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Eco-car Projects to Spur Demand for Thai Automotive Parts and Components

The future already has arrived to Thailand and it is being built. With an increasing global focus on environmental protection, the vision of lower-emission vehicles has become a reality. In many countries, eco-cars are found on the road and changing how people view their use of automobiles in a world that is more environmentally conscious. The defining feature of eco-cars is that it releases less harmful contaminants into the atmosphere, when compared to a vehicle that runs on a conventional internal combustion engine, or uses certain alternative fuels, such as biodiesel, ethanol, hydrogen, or propane.

Contributing 12% to the country's GDP, auto manufacturing is one of Thailand's most vibrant sectors. Thailand's automotive industry ranks 9th in the world, with annual production capacity of more than 2 million units per year, which makes it the largest automotive manufacturer in Southeast Asia. These figures clearly illustrate the robust nature and competitiveness of the Thai auto industry on a global scale.

In 2007 Thailand was the first country in Southeast Asia to introduce an eco-car scheme, attracting investment of 28.8 billion baht. Five world-class OEMs (Honda, Toyota, Nissan, Mitsubishi and Suzuki) applied for the Eco-Car Program Phase 1 by the end of 2007, with total manufacturing volume anticipated to reach 585,000 units. Production commenced towards the end of 2009 or in 2010, with an output target of more than 100,000 units as the Thai government stipulated that volume capacity needed to arrive at 100,000 units in five years.

These investments naturally presented an opportunity for the Thai automotive industry to integrate itself further with the global production strategies of OEMs concerning mini-car and small car segments, which then were expected to grow

much faster than light commercial vehicles or pickups in markets around the world. All automakers planned to export at least 50% of their output, especially Honda and Suzuki, which had been waiting a long time to expand their manufacturing of small cars in Southeast Asia. They seized the occasion to make their new factory sites in Thailand the export base for the region and for newly emerging markets.

The Eco-Car Program Phase 1 was regarded widely not only as a value enhancer for the Thai automotive sector, but also a springboard for technological innovation. Vehicles labeled as "Eco" needed to pass stringent environmental and fuel economy regulations. Eco-car projects, which met all requirements set by the government, enjoyed special incentives with the excise tax reduced from 30% to 17%.

Following the success of the Eco-Car Program Phase 1, the Thai government announced in 2013 the Eco-Car Program Phase 2, which is expected to lift the country's automotive production volume to over three million units by the end of 2015.

Ten car manufacturers, including five existing eco-car producers, applied for Phase 2 of the government's eco-car program, with total expected investment of 139 billion baht to manufacture 1.58 million vehicles. The five manufacturers that took part in Phase 1 have committed 86.8 billion baht for the production of 753,000 eco-cars, while the five newcomers will spend 52 billion to make 828,000 units. The success of the eco-car scheme in Thailand has positioned the country as the eco-car hub for ASEAN.

Apart from the environmental protections, Eco-Car Program Phase 2 is part of the country's plan to increase annual car production and further strengthen its leading position in Southeast Asia. It will ensure that the eco-cars produced in Thailand match the standards of developed markets such as the United States and Europe.

For the second phase of the Eco-Car Program, the Ministry of Industry mandated even more rigorous criteria. Automakers have to develop eco-cars that satisfy certain requirements: Euro 5 emission standards, average fuel consumption of 4.3 liters/100 kilometers (a reduction from 5.0 liters/100 kilometers), an average CO2 emission of 100 grams per kilometer (a reduction from 120 grams per kilometer), and international crash safety levels. Indeed, the principal aim of the Eco-Car Program Phase 2 is to turn Thailand into a production and export hub not only for pickups but also for passenger cars.

Japan's Mazda Motor Corporation, the first eco-car maker to apply for the second phase under AutoAlliance (Thailand), commenced its local eco-car production in November 2014 after winning BOI privileges in July of that same year. The Mazda2 is the first model manufactured under Phase 2, which offers incentives and tax breaks for a minimum investment of 6.5 billion baht. Its 1.5-litre diesel version has been approved, while the 1.3-litre petrol version is being

considered as an additional model. Mazda has invested 9.7 billion baht for its Phase 2 eco-car project at its assembly line plant in Rayong. There is another 2.9 billion baht project by Mazda for the construction of a factory designed especially for engine assembly and engine-components production.

With capacity set at 158,000 units per year at AutoAlliance (Thailand), the manufacture of eco-cars will elevate the technical standards of the Thai automobile industry through collaboration between the Japanese OEM and numerous local parts suppliers. Moreover, since this eco-car is a highly competitive global model, as an export it will make a big contribution to the growth of Thailand's automotive sector.

However, Nissan was the first OEM to launch eco-car varieties in the Thai market, the March in 2010 and the Almera in 2011. As of October 2014, the Japanese company was responsible for 53.6% of the accumulated production of 712,292 eco-cars in Thailand and 54.1% of accumulated domestic sales of 369,509 vehicles. For Phase 2, Nissan plans to spend another 6.86 billion baht to make 123,000 eco-cars and 2 million auto parts a year at its Bang Na-Trat Road facility. Furthermore, the company will commit 3.11 billion baht on continuing the manufacture of 13,400 Phase 1 vehicles. Meanwhile, Mitsubishi Motors has invested 12.6 billion baht (for new and expanded projects) to make 268,000 eco-cars a year.

The Thai government has stated that all automakers should focus on new eco-car models since there will be a new vehicle excise tax structure in 2016. Under this new tax regime, all eco-cars must have average CO2 emission below 100 grams per kilometer and safety systems including ABS (anti-lock braking system) and ESP (electronic stability program).

By the end of 2014, the Board of Investment (BOI) had approved investment applications from ten automobile manufacturers under Phase 2 of the eco-car program.

The investments from the ten assemblers whose projects have been approved to date include investments for both the eco-car 2 project and expansion of eco-car 1 projects. To give some examples of approved eco-car phase 2 projects, Ford Thailand (see company interview on page 9) is making an investment of 18.18 billion baht with annual production capacity of 180,000 vehicles and 2,000 engines. Likewise, General Motors will invest 13.1 billion baht to make 158,000 vehicles annually. Toyota also will commit 10.4 billion baht to make 100,000 vehicles a year under Phase 2, and another 1.0 billion baht to produce a further 60,000 Phase 1 eco-cars.

Furthermore, the BOI has put together a set of incentives regarding the manufacture of automobile parts for eco-cars that meet international standards. For instance, on offer is an exemption from import duty on machinery regardless of zone, a corporate income tax exemption regardless of zone for the

first eight years of operation, and an exemption from import duty on the import of raw materials and ready-made auto-parts for up to 90%.

To qualify for tax breaks under the Eco-Car Program Phase 2, automakers were required to invest a minimum of 6.5 billion baht (US$199.5 million) on a new plant with annual production capacity of 100,000 units within four years of operation and meet the rigorous environmental standards mandated by the Ministry of Industry. In return, participating automakers will pay an excise tax as low as 14% and eco-cars that can run on E85-compatible fuel will be taxed at just 12%.

Phase 2 of the government's Eco-Car Program calls for participating automakers to build an all-new vehicle that is fuel-efficient, environmentally friendly, safe, and low cost, for sale throughout the ASEAN region by 2020. Currently, four Japanese carmakers construct seven eco-car models, namely Nissan (March and Almera), Honda (Brio and Brio Amaze), Mitsubishi (Mirage and Attrage), and Suzuki (Swift).

In addition, Ford introduced its newly-developed EcoBoost, the 1.0-liter, three-cylinder turbocharged engine, at the 34th Bangkok International Motor Show (25 March - 7 April 2013). The Mini SUV Ford EcoSport, which was launched towards the end of 2013, and the 2014 Ford Fiesta, which was made available to the US market last year, both use the state-of-the-art EcoBoost technology.

The Ministry of Industry expects the second phase to boost annual eco-car production in Thailand almost 60% to 935,000 units within five years. Launched in 2007, the first phase attracted combined investment of 28.8 billion baht (US$884 million) by Mitsubishi, Honda, Toyota, Nissan and Suzuki. The five automakers built 712,292 eco-cars between 2010 and 2013. Nonetheless, according to the Thailand Automotive Institute, the country's car production is estimated to rise by 500,000 vehicles in 2015, propelled by the second phase of the eco-car scheme. Overall output is thus likely to hit 3.35 million units in 2015.

The Thai automobile sector, thus, is ready for a banner year in 2015. After its good run in the production of pickup trucks, Thailand is now focused on becoming a major nexus for economical, eco-friendly cars through its two phases of the Eco-Car Program. Indeed, OEMs consider Thailand's better infrastructure and extensive supplier network as key advantages for establishing themselves in the country. More importantly, despite the changing political landscape, Thai investment guidelines have been largely unaffected. Subsequent governments have realized that policy consistency is a winning formula and changing it would be bad for business.

Plus, as BOI deputy secretary-general Chokedee Kaewsang mentioned in a recent Bangkok Post article, "The Thai automotive production trend needs to change in line with the new strategy". He further elaborated the point by stating, "Fuel efficiency, safety and environmental friendliness with electric vehicles and plug-in hybrids will be the next milestones for Thailand's automotive industry".