth in the automotive sector (See Figure 2 below). As ASEAN crosses the US$3,000 GDP per capita mark, vehicle ownership is poised to grow twice as fast as per capita income.

Table 2: Projected ASEAN GDP Growth Rates[6]

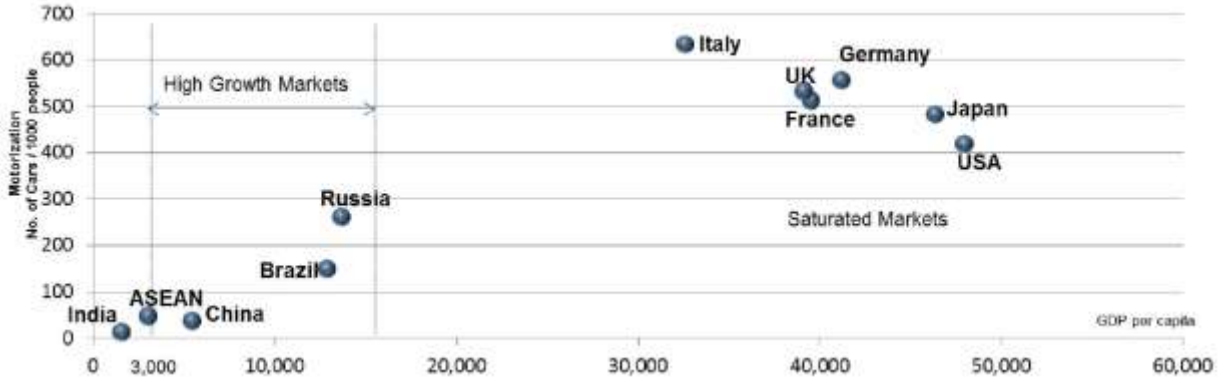
Country	2013	2019	2003-07	2011-13	2015-19
Brunei Darussalam	-1.8	1.9	1.7	0.9	1.6
Cambodia	7.5	7.3	10.6	7.3	7.1
Indonesia	5.8	6.3	5.5	6.2	6.0
Lao PDR	8.0	7.7	7.1	8.1	7.6
Malaysia	4.7	5.6	6.0	5.2	5.6
Myanmar	7.5	7.8	-	6.9	7.8
Philippines	7.2	6.3	5.7	5.9	6.2
Singapore	3.9	3.6	7.9	4.1	3.5
Thailand	2.9	4.6	5.6	3.2	4.1
Vietnam	5.4	5.8	7.2	5.6	5.7
ASEAN Average	**5.2**	**5.8**	**5.9**	**5.4**	**5.6**

[4] http://data.worldbank.org/data-catalog/GDP-ranking-table

[5] OCIA, Frost & Sullivan

[6] Source: OECD: Economic Outlook for South East Asia, China and India 2015: Strengthening Institutional Capacity

Figure 2: Motorisation vs GDP per Capita in Key Global Markets[7]



The rapidly growing market has also been a big driver for local manufacturing. Close to 3.9 million vehicles were assembled in 2014 in the region, making ASEAN the 6th largest manufacturing base of vehicles in the world (see Table 3 below).

Table 3: Global Top 10 Vehicle Production Bases 2014[8]

2014 Global Production (Actual)		
Rank	Country	Production (millions)
1	China	23.7
2	USA	11.7
3	Japan	9.8
4	Germany	5.9
5	South Korea	4.5
6	ASEAN	3.9
7	India	3.8
8	Mexico	3.4
9	Brazil	3.1
10	Spain	2.4

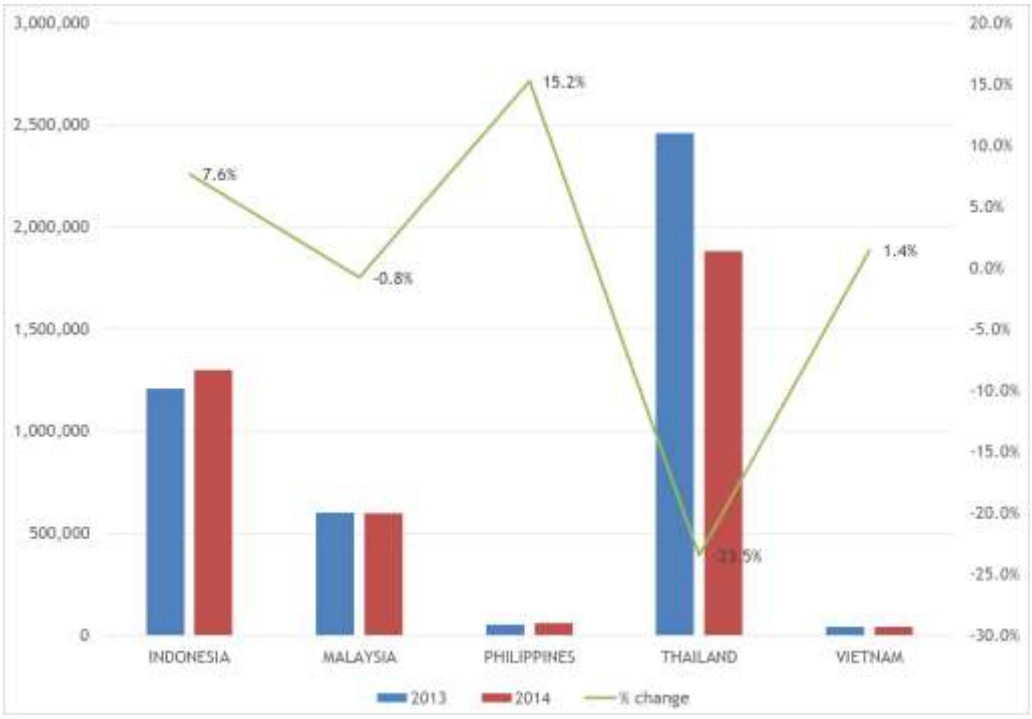
The drive for manufacturing has been led by Thailand where export driven policies have ensured that 50% of what is manufactured is exported. With the exception of Indonesia which has exported about 200,000 vehicles in 2014, the export of vehicles from other ASEAN markets remains negligible, even though ASEAN as a whole is a net exporter of vehicles. Other than Thailand, automotive production in ASEAN is mainly targeted at catering to domestic demand. The lack of alignment with global standards, supply chains and markets, further inhibits exports.

[7] OCIA, World Bank, Frost & Sullivan
[8] OCIA

However, ASEAN markets have been in an overdrive as far as negotiating FTAs are concerned. They find themselves in the midst of two of the most ambitious FTAs ever negotiated - the US led Trans-Pacific Partnership (TPP) which involves Brunei, Malaysia, Singapore and Vietnam and the ASEAN centric Regional Comprehensive Economic Partnership (RCEP). The latter involves ASEAN and its FTA partners - China, India, Korea, Japan and Australia/New Zealand. In addition, a slew of bilateral FTAs are also being negotiated with the European Union having already completed an FTA with Singapore and reached an in principle agreement with Vietnam. The EU-ABC hopes that the European Union will move quickly with other bilateral FTAs in the region or, more preferably, an EU-ASEAN FTA.

It is interesting to note that while these FTAs involve some of the largest automotive markets in the world, most countries with a significant auto industry of their own are extremely cautious in opening up the sector more and removing tariffs. Within ASEAN, the tariffs are already near zero for all markets, a key and significant success of the AEC. It is the Non-Tariff Barriers (NTBs) which are causing the most problems to free trade as the EU-ABC noted in its paper on market access issues, *Realising the Potential of ASEAN*, published in July 2015[9]. Furthermore, the plethora of bilateral and multilateral FTAs is starting to become counterproductive. Trade complexities arising due to different rules of origin have restrained the widespread usage of FTAs. A recent study has shown that on an average, the usage rate of more than 50 FTAs signed by them is just 26%[10].

Figure 3: ASEAN Vehicle Production 2013 vs 2014[11]



[9] See: http://eu-asean.eu/wp-content/uploads/2015/07/Realising-the-Potential-of-ASEAN.pdf

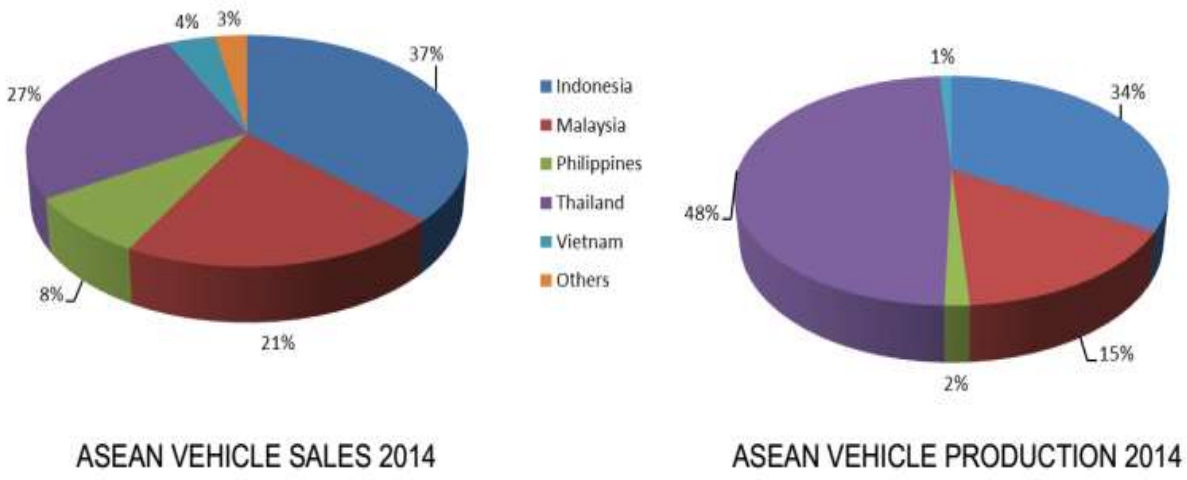
[10] "FTAs in South East Asia: Towards the next generation", by Economist Intelligence Unit. See: https://globalconnections.hsbc.com/hong-kong/en/special-features/fta/ftas-in-south-east-asia-towards-the-next-generation

[11] See: http://www.oica.net/category/production-statistics/

ASEAN Country Markets & Automotive Policies

The 10 markets comprising ASEAN present varying degrees of automotive industry development. The Big-3 - Thailand, Indonesia and Malaysia - account for 85% of the sales and 97% of all vehicles produced in the region. Whilst Indonesia is the largest market in ASEAN, Thailand is a long way ahead as the largest manufacturing base. On the other hand, Myanmar, Laos and Cambodia are primarily used car markets with an insignificant proportion of new cars (see Figure 4).

Figure 4: ASEAN Country Market Share in Sales & Production, 2014[12]



Other than the natural market growth, Government policy is a major driver of automotive growth in the region. It can cause dramatic swings in demand by directly impacting consumer choices and attitudes. For instance: in Thailand the Eco Car policy has created a new segment for cars and shifted demand from pickups; in Indonesia the LCGC policy also created a new market segment reducing demand for MPVs; and, in Malaysia the reduction in import duties on hybrid CBU cars led to a growth in that sector.

Across ASEAN, National Automotive Policies, Roadmaps and Master Plans are being drafted to encourage local investment, spur growth and generate additional employment (see Table 4 below for a comparison of Automotive Policies from the three major markets and how they relate to "Green Cars"). Apart from Thailand, Indonesia and Malaysia, automotive policies are also in the making in Vietnam (*Master Plan for Development of Automotive Industry up to* 2020) and the Philippines (*Comprehensive Automotive Resurgence Strategy, CARS)*[13]. However, these can create differentials between imported and locally produced vehicles and parts. By offering incentives and non-financial benefits[14] to lure FDI in the sector, these instruments inadvertently set up protectionist policies and create barriers to trade.

Over the years Thailand has effectively used "champion products" to grow its market and develop the industry. These have included special privileges for pickup trucks which made Thailand world's largest market for 1 tonne pickups. That policy was followed by the highly successful Eco Car

[12] OCIA, ASEAN Automotive Federation

[13] Executive Order No. 182, s. 2015, signed on May 29th 2015, http://www.gov.ph/2015/05/29/executive-order-no-182-s-2015/

[14] In Malaysia, for example, a series of potential incentives are available – See Table 4 below.

programme which saw Thailand become a global base for fuel efficient compact cars. And Thailand has already announced its intention to focus on Electric Vehicles (EVs) going forward.

Across ASEAN, automotive policies are being increasingly oriented towards eco-friendly vehicles or "Green Cars". Regional demand for such vehicles has been largely shaped by government policy based on the dependence on fuel imports, fear of technology obsolescence, environmental issues and global market integration. While Thailand has its Eco Cars, Malaysia too has announced its Energy Efficient Vehicle (EEV) Policy and Indonesia has rolled out its Low Carbon Emission (LCE) programme with a focus on low cost vehicles.

The focus on "green cars" needs to be assessed in an ASEAN context. Across the region's markets Green is a "relative" concept, not an "absolute" one. A Green Car is so because it is "relatively" greener than a large number of vehicles currently being sold in the market in the same segment. They offer better fuel economy and have lower emissions than the majority of incumbents, even though they may appeal to the lower end of the market and offer basic technology at best.

Thailand has been a virtual pioneer in the Green Car space in the region. The Eco Car programme, launched in 2007, is the bedrock of the Government's Green Car Policy. So much so that Green Cars are virtually synonymous with Eco Cars in Thailand, although the former also include Hybrids and other alternative fuel vehicles. The Eco Car, as envisaged by the Thailand Automotive Institute is supposed to be an "environmentally" friendly vehicle since it ensures better mileage per litre than other similar cars in the market. The Thailand Board of Investment itself defines the eco-car as "a *motor vehicle that emits either modest or no greenhouse gasses and as such is less harmful on the environment*"[15]. It further maintains that *"Thailand has imposed a very strict emissions standard for "eco-cars," requiring a limit of 120 grams of CO_2 per kilometre. In contrast, the European Union standard is 130 grams of CO_2 per kilometre"*[16].

The Eco Cars have inherited the legacy of pickups as Thailand changes gears from an agriculture focused economy to a more industrialised and urbanised one. It has ensured increased investment, job creation and rapid development of the automotive sector. Harbouring aspirations to be amongst the top 10 automotive producers in the world, Thailand has realised that it is a must to meet global demand trends for more environment friendly, fuel efficient and safer products. With this objective in mind, and encouraged by the results of the Phase 1 of the Programme, the Thai Government announced, in August 2013, Phase 2 of the Project with a focus on export driven production. It sets more stringent technical conditions and a higher production target as qualification criteria. Also, whilst Phase 1 was an all Japanese affair, Phase 2 has seen applications of non-Japanese companies[17]. But in the meantime the automotive landscape in Thailand has changed and some of the applicants have pulled out again (GM), have stopped production due to sluggish demand (SAIC) or are rethinking their strategy (Volkswagen). Manufacturers of "eco-cars" in Thailand have called for a change in the government-supported eco-car programme to include more vehicle types[18].

It is also worth noting that the Eco Car Phase 1 Programme in Thailand was based on Euro 4 fuel standards, with Phase 2 based on the higher Euro 5 standards, whereas similar programmes in both Malaysia and Indonesia were based on lower Euro 2 standards, something that makes the export of such vehicles to other markets more problematic and therefore could hinder the growth potential for such cars as their domestic markets become saturated.

[15] See: http://www.boi.go.th/tir/issue/201312_23_12/42.htm
[16] Ibid.
[17] ibid
[18] https://www.ihs.com/country-industry-forecasting.html?ID=1065998897

For the last few years, the Indonesian automotive market has been abuzz with news of the Low Carbon Emission (LCE) Policy of the Government. The Indonesian Green Car Policy has two distinct tracks: (A) the more popular "low cost" one (referred to as the LCGC - Low Cost Green Car) based on conventional internal combustion (IC) technology and having a price cap of 100 million Rupiah; and, (B) the other, dealing with vehicles running on advanced fuels, gas and biofuels. For the latter there is no price cap and the Government considers this as catering to the higher end of the market. While the A track has been implemented as the focus of the government remains on the 'mass appeal', the detailed technical guidelines for the B track that are more appealing to the European manufacturers is still awaited.

As the Indonesian Government battles to manage the after effects of fuel subsidy removal and the subsequent rise in fuel prices, low consumption cars are likely to help reduce the country's fuel consumption in the long run. Additionally, the adoption of superior fuel technologies (such as Euro 4 and 5) would even further reduce the overall fleet fuel consumption and reduce the need for fuel imports.

While Thailand launched its Eco Car Programme in 2007 and Indonesia announced its Green Car Policy in 2013, Malaysia put forth its approach through the National Automotive Policy (NAP) announced in January 2014. Though there were preferential duty provisions for Hybrids and EVs in the previous NAP (2009), Malaysia has only now put together a comprehensive policy document dealing with the entire value chain with a view to increasing investment, improving competitiveness and enhancing productivity.

As far as automotive manufacturing is concerned, Malaysia has been a pioneer in the region, having embarked on its National Car Programme way back in the early 1980s. However, over the years, its domestic production has been plagued by structural weaknesses (e.g. low productivity levels, lack of scale) which have in a way 'clipped its wings', restraining growth and making it harder to compete with Thailand and Indonesia for fresh investment and develop the local industry further. These challenges form the backdrop of the NAP 2014 and are key to understanding the Malaysian Government's current focus on EEVs.

Malaysia's EEV policy covers a wide range of vehicle segments and powertrain technologies including internal combustion (IC) engines, hybrids, electric vehicles, LNG, CNG, LPG, biodiesel as well as fuel cells. Instead of demarcating a "Green Car' by engine capacity, EEVs have been defined on the basis of Kerb Weights and emission standards. However, carbon emission levels are yet to be specified due to the non-availability of Euro 4 fuel nationwide.

This is in stark contrast to the green car policies of Thailand and Indonesia which focus mainly on IC engines of smaller cc with stringent price, production, and investment and export conditions. The EEV policy puts no investment conditions with a view to offer OEMs a greater degree of flexibility. However, the quantum of incentives offered by the Government depends on the automaker's scope and extent of investment, localisation commitment and export orientation. This represents a high degree of interdependency, prolonged negotiations and ensuing uncertainty since OEM commitments usually depend on the extent of incentives available.

For Malaysia, the NAP is more of a balancing act by the Government trying to open/liberalise the market and protect the local industry at the same time. The EEV policy is more of an attempt to play catch up to Thailand and Indonesia, and attract investment, rather than reduce carbon emissions. It could be argued, however, that the LCGC in Indonesia itself does little to reduce CO_2 and other emissions as it is based on Euro 2 levels, rather than higher quality fuels.

Table 4: Comparison of Automotive Policies for "Green Cars"[19]

	Thailand	Indonesia	Malaysia
	Eco Car Phase 2	Low Cost Green Car (LCGC) [20]	Energy Efficient Vehicles (EEV)
Product	➢ Petrol Cars ≤ 1300cc ➢ Diesel Cars ≤1500cc ➢ Fuel Economy ≥23.25km/l ➢ Emission Standard – Euro 5 ➢ CO_2 Emissions ≤100g/km ➢ UN R94, R95 Revision 1 ➢ ABS, ESC, ESP, VSC	➢ Petrol ≤1200cc ➢ Diesel ≤1500cc ➢ Fuel Economy ≥20km/l ➢ CO_2 Emissions ≤120g/km ➢ Fuel Standards: ○ Petrol – RON92 ○ Diesel – CN51	➢ All fuel types including petrol, diesel, hybrid, EV & alternative fuels ≤2500cc ➢ Fuel economy requirements vary by kerb weight ➢ Emissions levels TBA
Requirement	➢ Min Investment: ○ Existing Manufacturers THB5bn ○ New Manufacturers THB6.5bn ➢ At least 100,000 cars p.a. from year 4 onwards	➢ Price ≤IDR95 million (off road, basic incl. taxes) ➢ Price adjustments can be made for: ○ Transmission (automatic, dual clutch) 15% ○ Safety features (airbags, ABS) 10%	➢ No conditions on investment; individual discussions with OEMs
Incentive	➢ 6 year exemption on corporate income tax (possible extension to year 7-8 in case of additional investment of 500-800 Million Baht respectively) ➢ Additional incentives for using local suppliers ➢ 14% excise tax ➢ 12% excise tax for cars compatible with E85	➢ 100% luxury tax exemption or rebate ➢ On Petrol (≤1200cc) and diesel (≤1500cc) cars	➢ Customised incentives – combination of "pioneer status", investment tax incentives, grants, infrastructure facilitation etc. ➢ Import & excise duty exemption on incentives (to 2015) and EVs (to 2017)
Market Focus & Penetration	➢ Strong export orientation ➢ 30:70 split between domestic sales and export	➢ Domestic focus ➢ 19.6% penetration of car market[21]	➢ Export growth objective ➢ Current penetration of 3% of domestic market

AEC - The Quest for One Market

The AEC is likely to have a gradual but significant impact on the automotive sector. However, the desired transformation of an economically diverse ASEAN into a more united economic area is extremely challenging. There are significant gaps in the way the markets are currently regulated, the quality of institutions and the environment in which businesses operate. Different Automotive

[19] http://www.smmt.co.uk/wp-content/uploads/sites/2/Advent-of-Fuel-Efficient-Cars-in-ASEAN_Frost-Sullivan.pdf

[20] The second track of the LCE has not been implemented yet. It foresees a 25% rebate on the luxury tax for fuel economy 20 to 28 km/l & 50% rebate on economy >28km/l) for hybrids, EVs and alternative fuels cars.

[21] First full year of the programme (2014) Source: Frost & Sullivan

Policies also lead to very locally focused industries. Progress to date has been patchy and that is undoubtedly holding back the automotive industry in the region from achieving its full potential.

In context of the automotive sector, regional integration aims at the following:

- Abolition of regional tariffs;
- Harmonisation of automotive technical regulations;
- Mutual recognition of certification;
- Streamlining of customs procedures and distribution systems;
- Fostering of supporting industries and human resources; and
- Promotion of safety and greater environmental protection

In order to achieve these objectives, key measures of integration have been identified.

- Increasing intra-ASEAN Trade and Investment
  - Tariff elimination
  - Elimination of Non-tariff measures
  - Increased Customs cooperation
  - Effective implementation of ASEAN Industrial Co-operation Scheme (AICO) and The Common Effective Preferential Tariff (CEPT)
  - Improvement of rules of origin
  - Standards and conformance
  - Future investment
  - Improvement of logistics services

- Increasing Technological Capabilities
  - Enhancing ASEAN car manufacturing capabilities

- Improving Human Resources Capability
  - Training and skill certification systems

While tariff abolition has been largely achieved, remaining integration objectives pose significant challenges, manifesting in NTBs that are extremely hard to overcome. These include import quotas and anti-dumping actions as well as technical, administrative, health and safety regulations that end up having protectionist effects. Some of the most important among these are non-harmonised technical standards, 'reduced' mutual recognition of certification and cumbersome customs procedures that do not sync with each other. Though NTBs were supposed to be eliminated by 2015 in case of ASEAN-6 and by 2018 for CLMV markets, the progress has been slow due to difficulties in identifying and compiling such measures at the country level.

Harmonisation of standards and mutual recognition of certification are the bedrock of Technical Barriers to Trade (TBTs). Different product standards, varying by market, and non-adherence to any international standards have an adverse impact on export competitiveness for locally manufactured automotive products. Furthermore they pose issues to environmental protection and road safety. Under the AEC, 19 priority International UNECE standards are to be implemented by 2015. However, the progress has not been uniform and the pace of adoption has varied considerably across the constituent markets. The wide development gap between ASEAN countries remains a serious hurdle. While Malaysia and Thailand are signatories to the World Forum for Harmonisation of Vehicle Regulations (WP29), 1958, other ASEAN countries are only observers.

Since ASEAN is not a Customs Union, streamlining of customs procedures becomes imperative to root out corruption, stem delays and lower the transaction costs. The Trade Facilitation Framework has been developed to integrate customs procedures, establish the ASEAN Single Window (ASW) programme, enhance preferential tariff certification procedures, harmonise standards, and

conformance procedures. While significant process has been made in developing the ASEAN Harmonised Tariff Nomenclatures (AHTN), ASEAN Customs Valuation Guide, ASEAN Post-Clearance Audit Manual, etc., progress has been slow with regards to the ASW Programme. Not all member countries have been able to either establish or fully implement their respective National Single Windows (NSWs) which aim to reduce transaction costs by speeding up clearance of shipments and release of goods by customs. While markets like Indonesia and Thailand are battling coordination issues, resource crunch and legal inadequacies, Philippines is facing challenges with regards to data standardisation and simplification of business processes.

An important issue is that of labour availability, quality and mobility. Businesses are seeking flexibility in sourcing cheaper labour from CLMV markets as costs rise in Thailand and Indonesia. Current migration trends are skewed towards medium/low skilled labour vis-a-vis high skilled labour and this is likely to increase further in the years to come. There is a great emphasis on market access of professionals and in this regard, Mutual Recognition of Agreements (MRAs) has come into focus. However, many MRAs have still not been ratified by all countries and those that have, are facing implementation issues. There are strong political and nationalistic pressures to ensure high percentage of jobs for locals, especially in local businesses.

While the post-AEC vision of the market seems every bit exciting, given the sheer scope and complexities of various outstanding issues, there is a strong likelihood that closer to 31st December 2015 certain AEC elements may be deferred. A quick radical transformation of the industry is unlikely. While 2015 is going to become a key milestone in the evolution of the AEC, a comprehensive post-2015 plan is currently being worked out. From an automotive perspective the issues of non-tariff measures, standards and conformance and the mobility of skilled labour are of critical importance and need to be prioritised.

The European Contribution

European Companies & Their Presence in ASEAN

The ASEAN automotive market is dominated by Japanese brands accounting for over 80% of the market share. The rest of the market in ASEAN comprises of American, Korean and European brands. The presence of Chinese and Indian OEMs is, for the moment, marginal.

This market composition has been the result of many years of sustained presence, localisation and positive traction with various stakeholders by the Japanese manufacturers. It has also been supported by significant Japanese involvement in the overall economic development of the region. ASEAN has been a natural extension of the Japanese manufacturing footprint outside Japan from the perspective of sourcing, manufacturing and as well as sales.

Key challenges for the European automotive sector which have prevented them from gaining a larger foothold in markets in South East Asia include:

- High import duties and excise taxes;
- Numerous non-tariff barriers to trade;
- Limited economies of scale in local production and purchasing; and,
- Government incentive schemes that have been mainly geared towards entry-level segments.

Therefore, despite the rapid growth of the automotive market in ASEAN, the share of European automakers has been steady at around 1.5% (see Figure 5 below). Most of the European sales are accounted for by BMW and Mercedes-Benz, which hold a dominant position in the 'premium' segment.

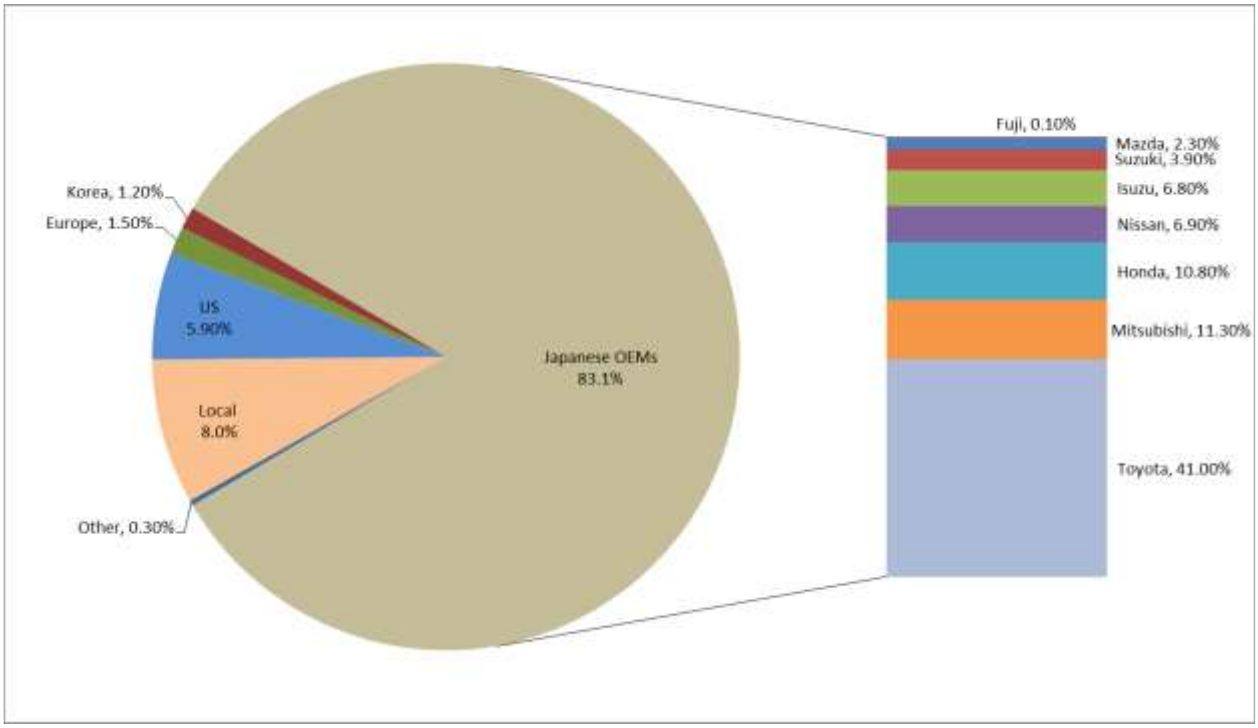
The ASEAN mass market is conspicuous by the absence of European models, usually priced out by cheaper locally produced Japanese brands, well supported by extensive dealer networks and aftermarket support.

In the coming years, European brands such as Volkswagen, Renault, Peugeot and Citroen are likely to increase their presence and share in the mass car market. For example Volkswagen, which already has a small scale local assembly in Malaysia, has recently won approval for a new assembly facility in Thailand[22] and is reported to be looking at sites in both Indonesia and the Philippines[23]. Renault are also being reported as looking at setting up a production facility in ASEAN[24].

In the parts and components markets European players have a well-established footprint with Bosch and Continental playing a major role in both the OEM supply and the independent aftermarket. Both component makers have not only invested in a strong manufacturing base across ASEAN, they have also established R&D centres. Increasingly, European suppliers are also looking at ASEAN as a global production hub – exporting parts and components from ASEAN to Europe's major automotive factories. Putting in place further FTAs, such as an EU-ASEAN FTA, would undoubtedly increase the potential for suppliers to export more from ASEAN to other global locations. However, moves also need to be made within ASEAN to remove differences in standards and testing regimes between intra-ASEAN markets to as to facilitate greater expansion of the supplier market in the region.

[22] http://uk.reuters.com/article/2015/02/21/uk-volkswagen-thailand-idUKKBN0LP0HP20150221
[23] http://www.bangkokpost.com/news/asean/525059/volkswagen-mulls-200m-factory-in-philippines
[24] http://www.reuters.com/article/2014/04/02/us-carmakers-asean-idUSBREA311CJ20140402

Figure 5: Share of European OEMs in the ASEAN Market, 2014[25]



European OEMs and suppliers do have production and assembly bases in the region, albeit not to the same scale as their Japanese counterparts. Those plants tend to be centred in Malaysia, Indonesia and Thailand, reflecting the maturity, skills centres and domestic sales potential that each those countries have. Figure 6[26] below provides an overview of the level of European OEM manufacturing and assembly in the region.

European Automotive Industry – A source of innovation

There is little doubt that the European automotive industry is a significant source of innovation and development of new technologies for the world industry. Some 60% of the patents granted in the automotive sector in 2014 have been granted to European companies (see Figure 7 below). Expenditure in R&D in the automotive sector in Europe (both OEMs and parts suppliers) amounted to more than €41.5 billion (2013), significantly more than any other industrial sector in Europe[27] and more than other major global automotive players (see Figure 8 below).

The advances being made by the European industry are most clearly prevalent in the environmental arena, where European cars have seen CO_2 emissions of automobiles and the environmental impact of the production of motor vehicles fall significantly in recent years. There is little doubt that the European industry is leading the way for the broader global industry in this sector. Across the EU as a whole the average CO_2 emissions from new cars in 2014 was 123.4 grams per kilometer, a fall of 2.6% over the previous year, with some of the EU Member States recording falls in the range of 4% to 6%[28].

[25] VDA, 2015
[26] Various sources. Information taken from web sites of major European OEMs
[27] http://www.acea.be/uploads/publications/POCKET_GUIDE_2015-2016.pdf
[28] Ibid.

Figure 6: Location of Key European Assembly Plants in ASEAN

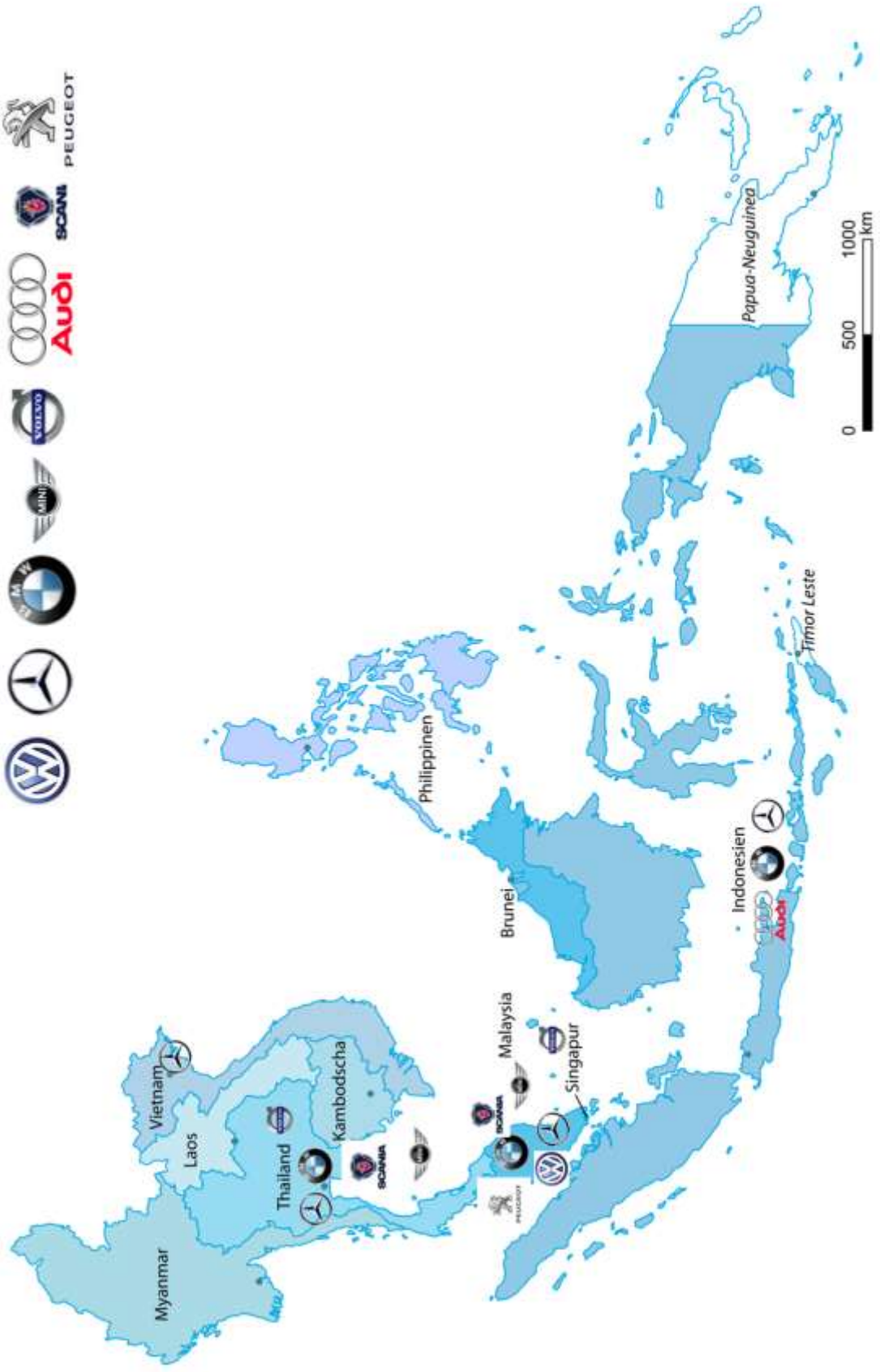


Figure 7: Patents Granted in the Automotive Sector (2014)[29]

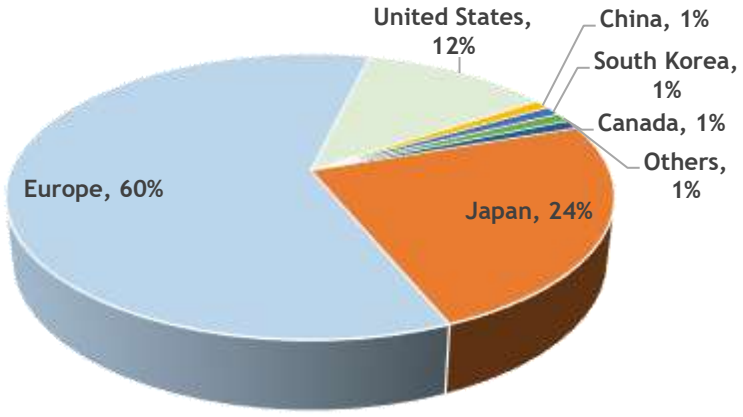
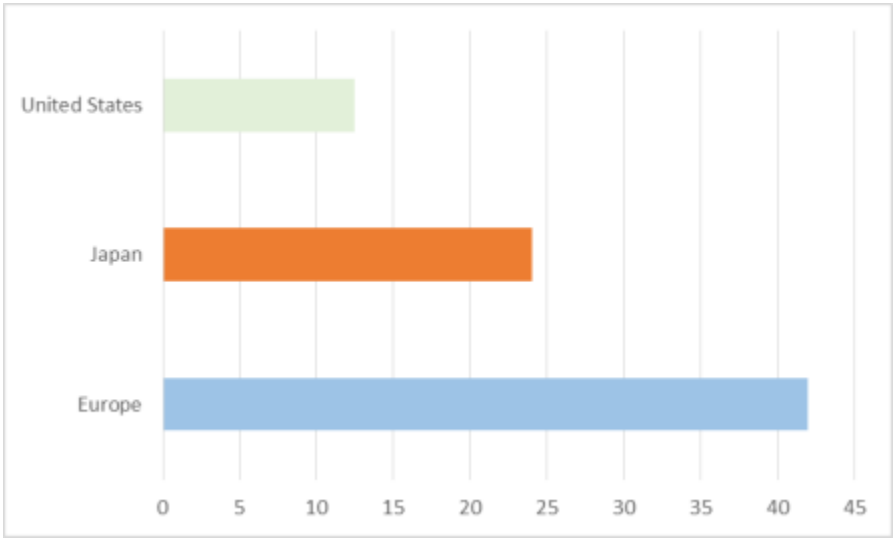


Figure 8: Expenditure on R&D in the Automotive Sector (2013; € billion)[30]



Even though vehicle production has become increasingly complex as new technologies have been introduced (such as those improving vehicle safety, fuel efficiency, vehicle durability etc.) the European industry has been very successful at reducing its environmental footprint in the production process. Recent statistics have shown that over the last ten years water consumption in the industry in Europe has fallen by over 40%, CO_2 emissions from production by over 24%, and Volatile Organic Compound emissions by over 42%[31] all despite vehicle production levels in Europe remaining fairly flat over the same period of time.

Some European players in the automotive sector have established, or plan to establish, R&D centres in ASEAN (e.g. in 2013, BMW Group has set up a Future Mobility Research Lab jointly with Nanyang Technological University in Singapore).

[29] http://www.acea.be/uploads/publications/POCKET_GUIDE_2015-2016.pdf
[30] Ibid
[31] Ibid.

Key Challenges and Recommendations

Refocusing of national automotive policies on innovation, export and environmental protection

ASEAN governments are, traditionally, very actively engaged in supporting local production – especially for the small, low cost car entry segments. Special attention is given to vehicle segments that seemingly meet the local consumer needs (for example pick-ups in Thailand, MPVs in Indonesia) whilst not necessarily looking at the broader international demand. To a certain extent, the growth of the automotive production in ASEAN over the last years can be attributed to these government policies and incentives.

Whilst these cars are affordable and have helped to boost the motorisation rate, they generally only meet relatively low safety, technical and environmental standards and are not competitive in international markets without further government incentives, thus limiting the ability of locally built vehicles from being exported to global markets.

Moving forward, new strategies are needed to further increase local production and increase international competitiveness. Some of the more recent important automotive policies have not achieved the desired results. In Thailand, the Eco Car 2 incentive programme is currently being re-evaluated; in Indonesia, the growth of the Low Cost Green Car initiative took place partially at the expense of other segments.

Trade Agreements turn Mexico into Global Production Hub

Auto makers increasingly turn to Mexico as a production hub for selling cars worldwide. Seven Asian and European auto makers have disclosed plans for, or have opened, new manufacturing plants in Mexico over the last one and a half years with several others in the course of substantial expansions.

Besides Mexico's low labour costs its trade pacts with some of the major economies in the world have increased Mexico's attraction in the global car market.

In total, Mexico has free trade agreements with 45 countries – including the US and the EU Member States – giving exporters from Mexico duty-free access to world markets that in total make up 60% of the world's GDP.

The wave of investment has turned Mexico in the world's seventh-largest producer of cars and the fourth-largest exporter after Germany, Japan and South Korea. Local production is expected to reach 5 million cars by 2018 – an increase of 50% compared to 2014.

(Source: Wall Street Journal Europe, 19 March 2015).

ASEAN countries also need to work together to better integrate fast following countries like Vietnam and the Philippines into the value chain of the automotive industry with each country using its competitive advantages instead of initiating competing nationalistic incentive schemes that further inhibit regional integration.

Initiatives are required that will support the development of a local supplier base which would in turn encourage international players to both establish local plants and to source more readily from ASEAN for their operations elsewhere in the world. Improvements in quality and ensuring compliance with international standards will raise ASEAN's profile and competitiveness in this regards.

MALAYSIA: IMPORT RESTRICTIONS

Measure/Impact:

Vehicle imports into Malaysia are tightly controlled by **"Approved Permits" (AP)** that link CBU import volumes to locally assembled cars and caps imports to 10 per cent of the number of local-assembled cars in the preceding year. The system is in contravention with World Trade Organisation rules and other trade agreement as it restricts international trade. The AP system was supposed to be abolished by the end of 2015 under the Automotive Policy 2009 but the Government has backpedaled and opted to conduct an in-depth study to assess the termination's impact amongst the industry's Bumiputra participation.

Recommendations:

- The AP system should come to an end as it contradicts the goals of the ASEAN Economic Community to create a common market in SE Asia.
- Open AP for parallel importers should come to an end. Vehicles coming in through this channel limited automakers abilities to provide qualified proper service and endanger the investments in state-of the art dealer facilities and technical training.

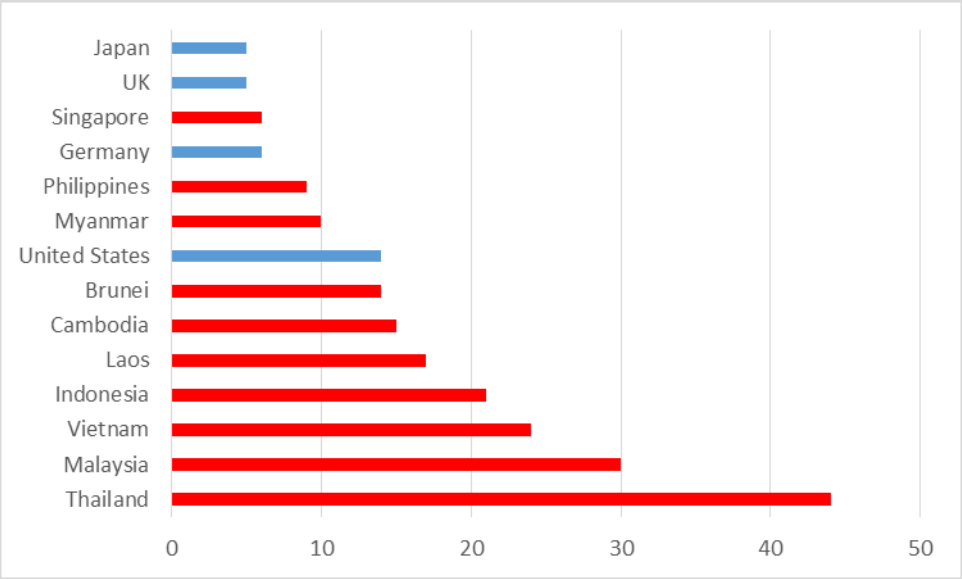
In order for local auto makers to further increase local production and for ASEAN to become a global automotive hub, new export markets outside of ASEAN will need to be developed through negotiation of Free Trade Agreements with major automotive markets like the EU. This is especially true for countries such as Malaysia and Thailand which have already high motorisation rates and which have the potential to develop export orientated manufacturing.

The EU-ABC anticipates that vehicle safety issues and environmental concerns will become even more relevant for the automotive industry in ASEAN moving forward, especially as more mature markets such as the US and Europe increasingly look to enhance both passenger and pedestrian safety standards. Forward looking government policies are needed that best stimulate the broad introduction of innovations and thus meet the needs of more mature international markets and increasingly concerned local consumers in ASEAN.

ASEAN countries have some of the highest number of traffic accidents and casualty rates in the world. 334,815 people died as a result of road traffic accidents in South East Asia in 2010[32]. Compared to the United Kingdom, a person is six-times more likely to die in a road accident in Malaysia, and even nine-times more likely to die in a road accident in Thailand (see Figure 9 below). Indeed, Thailand regularly features in the top three countries with the highest mortality rates from road traffic accidents. The worldwide average is 18 deaths per 100,000 of the population: in ASEAN it is 19. Apart from road safety education that can lead to a reduction of casualties and accidents in particular for motorcycle riders, consumers should be encouraged to replace current cars with low technical safety standards with modern state of the art safety features like ABS, ESC, Seatbelts, Passive Safety features, automatic tyre pressure control and LED lights.

[32] http://www.searo.who.int/entity/disabilities_injury_rehabilitation/documents/roadsafetystatusinSEARfactsheet.pdf?ua=1

Figure 9: Road Traffic Deaths per 100,000 of population 2014[33]



Recommendations:

- The EU-ABC recommends a refocus of the National Automotive Policies throughout the ASEAN region in order to further develop the automotive industry, make the automotive manufacturing industry in the region globally competitive and less locally and regionally focused. This would also help bring to the market more innovative and environmentally friendly products.

- EU-ABC suggests that ASEAN Member States should seek to create a level, competitive playing field among all auto makers and not "pick winners and losers" by incentivising certain vehicle types, segments or technologies. Doing this would allow the market to react better to the requirements of consumers and improve standards more generally.

CAMBODIA: IMPORT ISSUES

Measure/Impact:

Very few effective controls are in place to regulate the import vehicles to Cambodia. The importing of older cars, accident cars, insurance write-offs, and flood-damaged cars is not uncommon. Adjustment of odometers is also not unusual. Additionally, as most imports are from countries with higher fuel quality than Cambodia, service complaints related to poor engine performance are regular occurrences.

Assessment of import duties is not transparent and alternative assessment methods exist which encourage underreporting and the importation of cars not suitable for the market.

Recommendations:

- Restrict the importation of vehicles not designed to operate on the quality of fuel available in-country until fuel quality levels can be improved.

- Implement a more transparent and better regulated import market, improving safety standards and regularising the calculation of import duties and taxes.

[33] Source: University of Michigan Transport Research Institute Read the study: http://deepblue.lib.umich.edu/handle/2027.42/102731

- Regional centres of excellence should be set up to facilitate a broader spread of economic wealth across the region, and to allow for economies of scale as suppliers to the automotive industry will be able to establish areas of excellence that can then supply multiple OEMs.

- The introduction of higher fuel quality and emission standards, jointly with CO_2 or fuel consumption based vehicle taxation schemes, will encourage a broad introduction of environmental-friendly low emission technologies in the market. A concrete implementation roadmap is further recommended by both the automotive manufacturers as well as the oil companies.

- It is recommended to introduce mandatory safety and environmental standards for cars and regular mandatory technical check-ups ("TUV"). This will improve vehicle safety, fuel efficiency, and reduce emissions.

- Midterm Completion of trade agreements with major automotive markets (Europe, USA). In this respect the EU-ABC is encouraged by the announcement from the European Commission that it intends to take a "stock take" of the situation with ASEAN at the end of 2015 to see if a region to region FTA might again be viable. The EU-ABC follows a realistic approach: Duty reduction schemes need to be carefully orchestrated as part of Free Trade Agreement negotiations to slowly but gradually expose local industry and suppliers to international competition and create additional opportunities for export.

Introduction of CO_2 based vehicle taxation systems

Within ASEAN Vehicles are subject to some of the highest duties, taxes and fees in the world (see figure 10 below). In some cases these additional costs to be borne by the customer more than double the net retail price.

European cars are at a disadvantage as current taxation regimes in ASEAN are mostly based on the vehicle price. As a result, cars with state of the art technologies, which tend to be higher in terms of production costs and therefore vehicle price, are being penalised as they receive the highest overall tax burden.

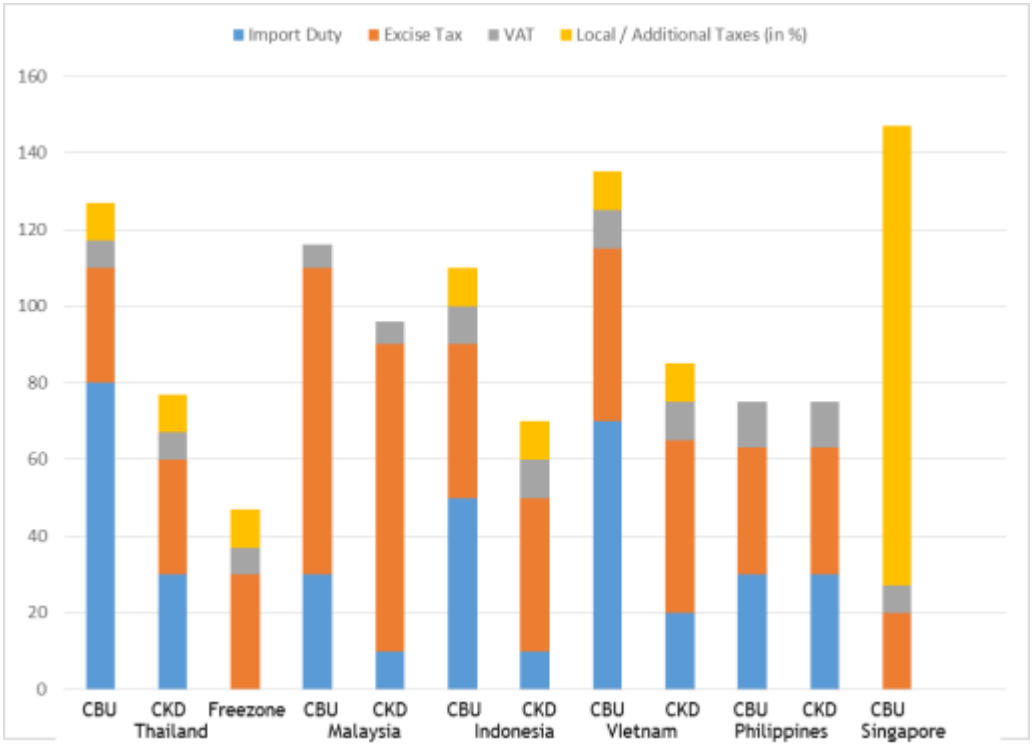
With a clear focus on the emissions output or fuel consumption of the vehicle as an alternative basis for vehicle taxation, the best (cleanest and safest) vehicle technology will be incentivised and will be more affordable to the end consumer. This will enhance competiveness and productivity among all market players and give the consumer a wider range of environmentally friendly options.

With such a taxation scheme, consumers would be more likely to choose clean and green vehicles low in CO_2 emissions and lower on fuel consumption. Over time, the CO_2-based system would lead to a gradual decrease in the usage of old, high-polluting vehicles, with a consequential reduction of overall fuel consumption which in turn would enable governments to more easily reduce fuel subsidies (where applicable).

Recommendation

It is recommended for the ASEAN Member States introduce technology-neutral taxation schemes that are based on CO_2 emissions or fuel consumption. Vehicles with low emissions would receive tax relief whereas high fuel consumption and high CO_2 emission vehicles would be taxed at higher rates, independent of their power train technology.

Figure 10: Vehicle Taxation Rates in Selected ASEAN Countries (% of Base Price)[34]



Alignment with international technical standards

The different regulatory and technical standards regimes that exist across the region add unnecessary bureaucracy and costs on the industry and therefore inhibit increased integration within ASEAN.

The harmonisation of automotive product standards is an essential basis for a single manufacturing base as envisioned under the AEC. Without this harmonisation, or at the very least the mutual recognition and acceptance of others standards, it will be impossible for the automotive industry to consider ASEAN as a single manufacturing base.

As work is underway within ASEAN to align technical requirements, 19 international UNECE regulations have been prioritised by ASEAN in a first step that will form part of the Mutual Recognition Arrangement (MRA) for automotive products in ASEAN (see Table 5 below). This proposed alignment with international standards will ensure increased global automotive competitiveness and will enable the export of cars and automotive technologies to other countries who also follow the global UNECE standards. This should open up new international markets for the vehicles produced within ASEAN.

While final discussions among the members of the Automotive Product Working Group (APWG) under the ASEAN Consultative Committee on Standards and Quality (ACCSQ) are still ongoing, the signing of the MRA document by the ASEAN Economic Ministers is not scheduled until later in 2015.

[34] Source: Frost & Sullivan, EU-ABC Calculations. Singapore data excludes Certificate of Entitlement (CoE) cost which currently stands between S$56,209 and S$60,789 (as of 10 August 2015) depending the category that the car falls into.

A challenge for the automotive industry is the adoption of the 19 UNECE priorities into national regulations. Most of the industry has already accepted that it will not be achieved by the end of 2015 under the AEC agreements with the end of 2016 a more likely and tenable time line.

Since the process is left to the respective local agencies in accordance with individual domestic industrial standards and policies, a non-uniform progress is, unfortunately, to be expected with the likely result that there will be both different paces of adoption among the markets and different methodologies which will lead to complexity for the industry and potential inhibit achieving one of the key goals of the AEC.

Recommendation

- As the 2015 timeline to align the 19 priority UNECE standards will not be met, ASEAN governments and industry should work hard to implement the 19 prioritised UNECE regulations at national levels by the of 2016.
- ASEAN Member States should agree on and implement identical testing procedures using the same methodologies, standards and application regulations.
- Acceptance of the widely recognised EU—type approval and E-mark as proof of UNECE compliance.
- Industry, through representative bodies such as the EU-ABC, should be involved as part of a public/private sector working group in the development of new testing procedures and moves to align standards to ensure that the end result are workable from an industry and consumer perspective.

INDONESIA: TECHNICAL STANDARDS

Measure/impact:

Indonesia is among the top three countries when it comes to introducing new technical regulations. Recently, Indonesia has shown a more stringent focus on **mandatory Indonesia National Standards (SNI)** and local testing requirements for a number of automotive products (e.g. safety glass, tyres, rims). These requirements are not in line with international standards and result in unnecessary burden and additional bureaucracy for automotive manufacturers without creating additional value for consumers. Additional mandatory SNI standards are currently under discussion for other automotive parts.

Recommendations:

- Indonesia should respect the principle of mutual recognition of the international UNECE standards and accept EU-type approvals and E-marks as proof of UNECE compliance, regardless of the country in which a component was produced or tested.
- It is recommended that Indonesia expand the number of qualified testing laboratories that can issue approvals under UNECE to reduce the waiting time and deadlock at the current facilities and accept other independent testing providers (e.g. TUV, IDEADA)
- Harmonisation would also be in line with the goal of the ASEAN regional integration and the work currently undertaken for the mutual recognition of automotive products (ASEAN MRA on the type approval for automotive products and systems).
- Alignment with international automotive standards (UNECE) is crucial to improve the integration of Indonesia into the international automotive value chain and to open opportunities for an export oriented automotive industry.

Table 5: The 19 Priority UNECE Regulations for Harmonisation

Regulation number	Topic
ECE R13	Heavy vehicle braking
ECE R13H	Braking of passenger cars
ECE R14	Safety-belt anchorages
ECE R16	Safety-belts
ECE R17	Strength of seats, their anchorages and head restraints
ECE R25	Head restraints (headrests)
ECE R30	Tires for passenger cars and their trailers
ECE R39	Speedometer
ECE R40	Exhaust Emission
ECE R41	Noise emissions (L Category)
ECE R43	Safety glass
ECE R46	Devices for indirect vision (Rear view mirror)
ECE R49	Diesel Emission
ECE R51	Noise Emissions of M and N categories of vehicles
ECE R54	Tires for commercial vehicles and their trailers
ECE R60	Driver Operated Controls
ECE R75	Tires for motorcycles/mopeds
ECE R79	Steering Equipment
ECE R83	Exhaust Emissions of M_1 and N_1 vehicles

Harmonisation of local homologation processes and definitions on local content requirements

Even with some international UNECE technical product standards expected to be used by the ASEAN Member States in the future, different national approval and homologation processes are still being observed. Depending on local requirements, local agencies require manufacturers to comply with local mandatory certification procedures on top of international standards. Test reports and or plant audits accepted by one agency are not accepted by other agencies from other countries requiring duplication of effort and additional costs.

Whilst ATIGA stipulates identical local content requirements (40%) for duty free export within ASEAN, both local content and rules of origins are defined differently across the ASEAN Member States. In addition, different certification processes by different local authorities when applying for rules of origin result in increased complexity for exports.

This additional bureaucracy has had a direct impact on the development of ASEAN as a single production base as it hinders the free flow of automotive products. For the European auto makers, a single production base is crucial to improving productivity and economies of scale of local manufacturing and to maximise investment opportunities across the region.

A consolidated approval and homologation process across the region will also facilitate the formation of a single regime for future regional trade agreements with key partners like the EU.

THAILAND: HOMOLOGATION STANDARDS

Measure/Impact:

Despite consistent calls for improvement by the industry and some efforts being made in this regard, Thailand's approval/homologation standards are still regarded as onerous for the automotive industry. Manufacturers are required to comply with local mandatory certification standards on top of international UNECE standards, which also need to be adhered to. This has a substantial impact on the cost and time spent due to unnecessary duplication of processes at local laboratories that are certified by the Thai Industrial Standards Institute (TISI). Automakers also need to undergo separate quality audits by Thai inspectors at all their global plants that provide parts to Thai manufacturing sites, making the process repetitive, costly and time-consuming.

Recommendations:

- It is widely recognised that harmonised vehicle regulation and standards play a key role in the development and internationalisation of the automotive industry. Harmonisation offers savings in technical resources, reduces bureaucracy and simplifies production complexity, resulting in lower costs and prices and a wider choice of vehicles available to consumers.
- Thailand should recognise and accept overseas test reports and plant audits that comply with international standards like UNECE.
- Thailand should adhere to the UNECE 1958 Geneva Agreement, or more preferably become a contracting member of the agreement, and dismantle redundant approval/homologation standards.

Recommendation

- ASEAN should move quickly to align the approval and homologation processes and standards across the region to improve time and cost efficiency. Ultimately consumers will benefit from lower prices and increased choice, whilst manufacturers will be more likely to consider further investments in the region.
- The EU-ABC advises the recognition of approvals equivalent to local testing requirements that are based on agreements of the World Forum for Harmonisation of Vehicle Registration (WP29) and tests performed by qualified foreign parties.
- EU-ABC further recommends to harmonise the procedures for local content and rules of origin application as part of the approval and homologation process in order to become a single manufacturing hub.

Availability and quality of skilled workforce

As growth of the automotive industry in ASEAN is expected to continue an increased shortage in labour and a skilled workforce will be experienced across ASEAN, particularly in the highly-skilled and technology intensive manufacturing and vehicle service sectors. Indeed, shortages are already an issue in some areas.

Despite of the growing number of qualified engineers and graduates from vocational schools, ASEAN continues to experience labour shortages, as these graduates do not meet increased industrial standard requirements.

In Thailand, the Philippines, and Indonesia, graduates in industry fields such as engineering, manufacturing, and construction still only account for approximately 10% of all graduates, whilst the share of social sciences in total graduates is as high as about 40%[35]. Increased

[35] Source: Asian Development Bank Institute Working Paper Series: The Middle-Income Trap: Issues for Members of the Association of Southeast Asian Nations, May 2013, http://www.adb.org/sites/default/files/publication/156276/adbi-wp421.pdf

efforts by governments are required to place even more emphasis on a higher level of technical education to supply a qualified labour force to meet the current and future demands of the industry.

THAILAND: TRAINING FOR THE NEXT GENERATION

The German-Thai Dual Excellence Education (GTDEE) programme provides Thai students with technical skills training and helps enhance their motoring technical education. In 2012, the German-Thai Chamber of Commerce and the German International Co-operation (GIZ) brought it to Thailand in co-operation with founding partner companies, B. Grimm, BMW Group and Robert Bosch. Today, the programme is supported by nine companies. GTDEE is supported by the Ministry of Education of Thailand and the Embassy of the Federal Republic of Germany in Thailand.

The "dual" vocation concept was developed in Germany and, because of its remarkable success, has been adopted in many countries all over the world. It is a two-year vocational education programme in which students work and study at the same time. The concept pairs hands-on learning with classroom learning. This way, apprentices graduate not only with a degree, but also with job experience and a deep knowledge of their trade. They come into contact with the real challenges of a company from a very early stage – a valuable experience promoting independence and a sense of responsibility.

See: http://thailand.ahk.de/en/vocational-education/about-the-gtdee-programmeme

(Source: German-Thai Chamber of Commerce, BMW Group Thailand)

High-quality human resources are also seen as a prerequisite to avoid the middle-income trap that some ASEAN countries are facing. For sustained growth towards a high-income level, the countries should increasingly deploy highly technological and managerial resources that allow for higher productivity[36].

Recommendation

- ASEAN Member States should look to facilitate public/private partnerships in engineering and technical training to ensure that the workforce meets industry demands.

- Moves to further liberalise the job market within the region should be accelerated, placing increased emphasis on the free movement of skilled labour within ASEAN.

- In the longer term, the improvement of educational standards that incorporate practical industrial training regimes as part of the academic curriculum should be considered in order to improve the quality of workforce.

- EU-ABC and the European Automotive Industry express their interest in working closely with the ASEAN Member States to promote, design and set up vocational and industrial trainings.

[36] Ibid

About the EU-ASEAN Business Council

The EU-ASEAN Business Council (EU-ABC) is the primary voice for European business within the ASEAN region, being endorsed by the European Commission and recognised as such by the ASEAN Secretariat. Independent of both bodies, the Council has been established to help promote the interests of European businesses operating within ASEAN and to advocate for changes in policies and regulations which would help promote trade and investment between Europe and the ASEAN region.

The Mission of the EU-ABC is to:

- Advocate for European business interests in the ASEAN region;
- Push for the reduction and eventual elimination of barriers to trade (both tariffs and NTBs);
- Facilitate trade and investment between Europe and ASEAN;
- Collaborate and interact with the ASEAN Secretariat and other related bodies;
- Contribute to and promote pan-ASEAN economic integration; and
- Support the establishment of an EU-ASEAN free trade agreement, and FTAs between the EU and ASEAN Member States in the meantime.

The EU-ABC works on a sectorial and cross-industry basis to help improve the investment and trading conditions for European Businesses in the ASEAN region through recommendations to policy makers throughout the region and in the EU, as well as acting as a platform for the exchange of information and ideas amongst its members and regional players within the ASEAN region.

The EU-ABC conducts its activities through a series of advocacy groups focused on particular industry sectors and cross-industry issues. These groups, usually chaired by a multi-national corporation, draw on the views of the entire membership of the EU-ABC as well as the relevant committees from our European Chamber of Commerce membership, allowing the EU-ABC to reflect the views and concerns of European business in general. Groups cover, amongst other areas, Insurance, Automotive, Agri-Food & FMCG, IPR & Illicit Trade, Market Access & Non-Tariff Barriers to Trade, and Financial Integration.

The EU-ABC publishes regular position papers and has regular interaction with ASEAN Ministerial bodies, including Economic Ministers and Finance Ministers.

For further information about the EU-ABC please send an e-mail to info@eu-asean.eu , visit our website at www.eu-asean.eu or follow us on social media.

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Annexes

List of Working Group Members:

BMW Group Asia

Robert Bosch (SEA)

EABC Thailand

European Chamber of Commerce in the Philippines

EU-Malaysia Chamber of Commerce & Industry

European Chamber of Commerce in Vietnam

European Chamber of Commerce in Cambodia

European Chamber of Commerce in Singapore

European Chamber of Commerce and Industry, Laos

European Chamber of Commerce in Indonesia

Non-member Contributor to this Paper:

Frost and Sullivan

List of Acronyms

GDP	Gross Domestic Product
NTBs	Non-Tariff Barriers
FTAs	Free Trade Agreements
EEV	Energy Efficient Vehicle
AEC	ASEAN Economic Community
AHTN	ASEAN Harmonised Tariff Nomenclature
AICO	ASEAN Industrial Cooperation Scheme
AP	Approved Permit
APAC	Asia Pacific
ASEAN	Association of South East Asian Nations
ASW	ASEAN Single Window
ATIGA	ASEAN Trade in Goods Agreement
BRIC	Brazil, Russia, India, China
CBU	Completely Built Units
CEPT	Common Effective Preferential Tariffs
CKD	Completely Knocked Down
CLMV	Cambodia, Laos, Myanmar, Vietnam
CNG	Compressed Natural Gas
EU	European Union
EV	Electronic Vehicle
FDI	Foreign Direct Investment
IC	Internal Combustion
LCE	Low Carbon Emission
LCGC	Low Cost Green Car
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MPV	Multi Purpose Vehicle
MRA	Mutual Recognition Agreement
NAP	National Automotive Policy
NSW	National Single Window
OEM	Original Equipment Manufacturer
OCP	Operation Certificate Procedure
RCEP	Regional Comprehensive Economic Partnership
SME	Small Medium Enterprise
TBT	Technical Barriers to Trade
TPP	Trans-Pacific Partnership
UNECE	United Nations Economic Commission for Europe

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