



Thai Automotive Industry

Facts and Figures 2023

1. Thailand's Vision on Electric Vehicles

“To be one of the most important EV production bases and component parts in 2035”

The National Electric Vehicle Policy Committee

ZEV Cumulative volume target in 2030

(Zero Emission Vehicle - ZEV = BEV & FCEV)

Vehicle type	Production	Use	Public Charging Station
Passenger cars & Pick-up trucks	2,935,000	2,050,000	12,000 (Fast charge)
Trucks & Buses	156,000	160,000	n.a.
Motorcycles	3,133,000	3,200,000	1,450 (1 Station = 8 outlet)

2. Thailand EV Promotion Measures



SUPPLY SIDE

- EV and charger standard
- Testing facility: ATTRIC
- Supply chain transition program
- End-of-Life Vehicle (ELV) program
- Investment promotion scheme



DEMAND SIDE

- Incentive measures for EV purchase
 - Customs Tax
 - Excise Tax
 - Subsidy
 - Annual Road Tax



INFRASTRUCTURE

- Install a public charging station



3. Motor Vehicle

3.1 Motor Vehicle Assemblers in Thailand [1/2]

No.	Company	Passenger Car		Pick up
		ICE	BEV	
1	Auto Alliance (Thailand) (Mazda)	●	✧	●
2	BMW Manufacturing (Thailand)	●	●	
3	Ford Motor Company (Thailand)			●
4	FOMM (Asia)		●	
5	Great Wall Motor Manufacturing (Thailand)	●	●	
6	Honda Automobile (Thailand)	●	●	
7	Horizon Plus		●	
8	Isuzu Motor Thailand	●		●
9	Mercedes-Benz Manufacturing (Thailand)	●	●	
10	Mine Mobility		●	●
11	Mitsubishi Motors (Thailand)	●		●
12	Nissan Motor (Thailand)	●	○	●



Source: Thailand Automotive Institute, 2024

Note:

- In operation
- BOI-approved BEV project
- ✧ Planned to start in 2024 or later

3.1 Motor Vehicle Assemblers in Thailand [2/2]

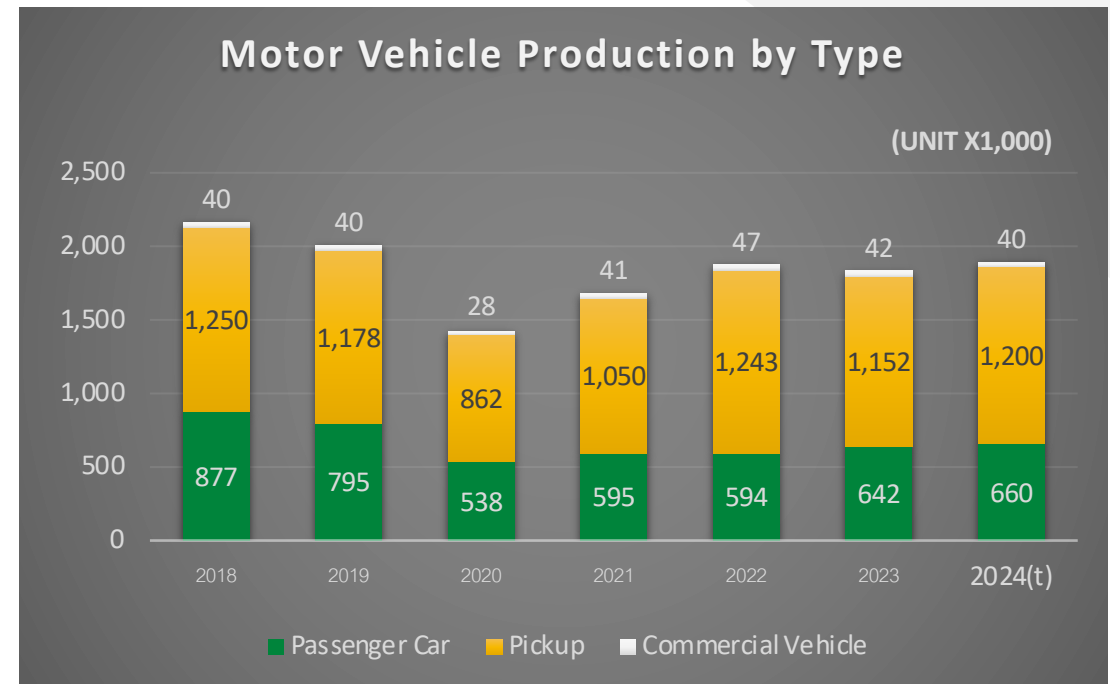
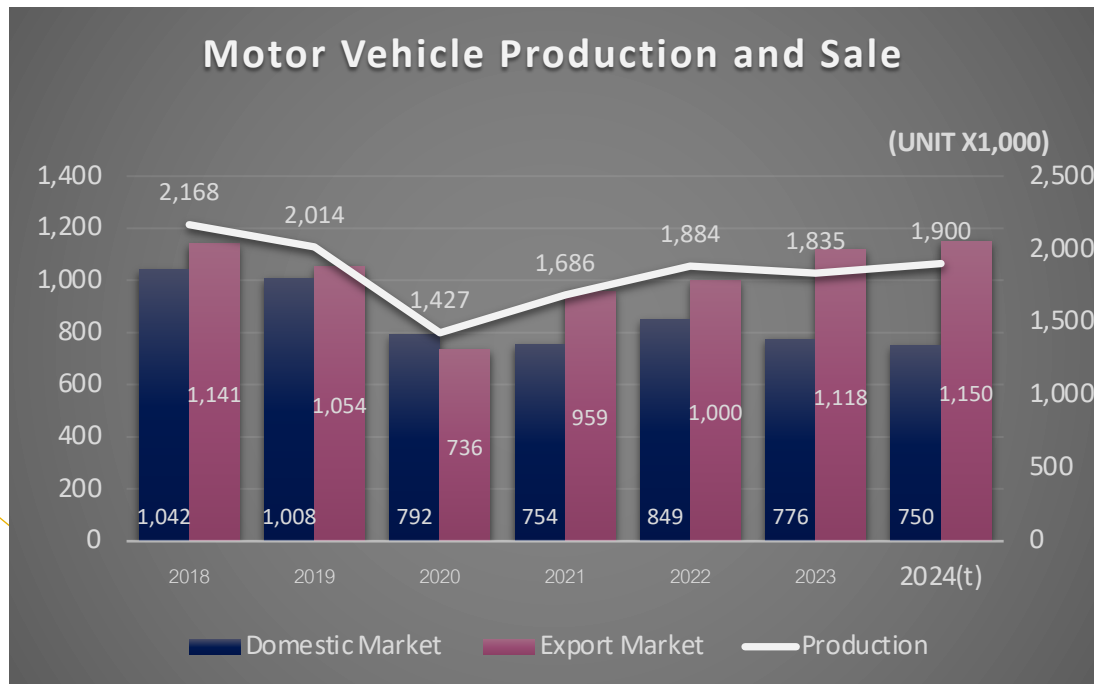
No.	Company	Passenger Car		Pick up
		ICE	BEV	
13	SAIC Motor - CP	●	●	●
14	Suzuki Motor (Thailand)	●		
15	Suplaor	✧		
16	Takano Auto Thailand		●	
17	Tan Chong Subaru Automotive (Thailand)	●		
18	Toyota Motor Thailand	●	○	●
19	Changan Auto Southeast Asia Co., Ltd.		✧	
20	THAI RUNG UNION CAR	●		
21	Thonburi Automotive Assembly Plant	●	●	
22	BANGCHAN GENERAL ASSEMBLY	●	●	●
23	BYD AUTO (THAILAND)		✧	
24	AION AUTOMOBILE MANUFACTURING		✧	
25	Neta Auto (Thailand)		✧	
26	EV Primus (Thailand)		✧	

No.	Company	Van	Bus & Truck	
			ICE	BEV
1	Cho Tawee		●	●
2	Foton CP Motor		●	
3	Hino Motors Manufacturing (Thailand)		●	
-	Isuzu Motor Thailand		●	
4	Absolute Assembly	●	●	●
5	Panus Assembly			●
6	Scania Manufacturing (Thailand)		●	
7	Sakun C Innovation		●	●
8	Thai-Swedish Assembly		●	
9	Toyota Auto Works	●		

Note:

- In operation
- BOI-approved BEV project
- ✧ Planed to star in 2024 or later

3.2 Motor Vehicle Production

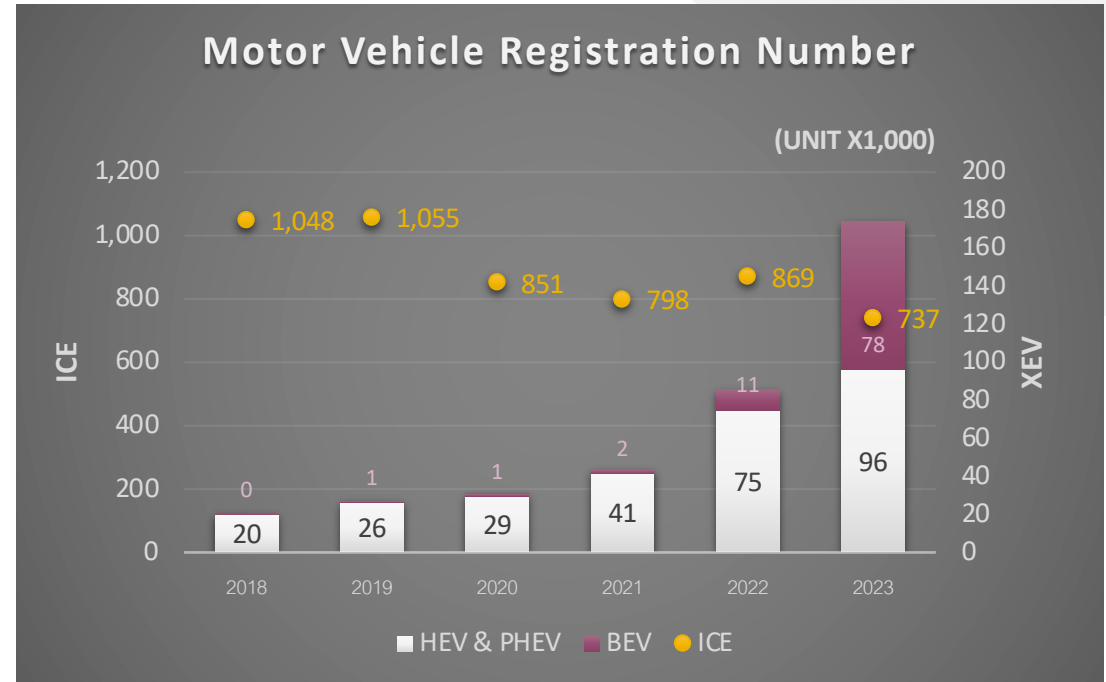
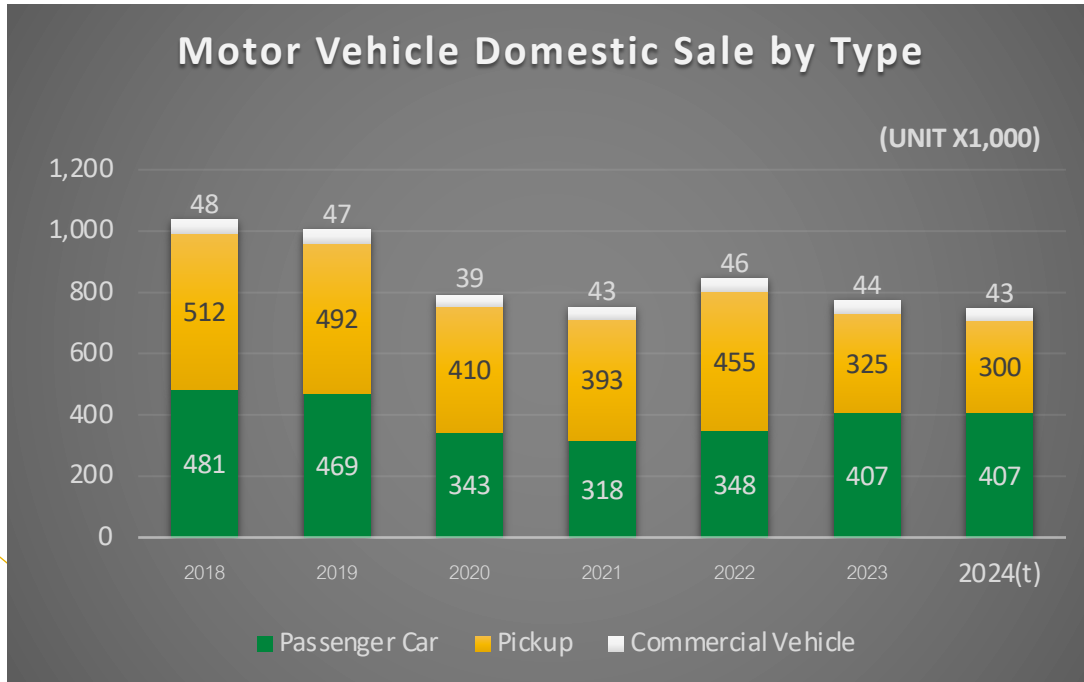


- In 2023, Thailand's car production totaled 1.83 million units. Of total, 0.77 million units were assembled for domestic distribution and 1.1 million units to serve the export market. The total car production is forecast to 1.90 million unit in 2024, increased by 3.5% from 2023.
- In 2023, Pick-up represented 63% of total car production in Thailand, while passenger cars shared 35% and other commercial vehicles (including trucks, vans and buses) was 2%, respectively. The country's BEV production was still small (only 14 units in 2023).

Source: Automotive Industry Club - The Federation Of Thai Industries

Note: (t) = Targeted by Automotive Industry Club - The Federation Of Thai Industries

3.3 Motor Vehicle Domestic Sale



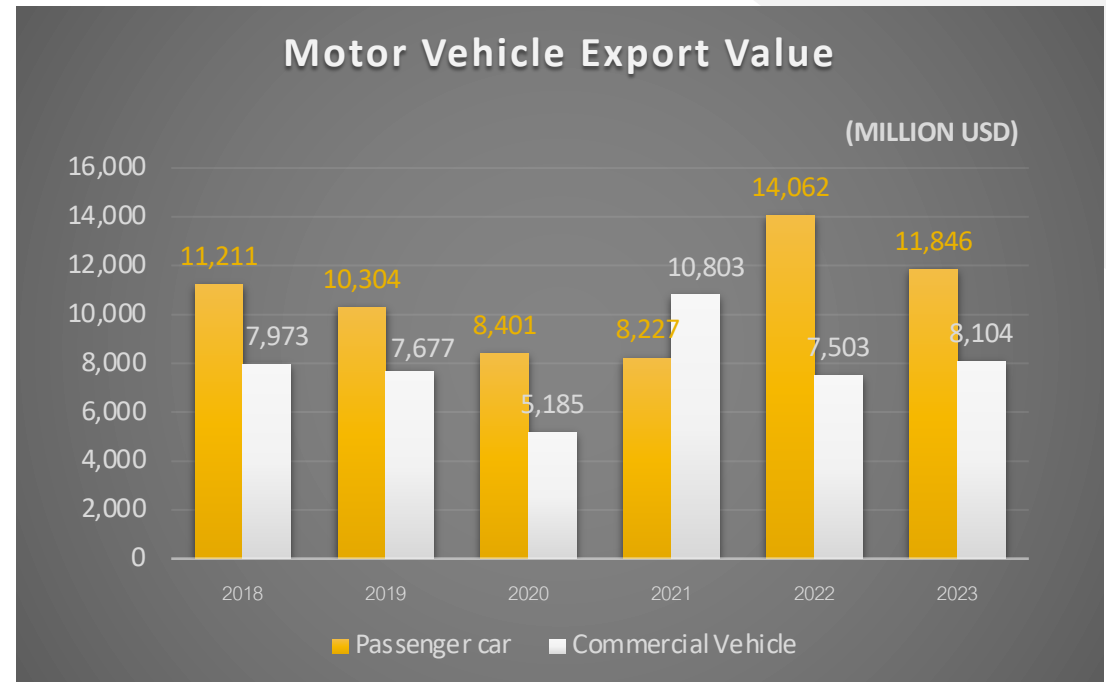
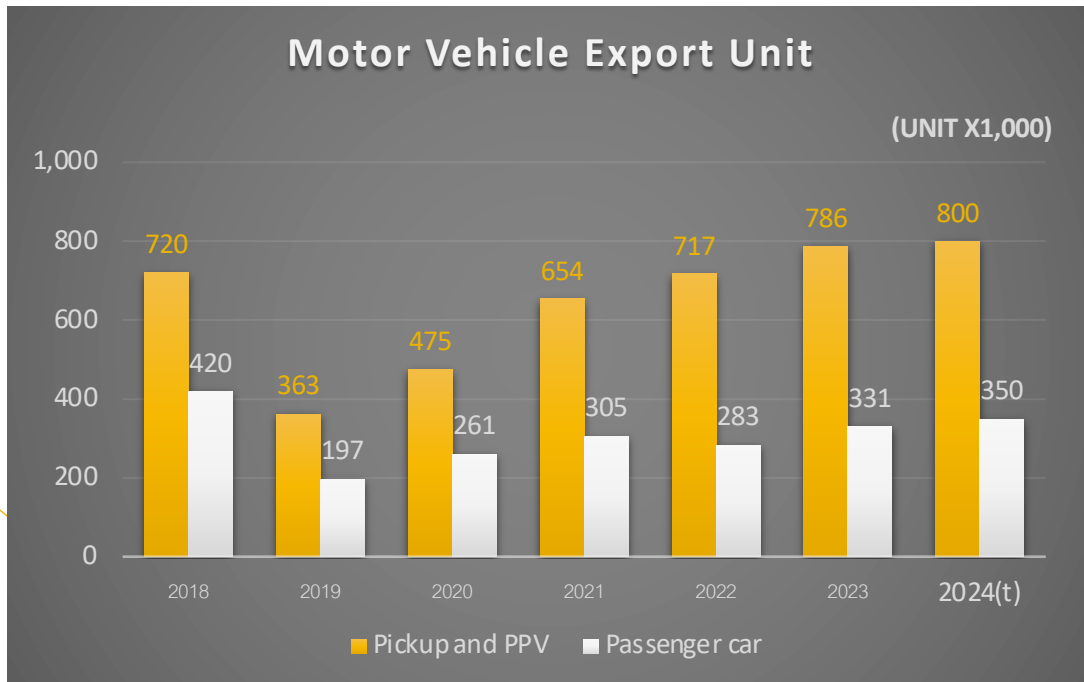
Description

- Thailand's domestic car sales in 2023 was 775,780 units, decreased by 9% from the previous year. The domestics sale of Passenger car was reported as 406,992 united or approximately 52% of total domestic sales followed by pickup, which showed the volume of domestic sale of 325,024 units and 43,764 units for the commercial vehicle, respectively.
- In 2024, the motor vehicle domestics sale was forecasted to be 750,000 unite and passenger car still show the largest domestics market share in this year.
- BEV car registration volume in 2023 was reported as 77855 units and the registration volume has continued to rise with an increase 729% YoY. Almost BEVs for domestic sales were imported particularly from China.

Source: Automotive Industry Club - The Federation Of Thai Industries, Department of Land Transport

Note: (t) = target by the Automotive Industry Club - The Federation Of Thai Industries

3.4 Motor Vehicle Export



Description

- In 2023, 1,117,539 unit of cars were exported to the world, increased by 12% from a previous year. The important car export destination of Thailand were Asia, Oceania and Middle East, respectively. In 2024, Thailand car export volume is expected to be 1.15 million units.
- Thailand car export value in 2023 was 19,950 Million USD, About 59% of total car export value was passenger car. While the remaining 41% of total export value represented to the commercial car.

Source: Automotive Industry Club - The Federation Of Thai Industries

Note: (t) = Targeted by Automotive Industry Club - The Federation Of Thai Industries



4. Motorcycle

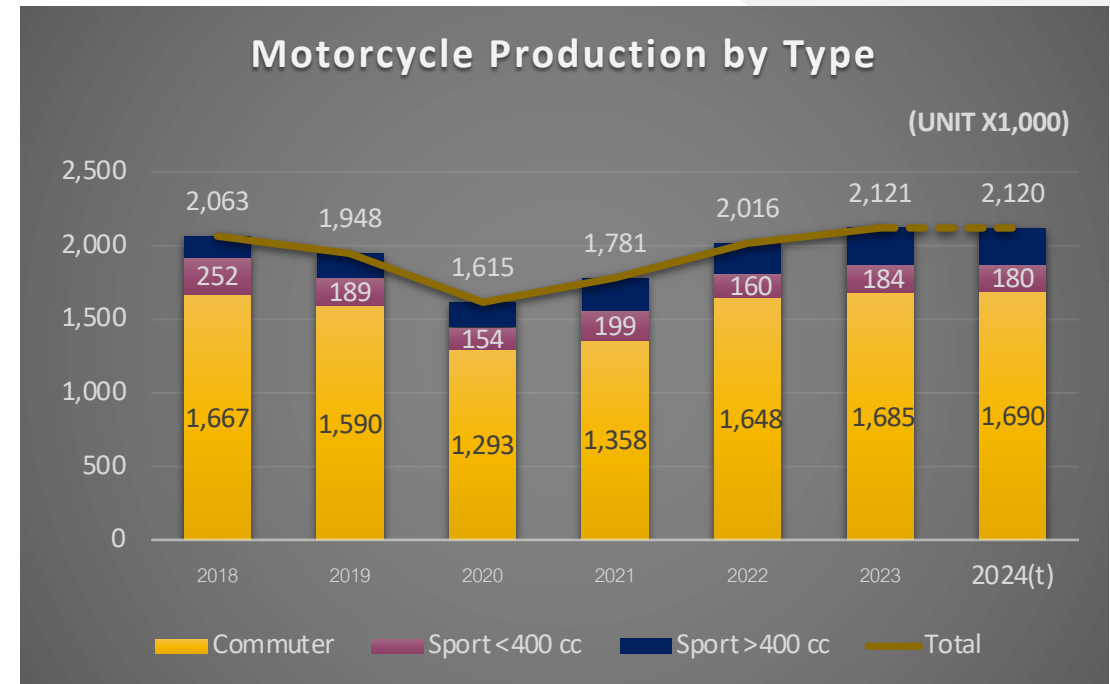
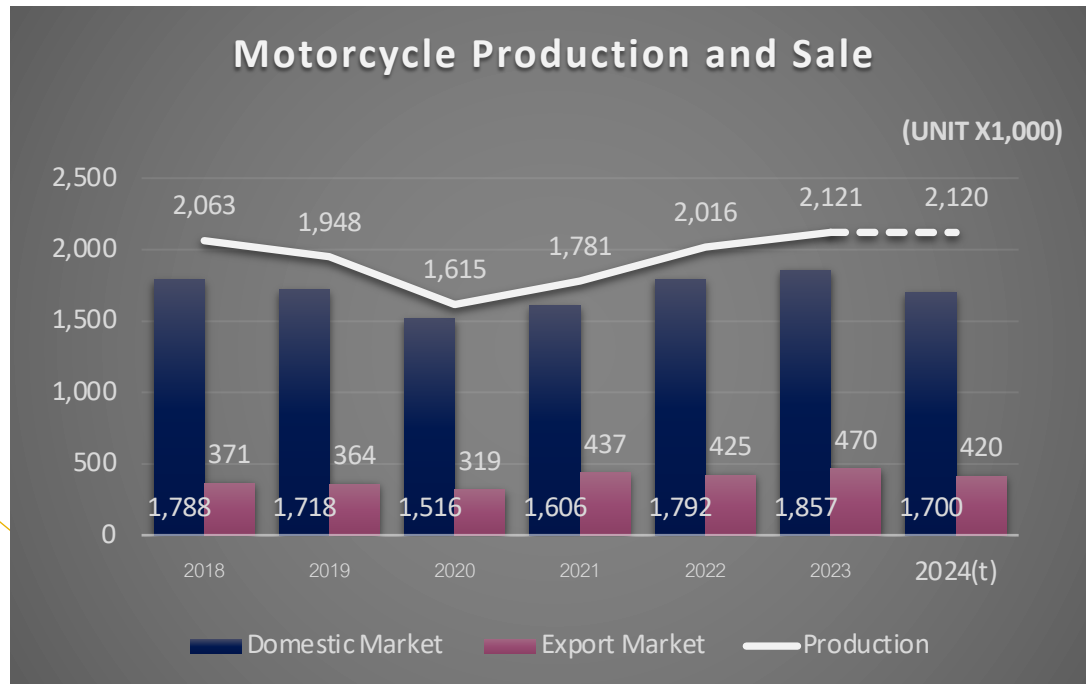
4.1 Motorcycle Assemblers in Thailand

No.	Company	ICE	BEV
1	BMW Manufacturing (Thailand)	•	
2	Ducati Motor (Thailand)	•	
3	Kawasaki Motors Enterprise (Thailand)	•	
4	Thai Honda Manufacturing	•	
5	Thai Suzuki Motor	•	
6	Thai Yamaha Motor	•	
7	Triumph Motorcycles (Thailand)	•	
8	Harley-Davidson (Thailand)	•	
9	GP Motor (Thailand)	•	
10	Deco Green Energy		•
11	Swag EV		•
12	Etran (Thailand)		•
13	Siam Green Energy Electric		•
14	Edison Motor		•
15	Power Stalian	•	
16	I-Motor Manufacturing		•
17	H Sem Motor		•
18	Tatung (Thailand)		•

No.	Company	ICE	BEV
19	Zong Shen Machinery Manufacturing (Thailand)	•	•
20	Strom (Thailand)		•
21	Smartech Motor		•
22	Thunder EV		•
23	Zapp Scooters (Thailand)		•
24	AJ Advance Technology		•



4.2 Motorcycle Production



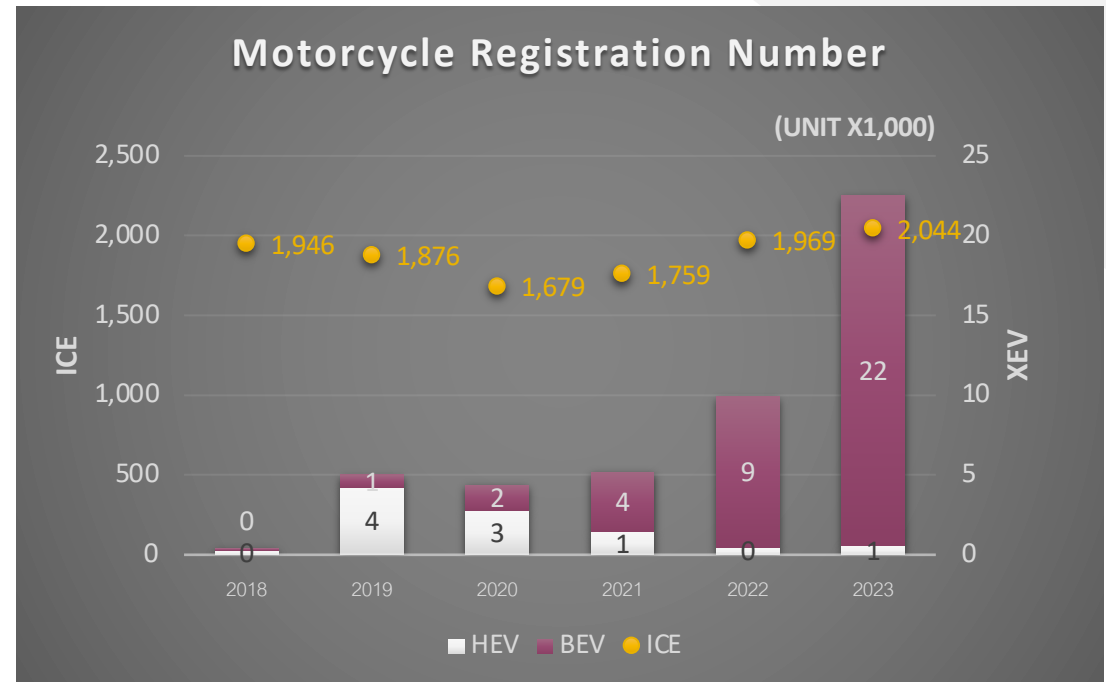
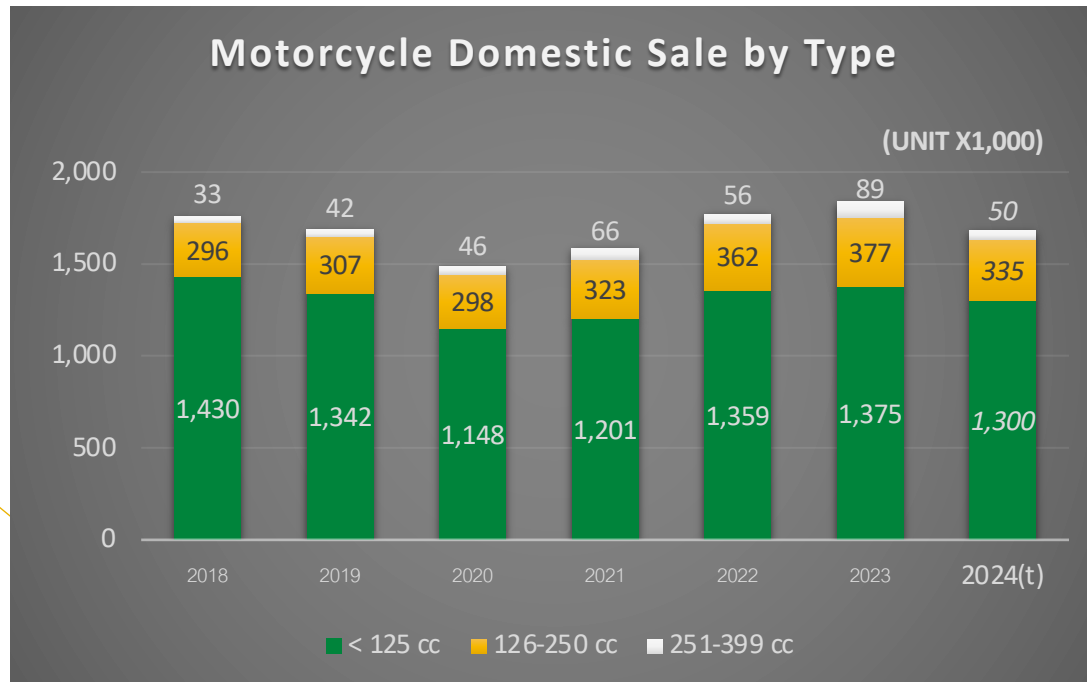
Description

- In 2023, about 2.12 million motorcycles were produced in Thailand. 1.85 million units were domestic sales, and 0.47 million units were export.
- Commuters showed the largest production proportion (79.4% of total motorcycle production) and Sport (including <150 cc, 150-399 cc, >400 cc) showed the remaining 20.6% of total production. In 2023, there are 500 Battery Electric Motorcycles produced in Thailand.
- In 2024, the production of motorcycle is expected to be 2.12 million units, 1.7 million units for the domestic sale and 0.42 million units for export, respectively.

Source: Automotive Industry Club - The Federation Of Thai Industries

Note: (f) = Forecast by Thailand Automotive Institute | (t) = Targeted by Automotive Industry Club - The Federation Of Thai Industries

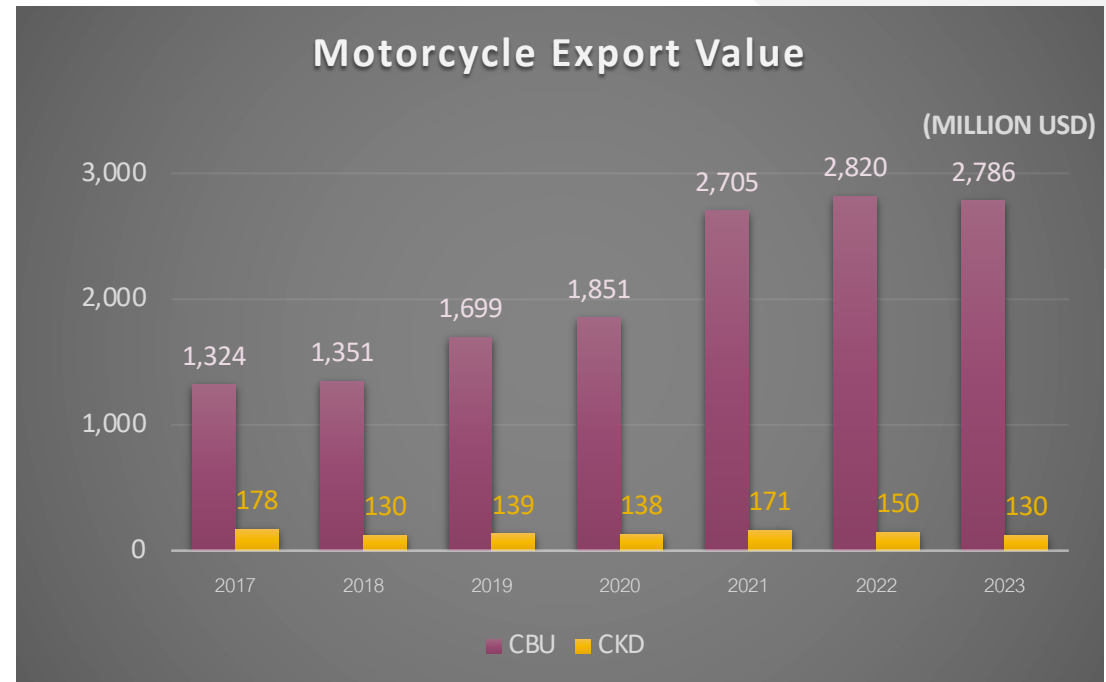
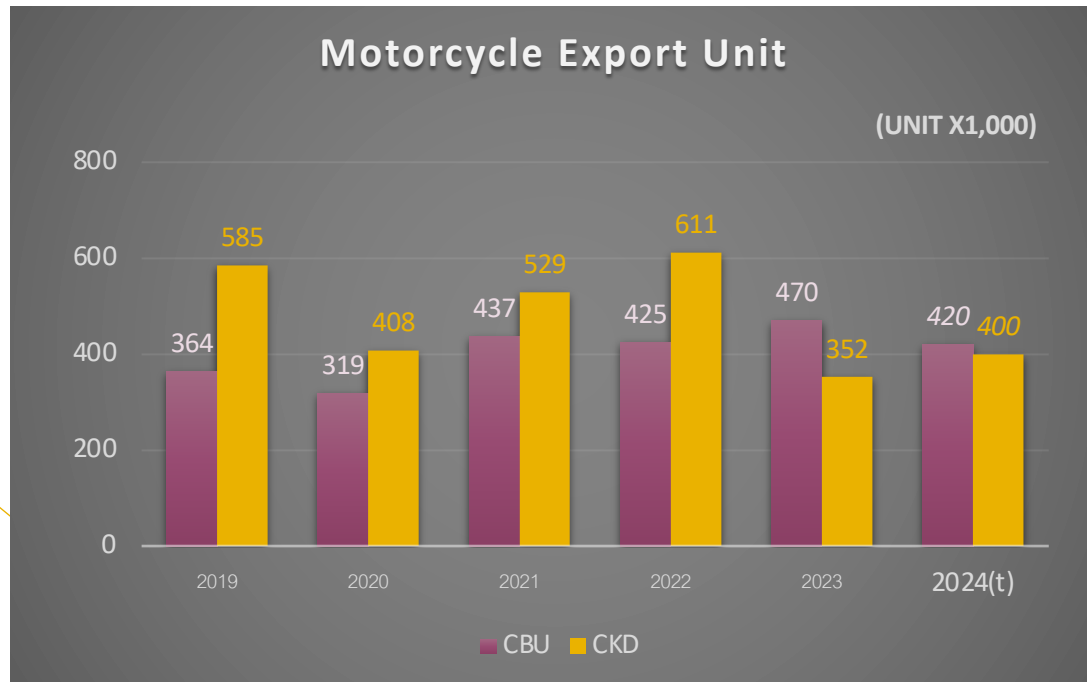
4.3 Motorcycle Vehicle Domestic Sale



Description

- Thailand's domestic motorcycle sales reached 1.85 million in 2023, increased by 4% from 2022. Motorcycles with a displacement of less than 125 cc represented 74% of total motorcycle domestic sales. In 2024, the domestic sale of motorcycle was estimated to be 1.70 million units.
- In 2023, BEV motorcycle registration has increased by 132.4% from a year earlier, while ICE motorcycle registration inched up 3.8%.

4.4 Motorcycle Export



Description

- In 2023, 0.47 million motorcycle CBUs and 0.35 million CKDs were exported. The CBU export increased by 11% from the previous year. As for CKD export declined by 42% from the previous year.
- CBUs accounted for 57.2% of total motorcycle exports in terms of value, thanks to those of high-value big bikes. CKDs exported were smaller bikes with lower value than those of CBUs.

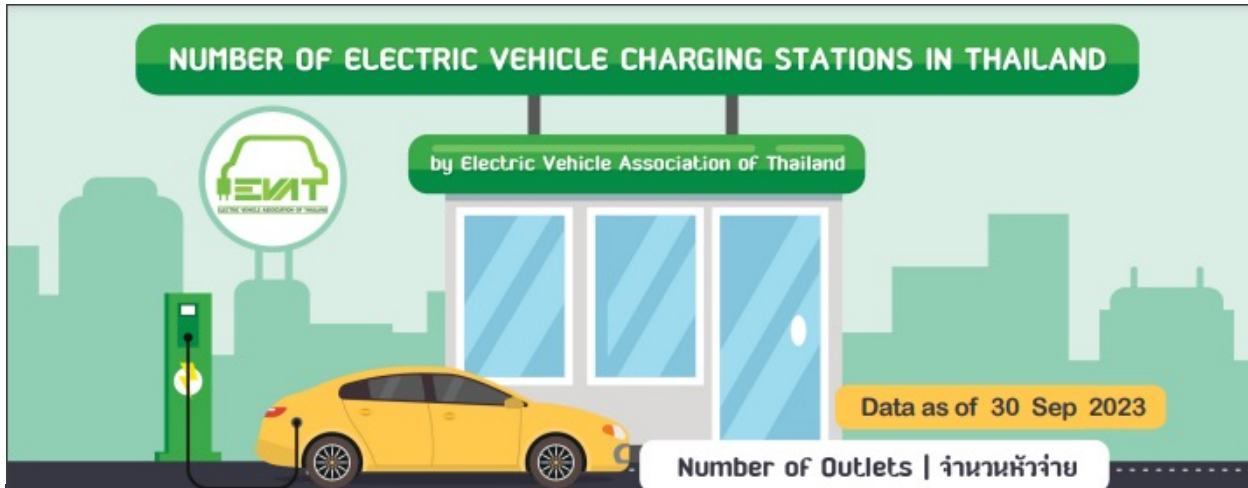
Source: Automotive Industry Club - The Federation Of Thai Industries

Note: (t) = Targeted by Automotive Industry Club - The Federation Of Thai Industries



5. Infrastructure for Next-Generation Vehicle

5.1 Public Charging Station



- Charging Plug & Socket : TISI Standard 2749
 - Passenger car: AC Charging = CCS 2
 - Bus: AC and DC Charging = CCS 2
- In 2023, 2,222 EV charging locations from 15 service provider are available in many areas of Thailand (As of September 2023), leading by EV Station PluZ (555 locations), EA Anywhere (538 locations) and PEA VOLTA (217 locations), respectively.
- 8,702 charging heads are available for services, including DC (CCS/CHAdemo) 3,896 heads and AC type II 4,806 head

Service Providers ผู้ให้บริการ	Number of Locations จำนวนแห่ง	DC	DC	AC	ALL
		DC CCS 2	DC CHAdemo	AC TYPE 2	TOTAL
EV Station PluZ	555	1047	1	652	1,700
EA Anywhere	538	1515	-	1,824	3,339
PEA VOLTA	217	378	316	164	858
RA	212	103	1	588	692
evoli	200	55	14	456	525
EleX	117	149	7	119	275
ALTERNIM	100	204	-	102	306
noodleEV	68	-	-	161	161
onion	60	7	1	424	432
HAUP	45	4	4	63	71
mea	36	17	9	130	156
Galvanic	29	15	1	56	72
GWM	20	44	-	-	44
CHOSEN	19	2	2	49	53
PUMP CHARGE	6	-	-	18	18
TOTAL	2,222	3,540	356	4,806	8,702

5.2 Activities Related to Battery Production



- On October 31, 2023, **SAIC Motor-CP and MG Sales** held the HASCO-CP Battery Shop opening ceremony and Thailand's first deeply localized battery line-off ceremony. Situated on the New Energy Industrial Park in the WHA Eastern Seaboard Industrial Estate 2 (WHA ESIE 2) in Chonburi province, this new EV battery factory is currently in its production preparation process and is scheduled to officially open in 2024.
- The plant is divided into 2 major areas. The first one is the battery assembly area which is fully automated through cutting-edge robotic technology, Laser Welding for accuracy and Charge Coupled Device (CCD) to cross-check the quality of battery with its prototype prior to its installation in a BEV.



- **Svolt Energy's Thailand plant**, a joint venture between the company's local subsidiary and Thailand's Banpu Next, focuses on power batteries, 2-3 wheeler batteries, energy storage, and battery recycling.
- Svolt Energy's first battery pack produced in Thailand is expected to be available in volume in the first quarter of 2024 and will first be fitted to the Thai version of the Good Cat model of Great Wall Motor's new energy vehicle (NEV) brand Ora.

5.3 Battery for EV Testing Laboratory

Location	Automotive and Tyre Testing, Research and Innovation Center (ATTRIC), Chachoengsao
Operated by	Thailand Automotive Institute
Area	3,000 m ²
Testing scope	Battery performance testing and battery safety testing, which requires a safety test room that can support burning or battery explosion from the test. Plan to expand the scope in the future as well
Opening	2 nd Quarter of 2022



UNECE R100 (Cars) and UNECE R136 (Motorcycles) Testing capability

- | | | |
|--------------------------|--------------------------------|--------------------------------------|
| 1) Mechanical Integrity | 2) Over Temperature Protection | 3) External Short Circuit Protection |
| 4) Overcharge Protection | 5) Over-discharge Protection | 6) Mechanical Shock |
| 7) Vibration | 8) Thermal Shock | 9) Fire Resistance |



Thank you



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