

Investment Promotion Policy and Measures to Support EV Industry in Thailand



Agenda



01

**Thailand's
Board of Investment**

02

BOI Incentives
for EV-related Activities

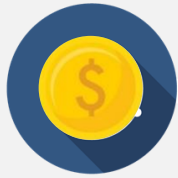
03

Other Supportive Measures

BOI's Role: To Drive the Investment to the New Economy

About BOI

BOI is a government agency under the Office of the Prime Minister



Promoter

drives and promotes investment in private sector in alignment with the country's development strategy & the changing world context



Integrator

integrates Government support tools such as tax, finance, and non-tax incentives in a whole package



Facilitator

coordinates with agencies to develop the ecosystem & facilitate ease of investment & eliminates problems/obstacles



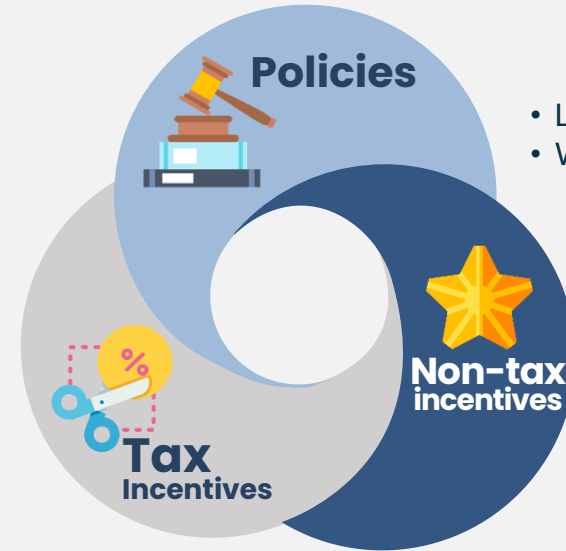
Connector

links large-scale with small-scale enterprises, Thais with foreigners, across industries & locations to expand business opportunities

Overseas Offices

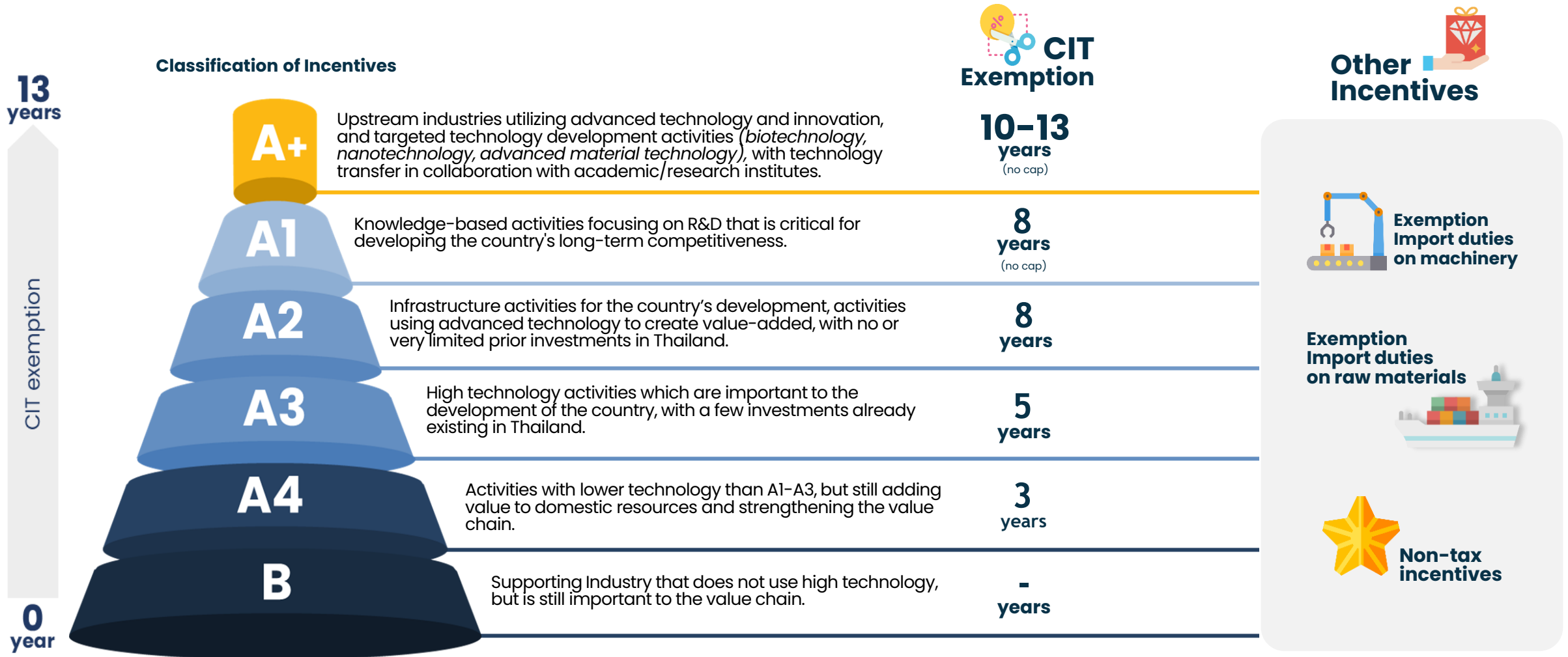


BOI's Investment Promotion Measures



- Land ownership
- Work permit & visa facilitation
- 100% foreign ownership
- No local content requirements
- No export requirements
- No restrictions on foreign currencies
- Corporate income tax exemption up to 13 years
- 50% Corporate income tax reduction for 5 years
- Exemption of import duties on machinery
- Exemption of import duties on raw or essential materials imported for exports
- Exemption of import duties on goods imported for R&D
- Double deduction for the cost of transportation, electricity and water
- 25% deduction for the cost of installation or construction of facilities

Investment Promotion measures for Targeted Industries



Measures for Competitiveness Enhancement

1 Provide extra incentives to encourage the implementation of competitiveness-enhancing initiatives

Eligible Investment/Expenditures for the computation

1. Technology and Innovation

- Research and Development (R&D)
- Licensing fees for using domestically developed technology
- Product and package design
- Support for S&T organizations such as academic institutions, specialized training centers, research institutes, and public agencies, including various funding such as technology and innovation, personnel development as approved by the BOI

2. Human Resource Development

- Advanced technology training
- Organizing training or accepting student internships for work training and skill development during their S&T education

3. Development of Business Operators' Potentials

- Local supplier development

Investments/
Expenditures to Sales
in the first 3 years

Additional Periods
for CIT Exemption

+ Additional
Incentives



≥ 1% / ≥200 MB

1 year

≥ 2% / ≥400 MB

2 years

≥ 3% / ≥600 MB

3 years

≥ 4% / ≥800 MB

4 years

≥ 5% / ≥1,000 MB

5 years

+ Additional CIT Exemption Limit

200% of Investments/Expenditures



In the case of investments/
Expenditures on R&D ≥ 1%

CIT Exemption

(with no Cap)

Extension of CIT Exemption to

a Maximum Period of **13** years

2 Promote establishment of Institutes for advanced skill personnel development

Promote private enterprises to establish academic/training institutes for advanced technology by providing incentives to their parent company



Agenda

01

Thailand's
Board of Investment

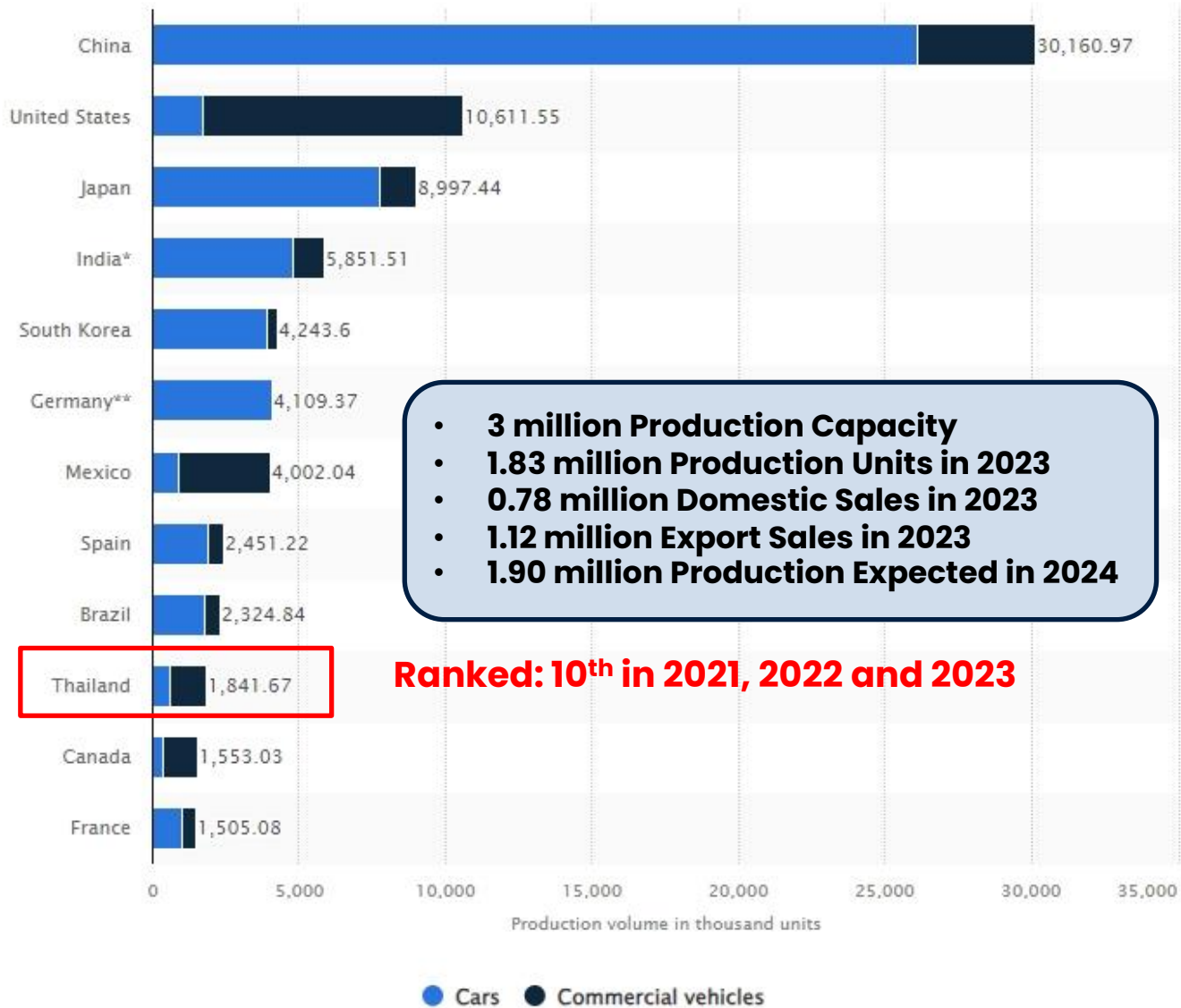
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**BOI Incentives
for EV-related Activities**

03

Other Supportive Measures

Motor Vehicle Production Volume

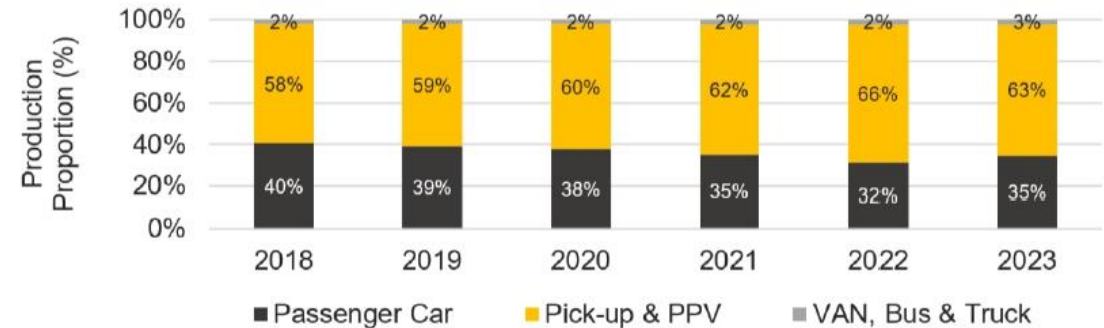


- **3 million Production Capacity**
- **1.83 million Production Units in 2023**
- **0.78 million Domestic Sales in 2023**
- **1.12 million Export Sales in 2023**
- **1.90 million Production Expected in 2024**

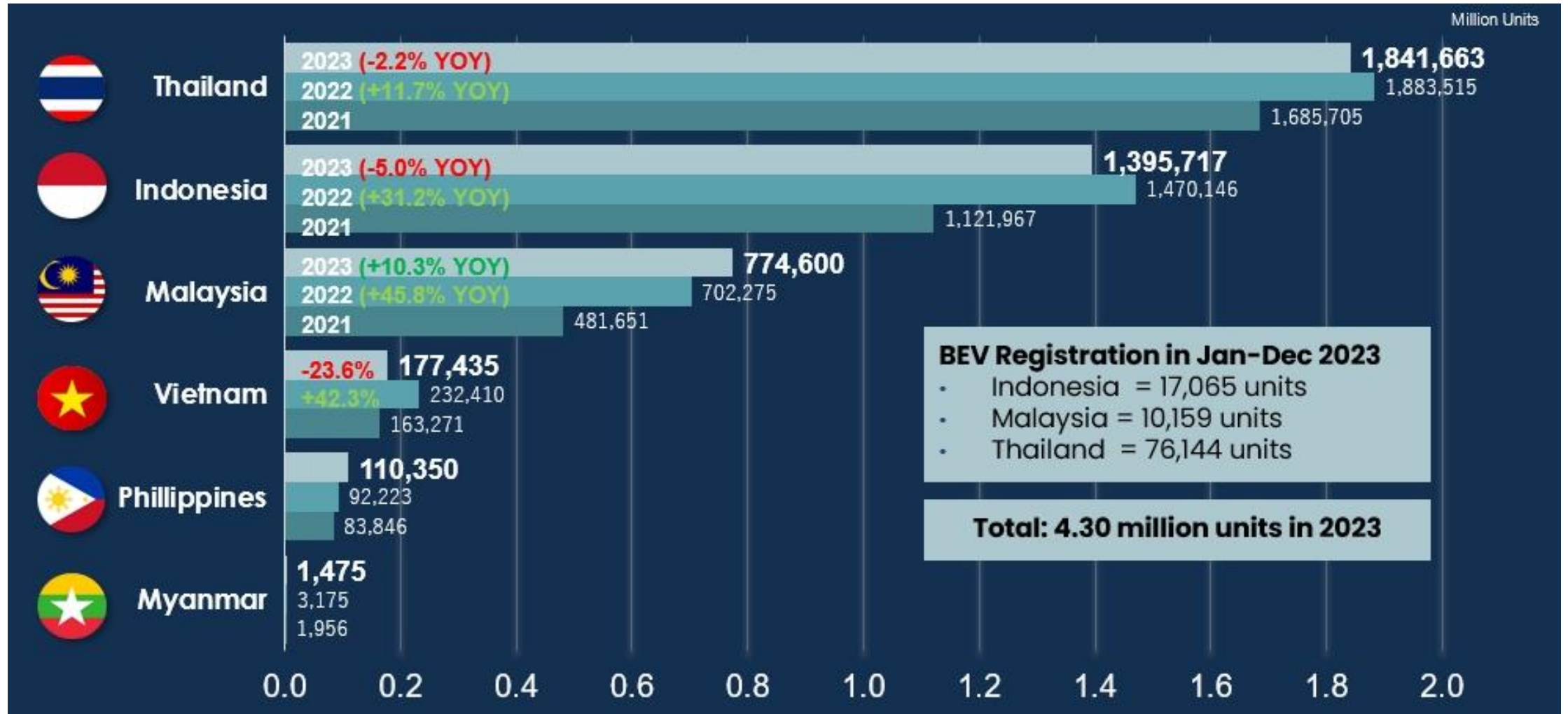
Ranked: 10th in 2021, 2022 and 2023



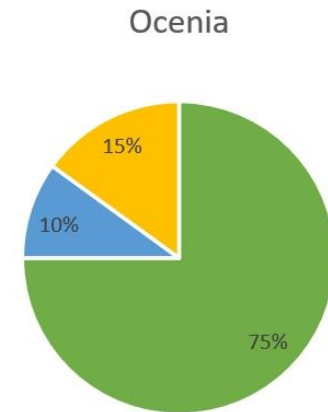
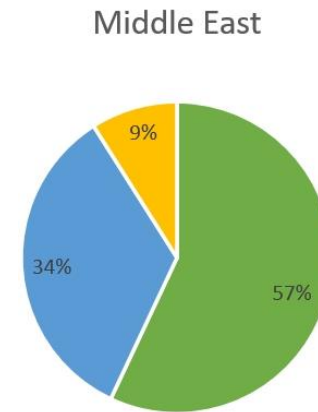
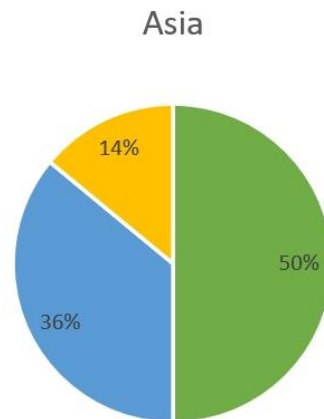
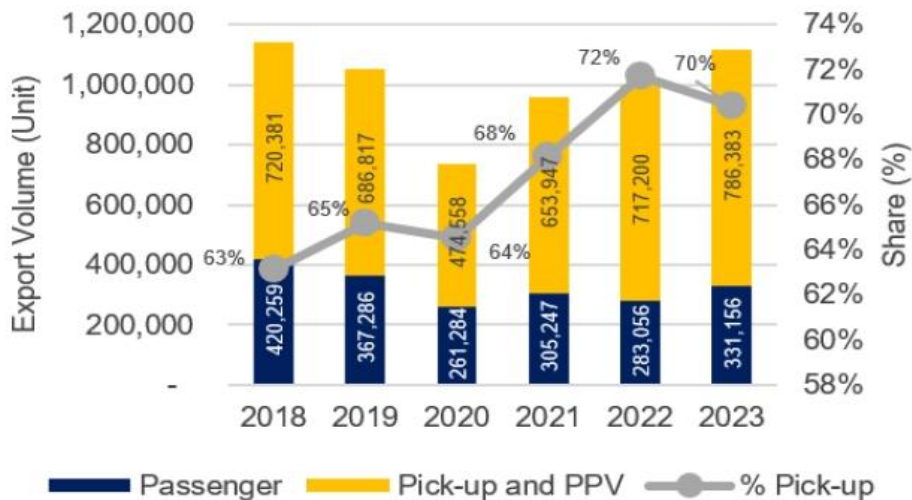
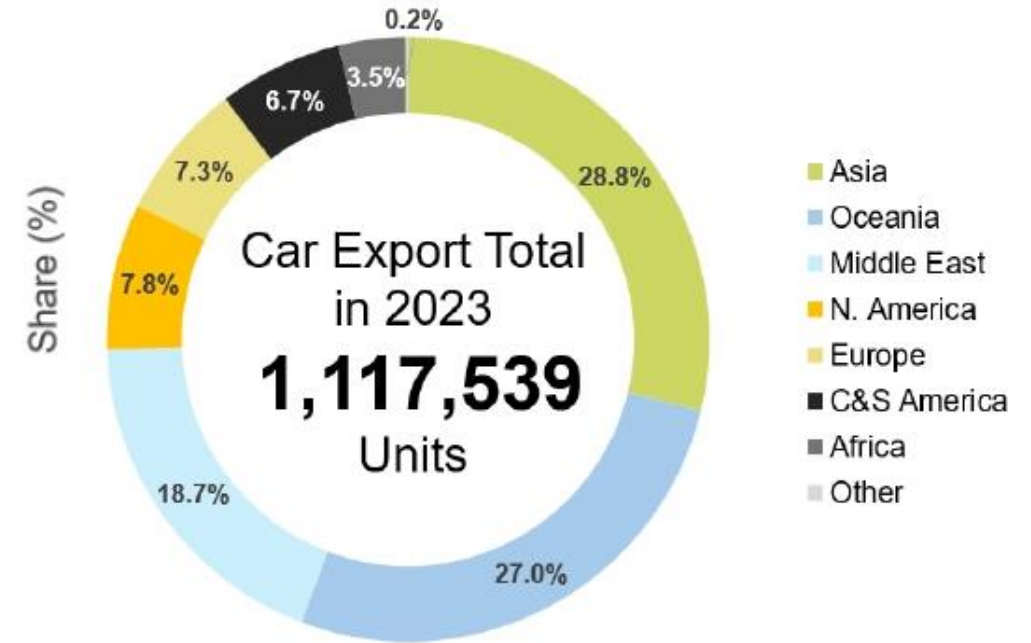
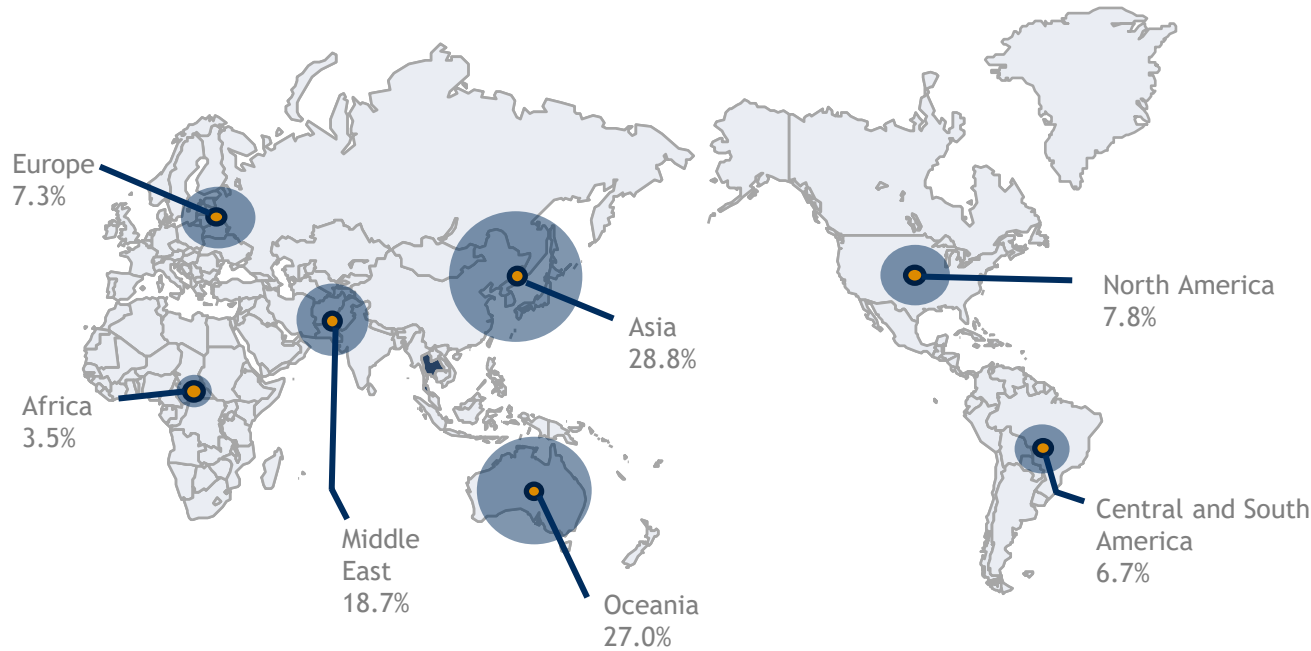
Thailand' Motor Vehicle Production Proportion by Types 2018-2023



ASEAN's Automotive Production in 2023



Export Destination for Thailand Automobile in 2023



Developing Focus of Thai Automotive Industry

2005

1-tonnage truck pickup promotion scheme,
Thai's first Automobile Product Champion



1960s

Promotion of local product to substitute import



The early day of Thailand automobile industry

1980s

Promotion of local product to export
Vehicles, parts had sprouted and lead to economy of scale



2017 - present

EVs production and sales scheme
Incentives for investment and usage demand



2007- 2013

**Eco-Car 1, Eco-car 2
NGV package for Trucks, Buses
and Big Bikes Investment
promotions**

Thailand Government Target and Ambition Support EVs Development



Reduce Green houses Gas Target



**Carbon Neutrality
By 2050**



**Net-Zero Greenhouse
Gas Emission
By 2065**



Future Industry

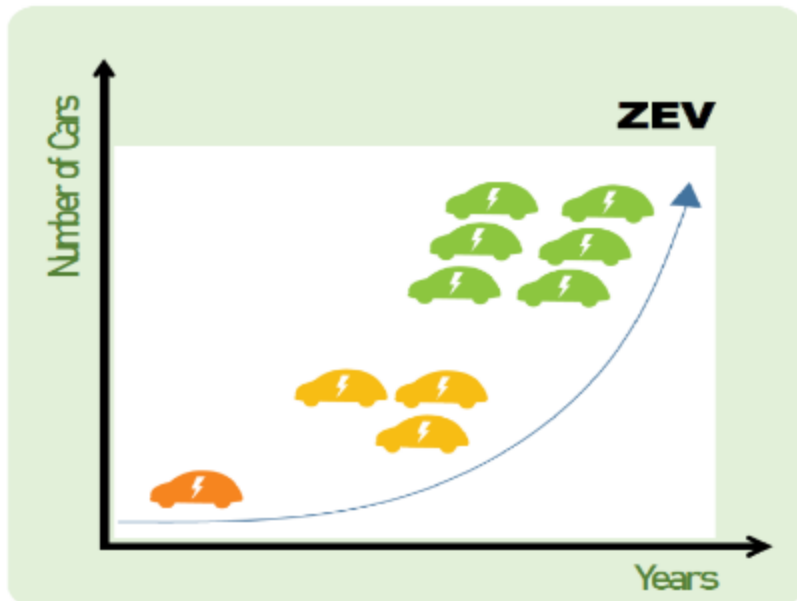


Next-Generation Automotive

ZEV: Utilization & Production Target for Thailand

Target 30 @ 30

**Year 2030
30% of the Car Production
in Thailand is "ZEV"**



Target	Classification	Volume of ZEV (Year)	
		2025	2030
Utilization	Passenger Car / Pickup	225,000 (30%)	440,000 (50%)
	Motorcycles	360,000 (20%)	650,000 (40%)
	Bus / Truck	18,000 (20%)	33,000 (35%)
Production	Passenger Car / Pickup	225,000 (10%)	725,000 (30%)
	Motorcycles	360,000 (20%)	675,000 (30%)
	Bus / Truck	18,000 (35%)	34,000 (50%)

Source: The Plan of the National Electric Vehicle Policy Committee

With 30@30 aspiration, Thailand will be ranked among top global BEV Manufacturers by 2025

2025 Global BEV Vehicles Manufacturing Ranking

Rank	Country	Volume (Million Units)
1	China	7.35
2	USA	2.17
3	Germany	2.00
4	Japan	1.08
5	France	0.63
6	South Korea	0.62
7	Mexico	0.56
8	Czech	0.36
9	UK	0.31
10	Spain	0.27
11	Thailand	0.23
12	Italy	0.19
13	Poland	0.11
14	Hungary	0.10
15	India	0.08

2030 Global BEV Vehicles Manufacturing Ranking

Rank	Country	Volume (Million Units)
1	China	15.54
2	USA	4.90
3	Germany	4.86
4	Spain	2.36
5	Hapan	1.80
6	France	1.56
7	South Korea	1.10
8	Czech	1.09
9	Mexico	0.90
10	Thailand	0.73
11	Italy	0.71
12	UK	0.69
13	India	0.55
14	Hungary	0.45
15	Romania	0.26



Comprehensive Measures for Promoting EV Industry



30/30 EV Vision



EV Support Measures



Demand Stimulation Measures

BOI Investment Incentives for Producers

- Manufacture of BEV / PHEV / HEV / FCEV
- Battery Electric Bus and Truck
- Battery Electric Motorcycle, Tricycle, Bicycle, Boat
- Battery / Key parts for EV + Other parts & components
- Battery Charging Station & Swapping Station
- Software & Application related to EV



+ Special measure to promote **Battery Cell** production



Corporate Income Tax Exemption



Exemption of import duties on machinery



Exemption of import duties on raw materials



Exemption of import duties on raw materials used in R&D



Non-tax incentives

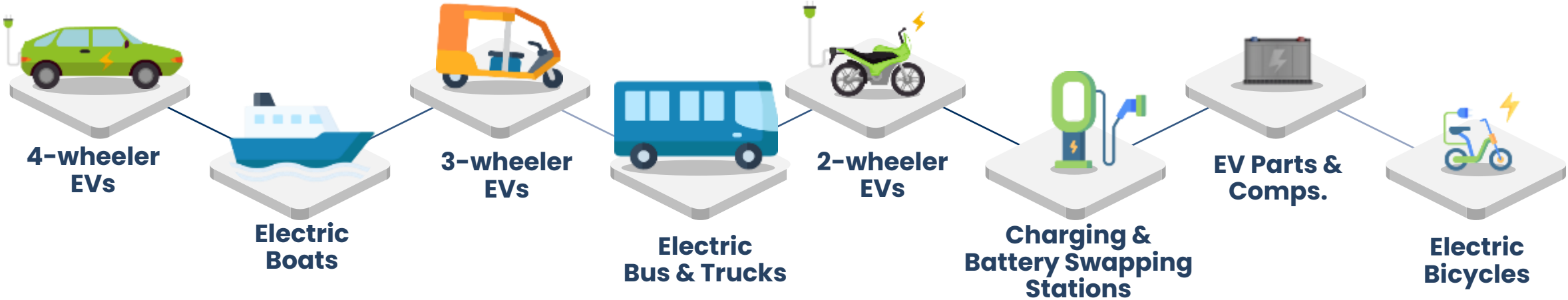
- EV3 & 3.5 : Subsidies for BEV (4W, 2W)
 - CBU import duty reduction
 - Excise tax reduction
 - Cash subsidy
- Tax deduction for EV Bus & Truck
- Government & SOE Fleet transition

Other Support Measures

- Charging facility
- Standard and Testing Facility (ATTRIC)

BOI Promotion on Battery Electric Vehicles (BEV)

BOI promotes every various types of **Battery Electric Vehicles (BEV)**, including **BEV platforms** and **Development of Software & Digital Platform** with an aim of developing the country as Asia's manufacture hub of EVs.



INCENTIVES



CIT Exemption:
3 - 13 years

Battery Electric Vehicles (BEV)



Front axle module (FWD or AWD)

- E-motor
- Power electronics
- HV Inverter
- Reducer
- Brake system
- Suspension system
- Front axle
- Wheel assembly

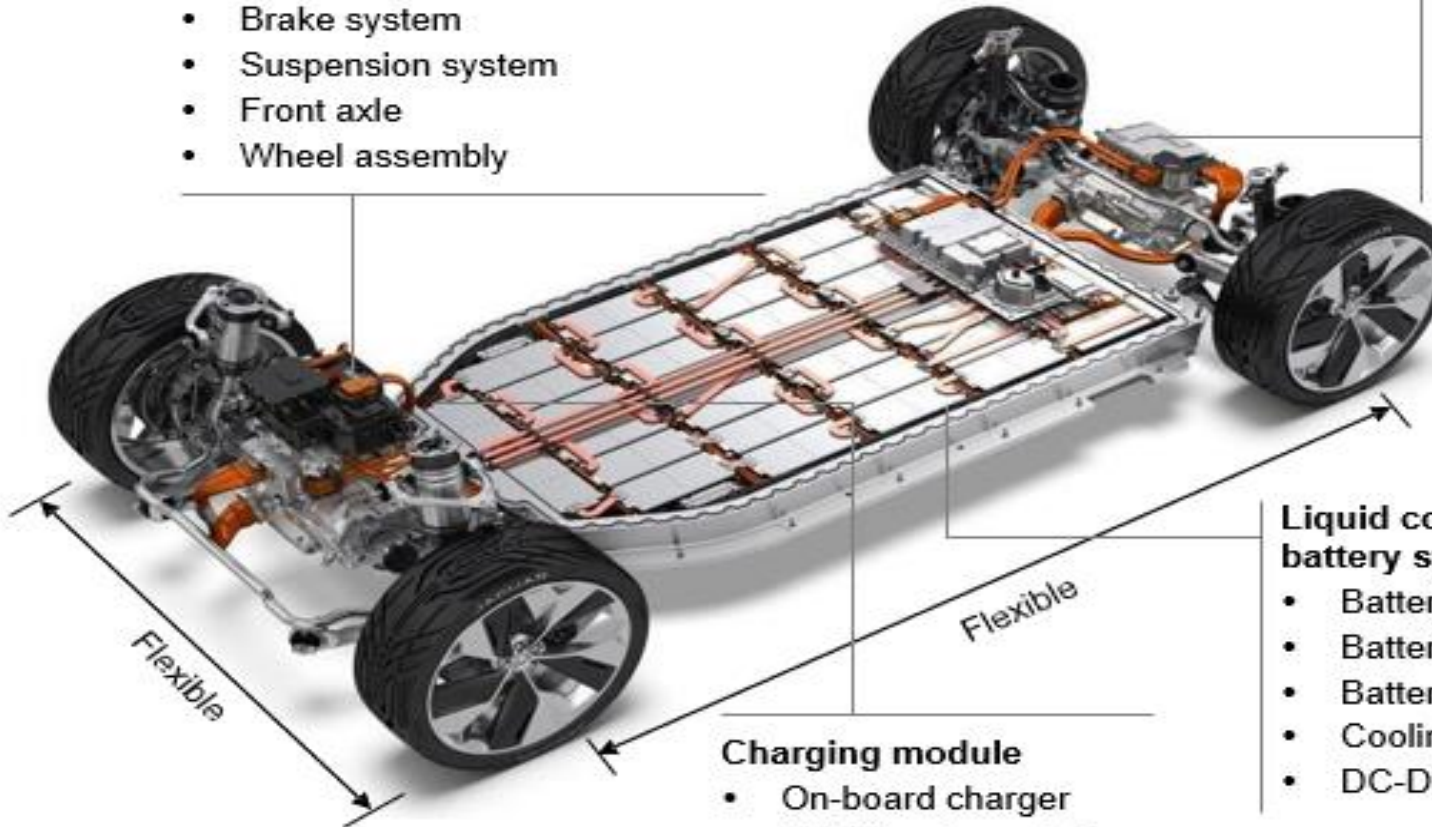
Rear axle module (RWD or AWD)

- E-motor
- Power electronics
- HV Inverter
- Reducer
- Brake system
- Suspension system
- Rear axle
- Wheel assembly

Including: BEV
“**PLATFORM**” for
Electric Car, Electric
Tricycle and Electric
Bus and Truck

Platforms must include:

- (1) Energy Storage System
- (2) Charging Module
- (3) Front & Rear Axle Module



Liquid cooled lithium-ion battery system

- Battery modules
- Battery management system
- Battery junction box
- Cooling unit
- DC-DC converter

Charging module

- On-board charger
- HV Charging point
- AC-DC converter



CONDITION

3.8 Manufacture of BEVs, PHEVs, HEVs, and BEV Platforms

1. Within 3 years after the date of promotion certificate issuance: manufacture of all categories of electric vehicles must be started, and electric battery must be started from cell or module manufacture.
2. Within 3 years after the starting date of electric car manufacture: at least 1 out of 3 key parts (Traction Motor, DCU, BMS) must be additionally manufactured. Additionally, for HEV and PHEV, at least 2 parts in accordance with activity 3.5.4 must be manufactured.
3. In case of domestic sale, the products must receive stipulated standards, i.e. UN R100, R13H, R94/95, and Euro5 (only for HEV/PHEV).

Machinery importing time shall not be allowed to extend, except for justified reasons.

INCENTIVE

Total investment capital of not less than 5 billion baht

HEV: **No** CIT exemption
PHEV: **3-year** CIT exemption
BEV: **8-year** CIT exemption

Max. 13 years

+ 1 to 5-year exemption in case of R&D

No additional exemption in case situated in the industrial estate

Total investment capital of less than 5 billion baht

HEV: **No** CIT exemption
PHEV: **3-year** CIT exemption
BEV: **3-year** CIT exemption

Max. 11 years

+ 1-year exemption

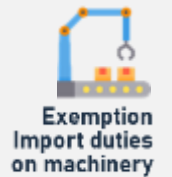
per part in case other key part is manufactured in addition to standard requirements.

+ 1-year exemption

in case actual manufacture is >10,000 car/year in any year within 3 years (only for BEV)

+ 1 to 5-year exemption in case of R&D.

No additional exemption in case situated in the industrial estate



Non-tax incentives

INCENTIVES





CIT Exemption:
Max. 12 years



Manufacture of Battery Electric Motorcycles



CONDITION

3.9 Manufacture of Battery Electric Motorcycles

1. Must propose the plans in package.
2. Must manufacture battery electric motorcycles and electric batteries within 3 years the date of promotion certificate issuance.

Machinery importing time shall not be allowed to extend, except for justified reasons.)

In case of domestic sale, the products must receive stipulated standards, i.e. UN R136, UN R75 and UN R78.

INCENTIVE

A4

3
years
Exemption
CIT (with cap)



+ 1-year exemption

if the battery manufacture starts from the cell or module production process within 3 years as from the promotion certificate issuance date.

+ 1-year exemption

per part in case other key part (BMS, Motor, or DCU) is additionally manufactured within 3 years as from the promotion certificate issuance date.

+ 1 to 5-year exemption in case of R&D.

No additional exemption in case situated in the industrial estate

Exemption
CIT



Exemption
Import duties on
raw materials
Used in R&D



Exemption
Import duties
on machinery



Exemption
Import duties on
raw materials



Non-tax
incentives

INCENTIVES



CIT Exemption:
Max. **12 years**

Manufacture of Battery Electric Tricycles and Platforms



CONDITION

3.10 Manufacture of Battery Electric Tricycles and Platforms

1. Must propose the plans in package.
2. Must manufacture electric tricycles and electric batteries within 3 years as from the promotion certificate issuance date.
(Machinery importing time shall not be allowed to extend, except for justified reasons.)

In case of domestic sale, the products must receive stipulated standards, i.e. UN R136.

INCENTIVE

A4

3 years
Exemption
CIT 
(with cap)

+ 1-year exemption

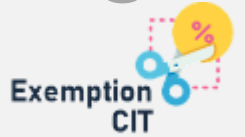
if battery manufacture starts from the cell or module production process within 3 years as from the promotion certificate issuance date.

+ 1-year exemption

per part in case other key part (BMS Motor, or DCU) is additionally manufactured within 3 years as from the promotion certificate issuance date.

+ 1 to 5-year exemption in case of R&D.

No additional exemption in case situated in the industrial estate



Exemption
CIT



Exemption
Import duties on
raw materials
Used in R&D



Exemption
Import duties
on machinery



Exemption
Import duties on
raw materials



Non-tax
incentives

INCENTIVES



CIT Exemption:
Max. 12 years

Manufacture of Battery Electric Bus & Truck and Platforms



CONDITION

3.11 Manufacture of Battery Electric Bus and Truck and Platforms

1. Must propose the plans in package.
2. Must manufacture battery electric bus or truck and electric battery within 3 years as from the date of promotion certificate issuance. (Machinery importing time shall not be allowed to extend, except for justified reasons.)

In case of domestic sale, the products must receive stipulated standards, i.e. UN R100.

INCENTIVE

A4

3
 years
 Exemption
 CIT



+ 1-year exemption

if battery manufacture starts from the cell or module production process within 3 years as from the promotion certificate issuance date.

+ 1-year exemption

per part in case other key part (BMS, Motor, or DCU) is additionally manufactured within 3 years as from the promotion certificate issuance date.

+ 1 to 5-year exemption in case of R&D.

No additional exemption in case situated in the industrial estate



Exemption
 CIT



Exemption
 Import duties on
 raw materials
 Used in R&D



Exemption
 Import duties
 on machinery



Exemption
 Import duties on
 raw materials



Non-tax
 incentives

INCENTIVES



CIT Exemption:
Max. 10 years

Manufacture of Battery Electric Bicycles (e – Bike)

CONDITION

3.12 Manufacture of Electric Bicycles (e – Bike)

1. Must propose the plans in package.
2. Must manufacture e – Bike and the environmentally friendly technology battery within 3 years as from the date of promotion certificate issuance. (Machinery importing time shall not be allowed to extend, except for justified reasons.)
3. Must use frames from lightweight materials.
4. Must comply with the EN15194 standard or equivalent.

INCENTIVE

A4

3 years
Exemption
CIT (with cap)

+ 1-year exemption

if traction motor manufacture within 3 years as from the promotion certificate issuance date.

+ 1-year exemption

if frame from lightweight material manufacture within 3 years as from the promotion certificate issuance date.

+ 1 to 5-year exemption in case of R&D.

No additional exemption in case situated in the industrial estate

Exemption CIT

Exemption Import duties on raw materials Used in R&D

Exemption Import duties on machinery

Exemption Import duties on raw materials

Non-tax incentives

INCENTIVES

Manufacture of Fuel Cell Electric Vehicles (FCEV) & Fuel Cell System

CONDITION

3.13.1 Manufacture of Fuel Cell Electric Vehicle (FCEV)

Must propose the plans in package covering at least a manufacture project of FCEV and a manufacture project of Fuel Cell (own project or other manufacturers' project)

1. Machinery importation and installation plans
2. Manufacture plans of FCEV in year 1-3
3. Manufacture of procurement plans of other parts
4. Hydrogen Fueling Station development plans
5. Used battery management plans
6. Plans for developing local suppliers of raw materials and parts, with Thai shareholding of not less than 51% in providing technology training and technical assistance

INCENTIVE

3.13.1 Manufacture of Fuel Cell Electric Vehicle (FCEV)

3.13.2 Manufacture of Fuel Cell System's Components

3.14 Manufacture of Fuel Cell and Parts

A2

8
years
Exemption
CIT



+ 1 to 5-year exemption in case of R&D.

- Exemption CIT
- Exemption Import duties on raw materials Used in R&D
- Exemption Import duties on machinery
- Exemption Import duties on raw materials
- Non-tax incentives



CIT Exemption:
Max. 13 years

Manufacture of EV Key Components including Electric Battery

17 Key Components of EV

- Air Conditioning System
- DCDC converter
- Front / Rear Axle for EV bus
- Electrical Circuit Breaker
- EV Charging Equipment
- Smart Charging System
- On-board Charger
- Traction Motor
- Portable EV Charger
- Inverter
- BMS
- DCU
- **Battery***
- High Voltage Harness
- Reduction Gear
- Battery Cooling System
- Regenerative Braking System

A2

8
years
Exemption
CIT (with cap)

Battery*



Pack Assembly

A3

5
years
Exemption
CIT (with cap)

Module or CTP

A2

8
years
Exemption
CIT (with cap)

+
Incentive of 90% import duty reduction for raw and essential materials not available within the country for 5 years

Cell Production

A1

8
years
Exemption
CIT

+
Incentive of 90% import duty reduction for raw and essential materials not available within the country for 5 years

Exemption
CIT

Exemption
Import duties on
raw materials
Used in R&D

Exemption
Import duties
on machinery

Exemption
Import duties on
raw materials

Non-tax
incentives

INCENTIVES



CIT Exemption:
Max. 10 years

Charging Station



CONDITION

- Propose a plan to implement an EV Smart Charging System or to connect to an EV Charging Network Operator Platform.
- Propose a procurement plan for parts and equipment
- Must follow safety standards and rules of other relevant agencies



at least **40 chargers**, 25% of which are fast chargers

(where at least 25% are rapid type)

A3

5
years
Exemption
CIT
(with cap)

Exemption
Import duties
on machinery



Exemption
Import duties
on raw materials



Non-tax
incentives



other cases

A4

3
years
Exemption
CIT
(with cap)

Exemption
Import duties
on machinery



Exemption
Import duties
on raw materials



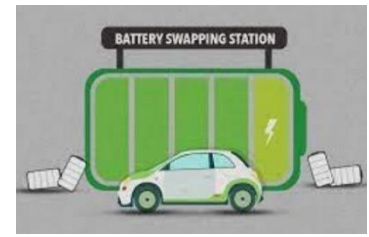
Non-tax
incentives





CIT Exemption:
Max. 10 years

Battery Swapping Station



CONDITION

- Propose a plan to implement an EV Smart Charging System or to connect to an EV Charging Network Operator Platform.
- Propose a procurement plan for parts and equipment
- Must follow safety standards and rules of other relevant agencies
- Battery will not be exempted from the import duties.
- Promoted Revenue must be derived from only the battery swapping service fee included electricity cost.



A3

5
years
Exemption
CIT



Exemption
Import duties
on machinery



Exemption
Import duties
on raw materials



**Non-tax
incentives**

Promoted Projects on Electric Vehicles (Passenger Car)

(Source: BOI Information Database (BIS) as of 31st August 2024)

79,614.8 MB. *

27 Projects **

886,194 Cars

**HEV
(30,392.1 MB.)**

**7 Projects
(7 Entities)**

317,955

**PHEV
(9,263.9 MB.)**

**7 Projects
(7 Entities)**

159,689

**BEV
(39,958.8 MB.)**

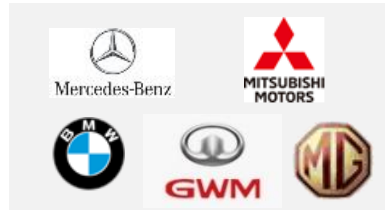
**20 Projects
(20 Entities)**

408,550

Promoted Projects **
27

Certificate Issuance (Projects)
19

Started Production (Brands)
14



Remarks: * Investment Values excluding Cost of Land and Working Capital
** 21 Promoted Entities. 1 entity can be promoted more than 1 project. 1 project can be manufactured more than 1 type of the EVs.

Promoted Projects on Electric Battery

(Source: BOI Information Database (BIS) as of 31st August 2024)

Projects on “Battery for Electric Vehicle (xEV)”

Investment = 13,941.7 million Baht**

21 Entities (27 Projects) *

Capacity: 21,644.9 MWh

1. DTS Draexlmaier Automotive Systems (Thailand)
2. Toyota Motor Thailand
3. Honda Automobile (Thailand)
4. Thonburi Energy Storage Manufacturing
5. SAIC Motor – CP
6. Mine Mobility Corporation
7. MMTH Engine
8. Nissan Powertrain (Thailand)
9. SVOLT Energy Technology (Thailand)
10. BYD Auto Components (Thailand)
11. Vitchukhanee
12. MR. CHENG CHEW HO (not yet registered)
13. Raja Cycle
14. Somboon Tron Energy
15. Hasco – CP
16. AC Energy Solution
17. Isuzu Motor (Thailand)
18. Powertech Energy Solutions
19. CALB (Thailand)
20. Changan Auto Components (Thailand)
21. Hyundai Mobility Manufacturing (Thailand)

Projects on “High-Density Battery” (for any Industries)

Investment = 13,284.8 million Baht **

19 Entities (20 Projects) *

Capacity: 13,931.0 MWh

1. Amita Technology (Thailand) (2 Projects)
2. Beta Energy Solution
3. 24M Technologies (Thailand)
4. Graphene Globe
5. Electric Vehicles PCL.
6. Garguar E Power
7. Transpower Technology
8. Honglin Technology (Thailand)
9. Energy Advance
10. NV Gotion
11. DP Next
12. Leonics
13. Dynavolt Tech (Thailand)
14. EQ Tech Energy
15. Dynapack Technology (Thailand)
16. L. B. E Technology (Thailand)
17. Terminal Max Li
18. The Future New Energy Technology (Thailand)
19. Individual Person (Phyllion Battery)

Total



Promoted Projects

40 Entities / 47 Projects *

Investment Values

27,226.5 million Baht **

Capacity

35,575.8 MWh

Remark:

* 1 entity can be promoted more than 1 project

** Investment Values excluding Cost of Land and Working Capital

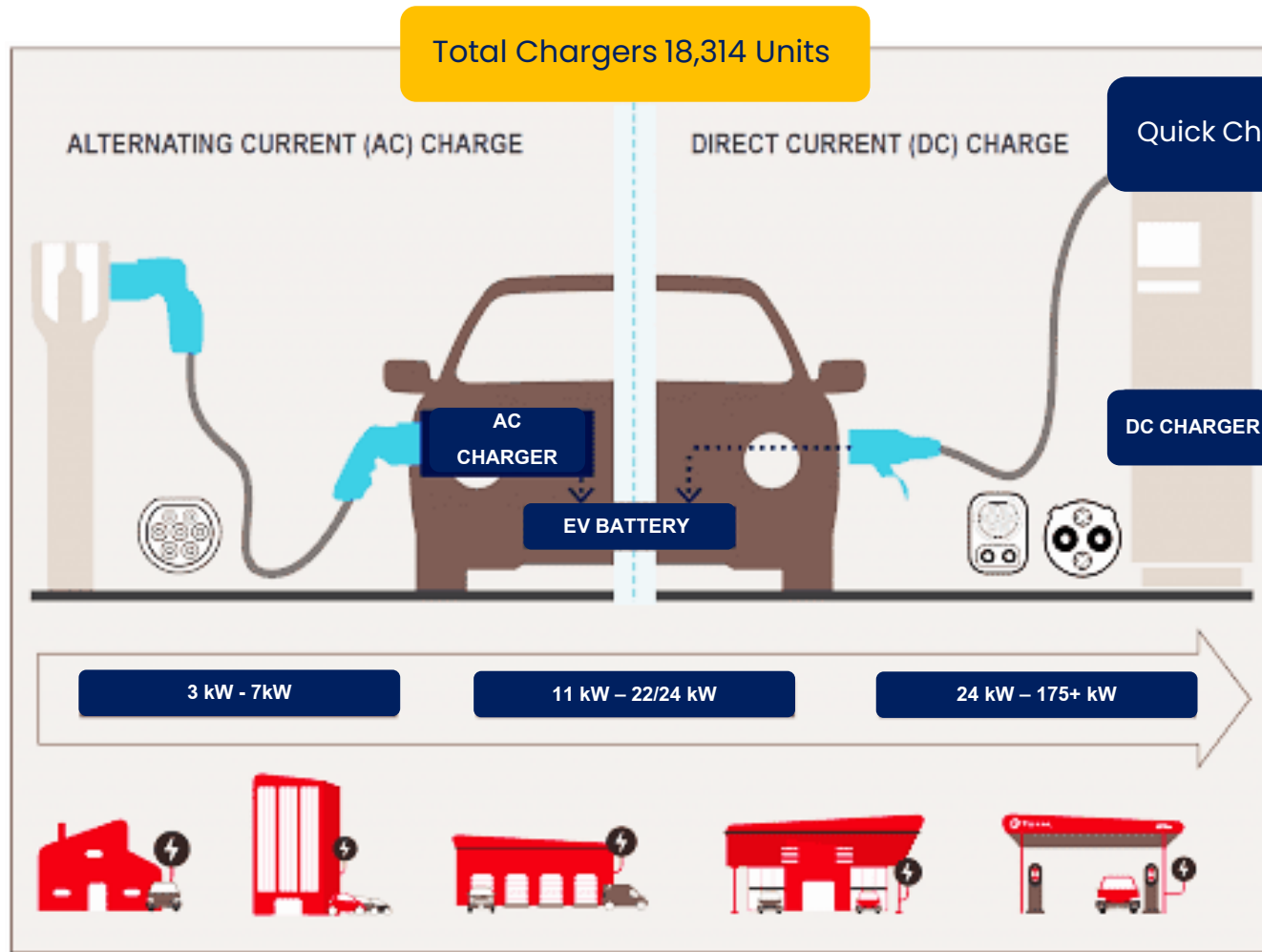
Promoted Projects on EV's Equipment (Battery not included)

EV Parts & Components	28 Projects * (26 Entities)	Investment ** 5,835.6 MB	Example of Promoted Entities
Traction Motor	8 Projects (8 Entities)	2,841.8 MB	
Air Conditioning System	3 Projects (2 Entity)	616.6 MB	
BMS	4 Projects (4 Entities)	332.6 MB	
DCU	3 Projects (3 Entities)	111.1 MB	
On - board Charger	4 Projects (4 Entities)	804.8 MB	
Charging Devices + Portable	6 Projects (6 Entities)	151.5 MB	
DC/DC Converter	2 Project (2 Entities)	309.4 MB	
Inverter	2 Project (2 Entities)	309.4 MB	
High - voltage Harness	4 Projects (4 Entities)	107.3 MB	
Battery Cooling System	3 Projects (2 Entities)	251.1 MB	

Notes
 * 1 project can be manufactured more than 1 type of the EV's Parts
 ** Investment Values excluding Cost of Land and Working Capital
 *** In 1 project of "DELTA" and "Grafeen Battery" manufacture more than 1 products so that the investment is estimated by product allocation



Promoted Projects on Charging Stations



Total Chargers 18,314 Units

Quick Chargers 6,049 Units

For example:



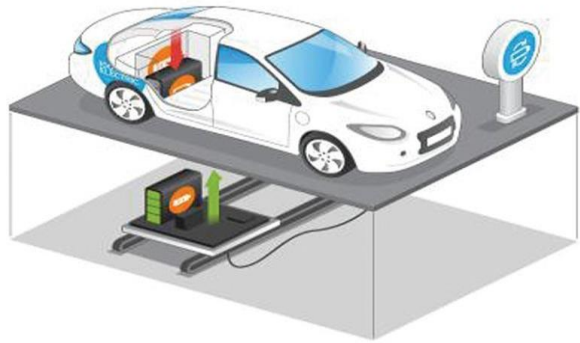
20 Projects from 18 Promoted Entities

Investment Values 4,476.0 MB *

Remarks: * Investment Values excluding Cost of Land and Working Capital

(Source: BOI Information Database (BIS) as of 31st August 2024)

Promoted Projects on Battery Swapping Station



EV battery-swap station



Swapping Stations for Motorcycles & Commercial Trucks



Total 406 Stations

Investment Values 473 MB *

2 Projects from 2 Promoted Entities



Thailand Potential Auto Part Product

Engines



Diesels

Body Parts



Chassis

Brake Systems



Master Cylinders

Steering Systems



Steering Wheels

Electrical/ Electronics



Alternators

Others



Tires



Motorcycles



Bumpers



Linings



Gears



Motors



Rubber Products



Fenders



Pumps



Flashers Relays

Agenda

01

Thailand's
Board of Investment

02

BOI Incentives
for EV-related Activities

03

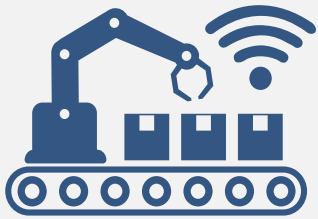
Other Supportive Measures

Investment Promotion Measure to Upgrade Automotive Industry

BOI

The Measure aims at enhancing the efficiency in the automotive industry through the adoption of automation and robotics

Conditions

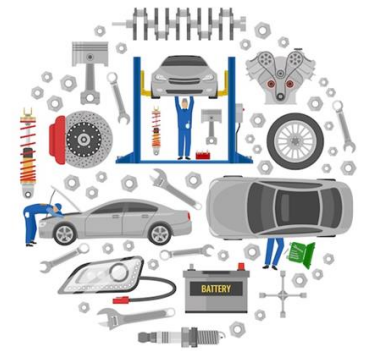


- Eligible applicants must be either existing companies or new entrants engaging in the manufacture of ICE, HEV, PHEV
- Minimum investment of 1 million baht, excluding the cost of land and working capital.
- Must submit a plan for investment in the automation system or robotics to support the manufacturing process
- Must submit an automotive product development plan that utilizes technologies aimed at cleanliness, energy efficiency, safety, intelligent driving, or other appropriate technologies.

Benefits



- Import duty exemption on “Automation Machinery & Robotics”
- 3-year tax holidays with a cap of 50% of the investment capital in automation and robotics system
- 3-year tax holidays with a cap of 100% of the investment capital in automation and robotics system, incase of investment at least 30% in machinery or systems with a linkage or support to the local automation industry.



Investment Promotion Measure to Upgrade Automotive Parts Industry

The Measure aims at stimulating and encourage automotive part manufacturers to enhance ability to compete in terms of production and to prepare to transition to a new industry

Conditions



- Eligible applicants must be either existing companies or new entrants engaging in the manufacture of Engines and Vehicle Parts
- Minimum investment of 1 million baht, excluding the cost of land and working capital
- Must submit a plan for investment to upgrade technological level and improve productivity, and/or invest to transition operations to serve new industries such as changing machinery to enhance production efficiency, applying the standards used in the new industry, training personnel in technical fields or any programs related to industry enhancement, etc.

Benefits



- Import duty exemption on machinery & equipment
- 3-year tax holidays with a cap of 50% of the investment capital for the upgrades including the application of the new industry's standards, advisory fees for enhancing production or changing to the new industry, training expenses in technical fields or any programs related to industry enhancement, the software programs or information systems used and the lease/use of cloud or data center services.
- 3-year tax holidays with a cap of 100% of the investment capital in automation and robotics system, incase of investment at least 30% in machinery or systems with a linkage or support to the local automation industry.



**Effective
until the end of
2025**



Battery Cell Subsidy Program: Competitiveness Enhancement

BOI

Criteria

“Negotiation Approach”

Incentives

1 Being a leading and well-recognized EV battery manufacturer

2 Having a solid plan of manufacturing EV battery starting from battery cell production, and manufacturing ESS can be included in the same project.

3 The battery cell must have a specific energy density of not less than 150 Wh/kg

4 The battery must have a life cycle of $\geq 1,000$ cycles, counting from 70% of the nominal capacity at a depth of discharge of $\geq 80\%$ at a test temperature of $20-25^{\circ}\text{C}$

Cash Grant

CAPEX / R&D activity / Advanced Training

Tax Incentives

- Exemption of CIT of up to 15 years
- Exemption of Import duty on machinery
- Exemption of import duty on raw material for export / R&D
- 90% reduction of import duty for raw materials not available in Thailand for domestic sales
- Exemption from taxes on dividends

Non-Tax Incentives

- Majority or 100% foreign ownership
- Land ownership
- Work permit & visa facilitation, LTR
- Allow to take or send money out of the country in foreign currency

Ministry of Finance: EV3.0 Subsidy Package and Tax Incentives

	Passenger Cars		Pick-up Trucks	Motorcycles
Cash Subsidy	70,000 THB/ unit		150,000 THB/ unit	18,000 THB/ unit
	SRP: ≤ 2 mil. THB Bat. capacity : 10- <30kWh		SRP: ≤ 2 mil. THB Battery capacity: ≥ 30 kWh	SRP: ≤ 2 mil. THB Battery capacity: ≥ 30 kWh

	Passenger Cars		Pick-up Trucks	Motorcycles
Excise Tax	2% (reduced from 8%)		0% (reduced from 10%)	1%
Import Tariff	Up to 40% Reduction	Up to 20% Reduction	No Reduction	No Reduction
	SRP: ≤ 2 mil. THB Bat. capacity : ≥ 10 kWh	SRP: > 2 – 7 mil. THB Battery capacity: ≥ 30 kWh		

Eligibility Conditions:

- Eligible manufacturers who import CBUs during **2022–2023** must produce off-set vehicles domestically by following conditions;
 - For those passenger cars with SRP of not over 2 mil.THB & battery capacity from 10 kWh, the local offset production can be any vehicle models **WHILE** the one for those passenger cars have SRP from more than 2 mil.THB but not exceeding 7 mil.THB & battery capacity from 30 kWh must be same models to the imported ones.
 - For the local offset production by the **end of 2024**, an import to local production ratio is **1:1**. If the production deadline is extended to the **end of 2025**, the ratio will increase to **1:1.5**.
- Must use locally produced battery from cells to final pack assembly to commence from **2026** or extendable, depending on conditions specified in Excise Department Announcement.
- Must sign an MOU agreement and obtain approval letter for tax incentives from Excise Department
- Manufacturers must place bank guarantee.

Time Frame	1 st Alternative	2 nd Alternative	3 rd Alternative
By January 1, 2026	Domestically manufacture or use domestic batteries with <u>cell production</u>	Domestically manufacture or use domestic batteries with <u>module production</u>	Domestically manufacture or use domestic batteries with <u>pack assembly</u>
By January 1, 2030	---	Use PCU inverters manufactured domestically	Use PCU inverters manufactured domestically
By January 1, 2035	---	Use traction motors/reduction gears/compressors for battery electric vehicles/BMS/DCU manufactured domestically by choosing 1 out of 5 parts	Use traction motors/reduction gears/compressors for battery electric vehicles/BMS/DCU manufactured domestically by choosing 2 out of 5 parts

Ministry of Finance: EV3.5 Subsidy Package and Tax Incentives

Vehicle Types	Specification	Cash Subsidy (THB/unit)				Excise Tax 2024 - 2027	CBU Import Tariff 2024 - 2025
		2024	2025	2026	2027		
Passenger Cars	SRP: \leq 2 mil. THB Battery capacity: 10- <50 kWh	50K	35K	25K		2% (reduced from 8%)	Up to 40% Reduction
	SRP: \leq 2 mil. THB Battery capacity: \geq 50 kWh	100K	75K	50K			
	SRP: > 2 - 7 mil. THB Battery capacity: \geq 50 kWh	N/A					Normal Rate
Pick-up Trucks	SRP: \leq 2 mil. THB Battery capacity: \geq 50 kWh	100K (only for locally produced)				Normal Rate	Normal Rate
Motorcycles	SRP: \leq 150K THB Battery capacity: \geq 3 kWh	10K (only for locally produced)				Normal Rate	Normal Rate

Eligibility Conditions:

- CBUs are allowed to import during 2024-2025 and offset for CBUs imported is required according to the following conditions;
 - The offset production for the CBUs imported must be done domestically at 1:2 ratio by 2026 or 1:3 by 2027
- Batteries of imported and locally-produced BEVs must receive testing standard from the Automotive and Tyre Testing, Research and Innovation Center (ATTRIC) or equivalent international standard such as UNR100.
- BEVs must support quick chargers.
- Must use locally produced battery by 2026. (Further requirement as specified in Excise Department Announcement.)
- Must sign an MOU agreement and obtain approval letter for tax incentives from Excise Department
- Must place bank guarantee

Ministry of Industry: Standards & Testing Facility

150 +
EV Standards

- เตาเผาและเตาอบสำหรับยานยนต์
- ระบบประจุไฟฟ้าสำหรับยานยนต์
- ความปลอดภัยของยานยนต์
- สมรรถนะของยานยนต์
- มอเตอร์สำหรับยานยนต์
- เซลล์และแบตเตอรี่สำหรับยานยนต์
- สายไฟฟ้าและอุปกรณ์อื่นๆ สำหรับยานยนต์
- ระบบสื่อสารสำหรับยานยนต์
- ระบบอัจฉริยะสำหรับยานยนต์
- คำศัพท์สำหรับยานยนต์



ATTRIC

ศูนย์ทดสอบยานยนต์และยางล้อแห่งชาติ
Automotive and Tyre Testing, Research and Innovation Center



1. Tyre and Automotive parts testing Lab

- UN R14, R16 – Safety Belts, S.B. Anchorage
- R17, R25 – Seats, Head Restraints
- UN R117 - Tyres
- UN R13, R13H – Braking System
- UN R41-R51 Pass by Noise
- UN R78 – Brake Motorcycle
- UN R79 –Steering Equipment

2. Brake Performance

3. Dynamic Platform
4. Skid pad
5. Parking Brake
6. Noise & Wet Grip
7. EV Battery (UN R100 R136)

1. High Speed Test Track (2026)

2. R94-95 Crash Test (2026)
3. Run-in

(Source: Thailand Automotive Institute)



Ministry of Industry: ATTRIC (Testing Facility)



Land Transport Department Thai Industrial Standard Institute






UNECE R100

(1)  Vibration การสั่นสะเทือน	(2)  Thermal shock and cycling การสั่นสะเทือนอุณหภูมิ	(3)  Mechanical shock การเปลี่ยนแปลงความเร็วที่ฉับพลัน
(4)  Mechanical integrity การชนและการกระแทกของโครงสร้างรถและแก๊ส	(5)  Fire resistance การทนไฟ	(6)  External short circuit protection การลัดวงจร
(7)  Overcharge protection ระบบป้องกันการชาร์จเกิน	(8)  Over-discharge protection ระบบป้องกันการคายประจุเกิน	(9)  Over temperature protection ระบบป้องกันการอุณหภูมิเกิน



UNECE R136

(1)  Drop test	(2)  Mechanical shock
(3)  Water resistance	

EV Battery Testing Center



(Source: Thailand Automotive Institute)



Ministry of Energy: Guidelines for Support Electric Chargers

Year	Charging Stations' Accumulated Target	
	Passenger Cars & Pickup (Units)	Fast Chargers
2025	400,000	2,200 – 4,400
2030	2,000,000	12,000

Year	Battery Swapping Stations' Accumulated Target		
	Motorcycles (Units)	Motorcycle Taxi / Delivery 2%	Station (1 Station = 8 Slots)
2025	580,000	12,000	260
2030	3,300,000	65,000	1,450

Charging Station Infrastructure Policy Framework

1

Promoting the development of an adequate charging station network through agencies and partners

- Investment and development plan for public charging station network
- Supporting the installation of public charging stations
- Promoting through financial and tax measures

2

Establishing the regulations, standards and guidelines to develop charging station

- Regulations and standards for communication and safety
- Regulations and standards for installation and area development

3

Promoting the smart grid technology to connect and manage integrated electric charging

- Smart meter infrastructure policy
- Development of an integrated and interconnection platform
- Connecting charging stations and electric vehicles to manage electrical systems

- Extend electricity low Priority tariff for public chargers
- Cooperate with state enterprises to invest chargers
- Reducing the permission time period for EV charger installation and inspection

Ministry of Finance by Department of Revenue

Measures to Support the Adoption of Large Commercial Electric Vehicles

Standard 1:

Pick-up truck



Standard 2:

Container truck



Standard 3:

Liquid tank truck



Standard 4:

Hazardous tank truck



Standard 5:

Special purpose truck



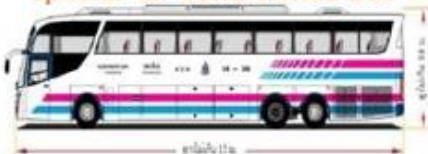
Standard 9:

Low bed trailer



Standard 1:

Special air-conditioned bus



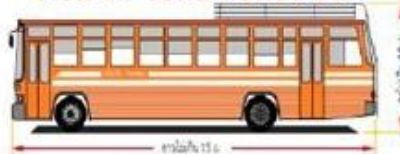
Standard 2:

Air-conditioned bus



Standard 3:

Non air-conditioned bus



Standard 4:

Double decker bus



Standard 6:

Semi trailer bus



Standard 7:

Special purpose bus



Allow companies or juristic partnership to deduct expenses of CIT for purchasing E-buses and E-trucks without a price ceiling

For purchasing vehicle manufactured or assembled domestically

2 Times Deduction of Expense

For importing CBU vehicles

1.5 Times Deduction of Expense

Effective until the end of 2025

Where to contact BOI ?

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Getting to Know BOI



Investment Promotion Guide



THAILAND
BOARD OF
INVESTMENT

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BOI NEWS



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