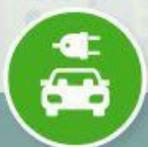


Why Thailand: Investment opportunities in Thailand's Automotive Industry

GO GREEN
GO ELECTRIC



Mr. Chatri Limpongsai

Director of Investment Promotion Division 2
Thailand Board of Investment

AGENDA



01

Introduction to Thailand
Board of Investment

02

Why Thailand

03

Overview of the Thai
Automotive Industry

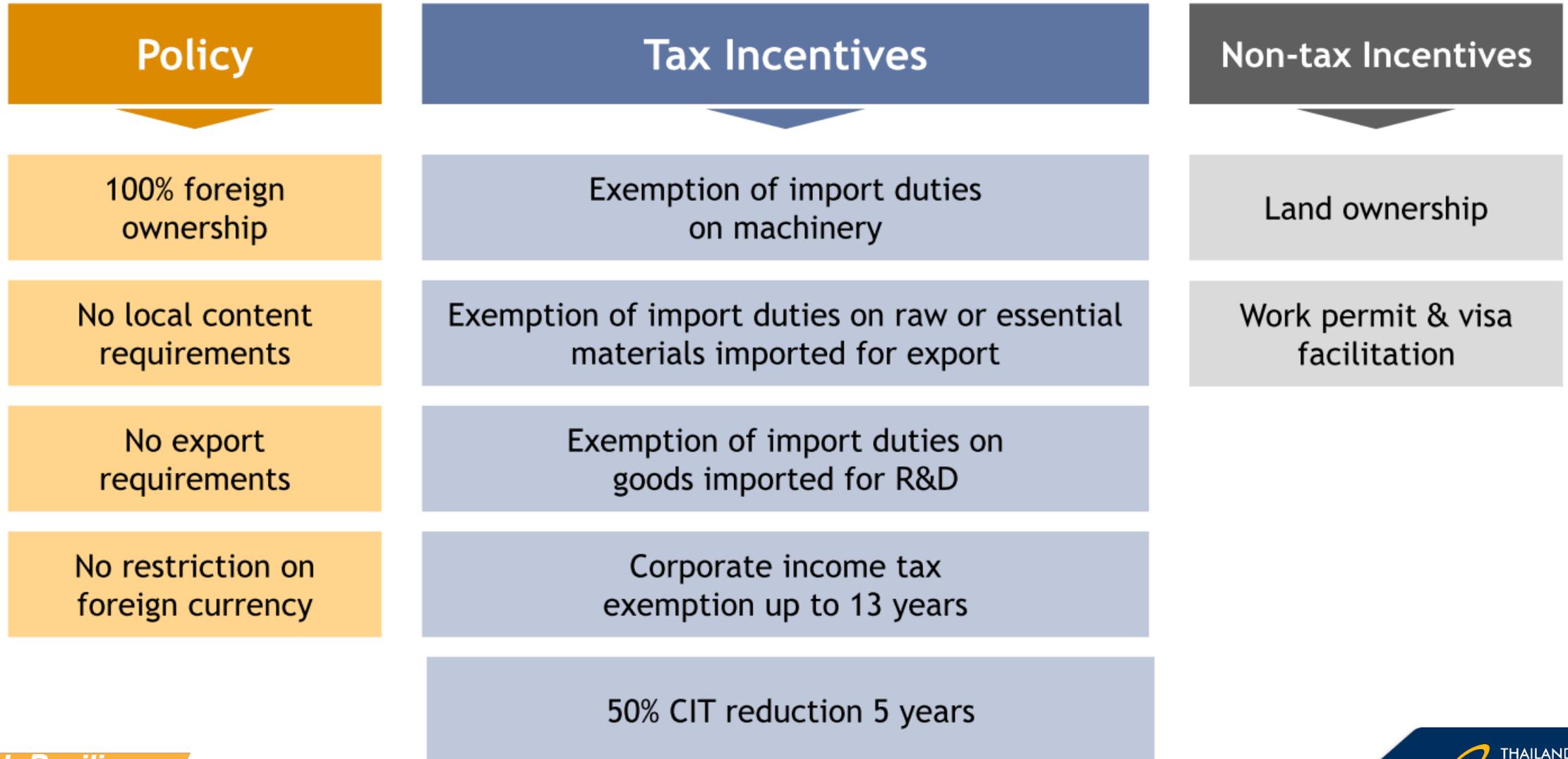
04

Investment Opportunities

05

BOI's Promotion Policy on
the Automotive Industry

BOI Investment Promotion Measures



AGENDA



01

Introduction to Thailand
Board of Investment

02

Why Thailand

03

Overview of the Thai
Automotive Industry

04

Investment Opportunities

05

BOI's Promotion Policy on
the Automotive Industry

Location & Market Access



8th Largest Economy Globally
(USD 2.7 Trillion)



2nd Largest Economy Globally
(USD 13.4 Trillion)



• 5th Largest Economy Globally
(USD 3.0 Trillion)

The Thai Market

- Population: 69 Million¹
- Middle Class Consumers: 52 Million²

CLMVT

- 242 Million Consumers³
- Within 1,000 KM

ASEAN Economic Community

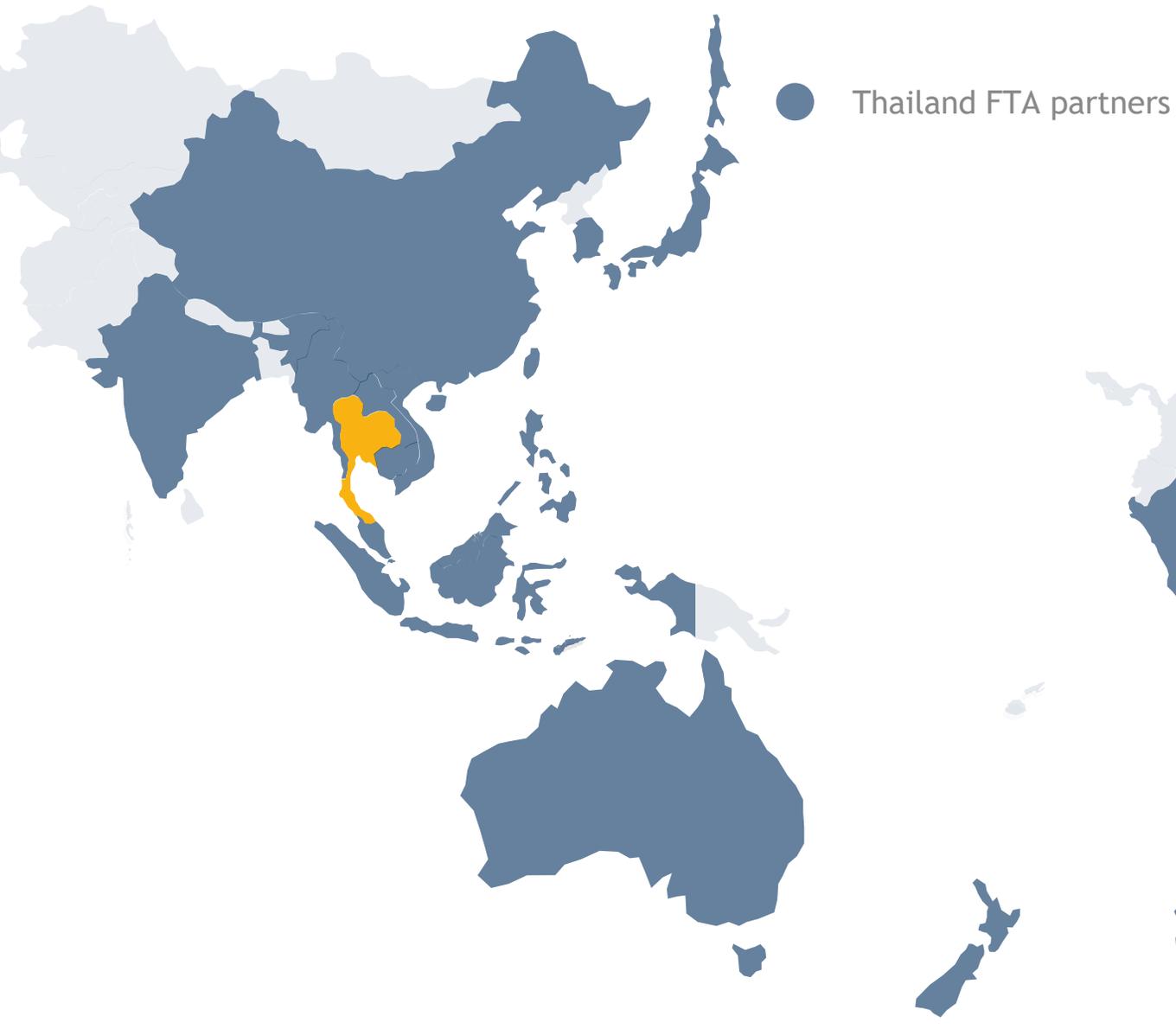
- 645 Million Consumers⁴
- 5th Largest Economy Globally (USD 3.0 Trillion)
- ASEAN FTA / ASEAN Connectivity

Greater Asia Region

- 4.6 Billion Consumers⁵
- Within 5,000 KM



Memberships & Free Trade Agreements



13 Free Trade Agreements (FTAs)

Near tariff-free trade with 18 nations FTA partner
Trade Volumes increased 4 times in 5 years

Highest Volume FTA (2018)



ASEAN
USD 90.74
Billion



China
USD 65.15
Billion



Japan
USD 48.73
Billion

Source: Department of Trade Negotiations (2019)

The Reach of Thailand's Current and *Potential* FTA Network

FTAs/RTAs Already Entered Into Force

ASEAN Free Trade Area

Thailand-**India** Free Trade Area

Thailand-**Australia** Free Trade Agreement (TAFTA)

ASEAN-**China** Free Trade Area

Thailand-**New Zealand** Closer Economic Partnership

Japan-Thailand Economic Partnership Agreement

ASEAN-**Japan** Comprehensive Economic Partnership

ASEAN-**Korea** Free Trade Area

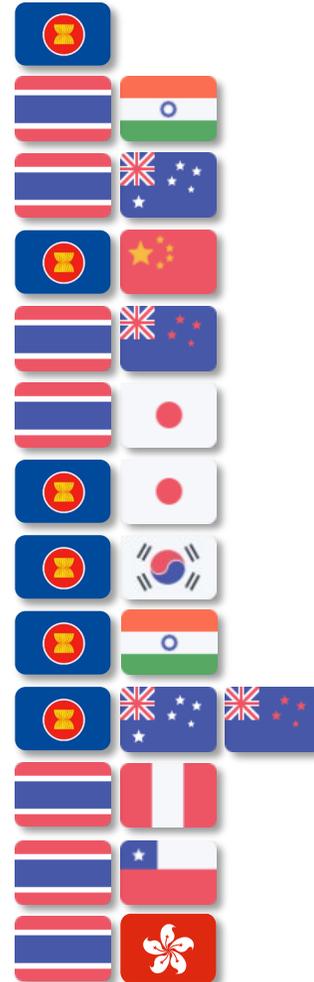
ASEAN-**India** Free Trade Area

ASEAN-**Australia-New Zealand** Free Trade Area

Thailand-**Peru** Closer Economic Partnership

Thailand-**Chile** Free Trade Agreement

The ASEAN - **Hong Kong**, China Free Trade Agreement



Under Negotiation

RCEP

- Signed in November of 2020

Thailand-Pakistan / Thailand-Turkey / Thailand-Sri Lanka

- Under negotiation

Thailand-EU / Thailand-EFTA

- Under preparation for restarting FTA negotiation

Transport Infrastructure Connecting Thailand with the Rest of ASEAN



Intercity Rail Network

Tracking & Facilities Improvement

Dual Track Development



Public Transport Network & Services

Implementation of 10 Metro Lines

Construction of Roads & Bridges

Procurement of 3,183 NGV Buses and Depots



International Connectivity Hub

Accessibility to Agriculture & Tourist Areas

Connectivity Between Hub & Key Production Bases

Connectivity between Gateways

Promoting Seamless Multi-Modal Transport



Water Transport Network

Inland Port Development

Coastal Port Development



Air Transport Capability

Airport Capacity Expansion

Enhancement in Air Traffic Management Capability

Increased Fleet Utilization

Air Transport Industrial Park

Human Resource Development

*Plan initially outlined in 2018

**110 Projects: Investment Cost
THB 1.91 Trillion (USD 6.02 Billion)**

Note: Exchange Rate 1 USD = 31.7 THB (As of 28 September 2020, Bank of Thailand)
Source: Ministry of Transport (2019), Thai Journal (2016)

AGENDA



01

Introduction to Thailand
Board of Investment

02

Why Thailand

03

Overview of the Thai
Automotive Industry

04

Investment Opportunities

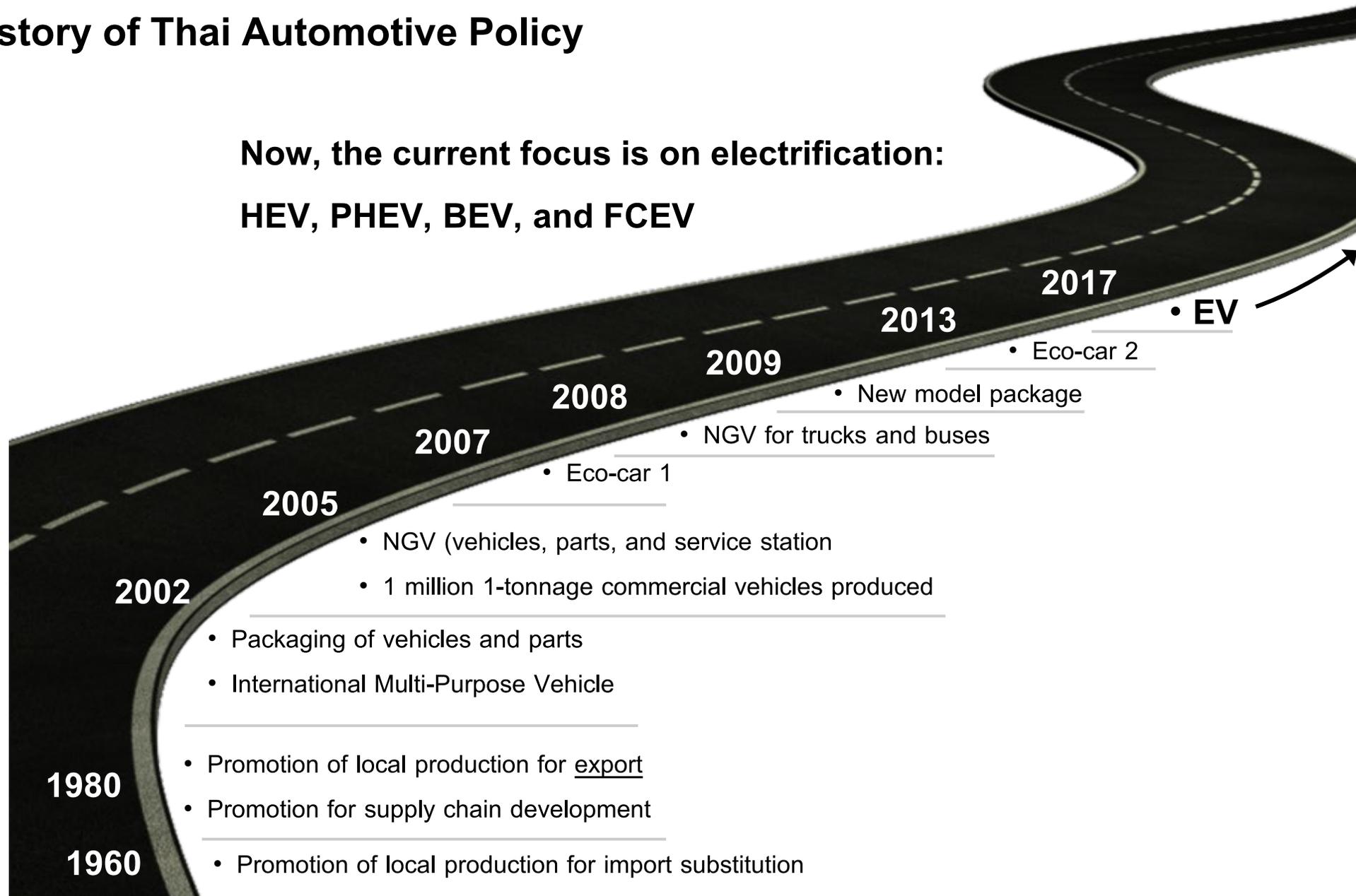
05

BOI's Promotion Policy on
the Automotive Industry



History of Thai Automotive Policy

Now, the current focus is on electrification:
HEV, PHEV, BEV, and FCEV



Thailand as an Automotive Hub in ASEAN

Thailand continuously accelerates its next-generation automotive industry in line with the government's promotion of new S-curve industry which have higher value-added production.



1st

Automotive Producer in ASEAN



11th

Automotive Producer in the World



World Ranking



5th

Light Commercial Car Producer



15th

Heavy Commercial Car Producer *



18th

Passenger Car Producer



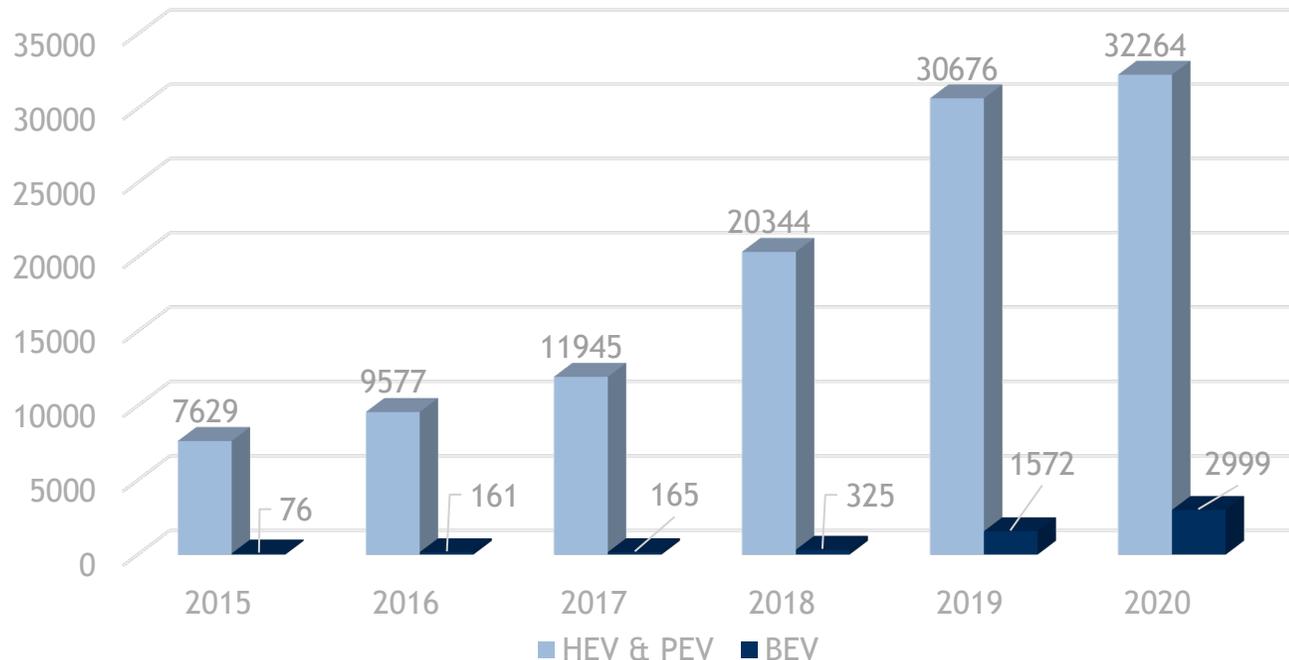
20th

Heavy bus Producer *

Current Status of Thailand's EV Markets

Number of New EV Registration (Units)

Number of New EV Registration



New BEV Registration by Vehicle Types in 2020

Vehicle Types	Units
Motorcycle	3125
Passenger Car	2,202
Motor-Tricycle	235
Truck and Bus	120

AGENDA



01

Introduction to Thailand
Board of Investment

02

Why Thailand

03

Overview of the Thai
Automotive Industry

04

Investment Opportunities

05

BOI's Promotion Policy on
the Automotive Industry

Next Generation Automotive as One of Strategic Sectors

THAILAND 4.0



New Economic Policy for Creativity + Innovation Smart Thailand

S-Curve Industry a Priority

New S-curve



Medical Hub



Digital



Biofuels & Biochemicals



Robotics & Automation

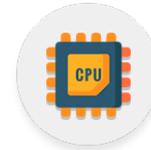


Aviation & Logistics

First S-curve



Advance Agriculture & Biotechnology



Intelligent Electronics



Tourism

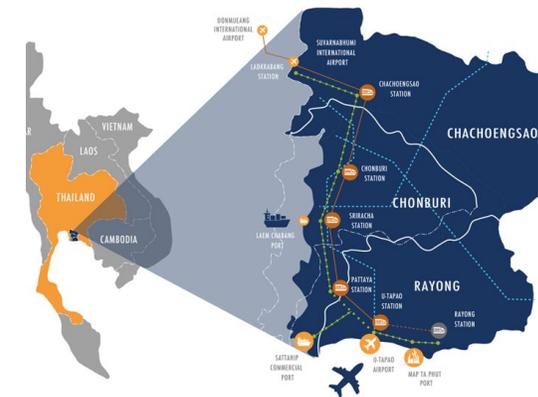


Next-Generation Automotive



Food Processing

Development of a Leading ASEAN Economic Zone: Eastern Economic Corridor (EEC)



With a goal to become a leader in next-generation automotive and green automotive production base, Thailand embrace the new breakthrough technology of electric vehicle (EV).

Think Resilience

THINK THAILAND

Investment xEV Project in Thailand

78,000 MB

27 Projects

Status

HEV

(50,366 MB)



Production

PHEV

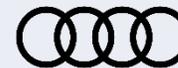
(11,443 MB)



Mercedes-Benz



TOYOTA



Production

BEV

(15,625 MB)



Mercedes-Benz



长城汽车
Great Wall Motors



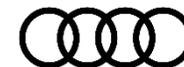
TOYOTA



HONDA



mazda



First One Mile Mobility



Production

Battery
Electric Bus

(665 MB)



SCAN INTER



SAKUN.C
INNOVATION

Investment

Think Resilience

THINK THAILAND

Forecasted Number of Electric Vehicles 2017-2036



Thailand set standards to reduce greenhouse gas emissions such as exhaust standards.

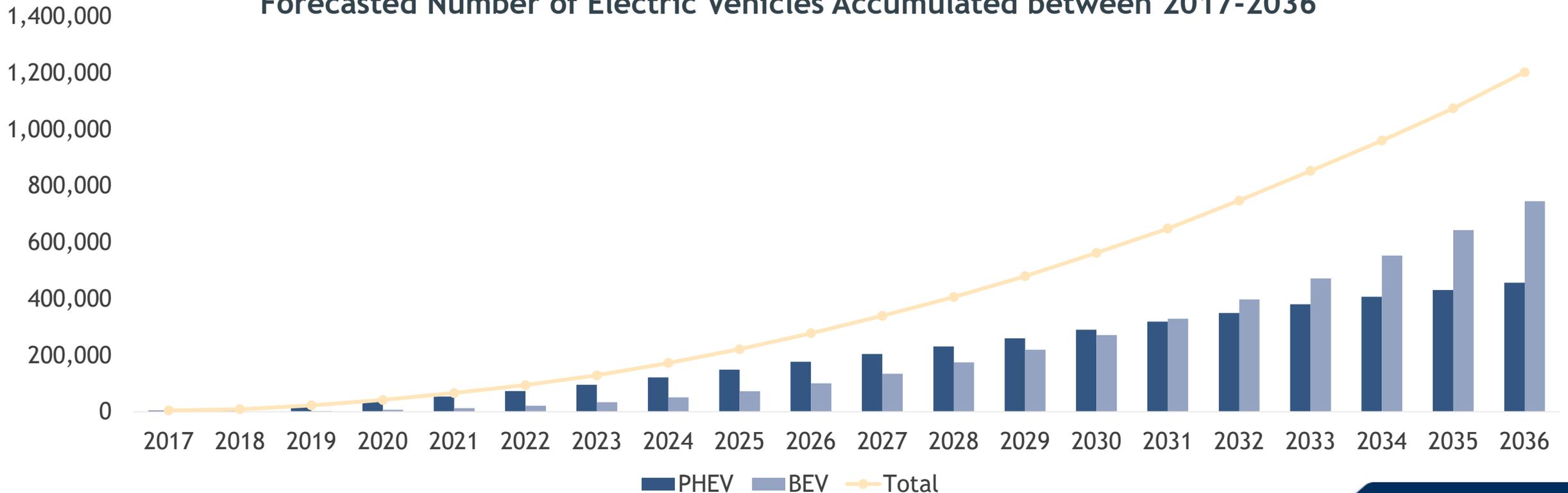


Tax measures include the reduction of public fuel taxes and the exemption of fuel taxes that reduce greenhouse gas emissions



Promoting financial support regarding the measures that promote environmentally friendly vehicles and transportation measures

Forecasted Number of Electric Vehicles Accumulated between 2017-2036



AGENDA



01

Introduction to Thailand
Board of Investment

02

Why Thailand

03

Overview of the Thai
Automotive Industry

04

Investment Opportunities

05

**BOI's Promotion Policy on
the Automotive Industry**

Investment Promotion Campaign Outlines for the EV Industry

Electric Vehicle



- HEV, PHEV, BEV
- Incentives varied by the electric driving technology

EV Parts



- Core technology: Battery, Traction Motor, BMS, DCU, etc.
- Build a strong supply chain of EV parts in the country

Battery Charging Station



- Support the infrastructure development to encourage EV use
- Increase customer's confidence

Incentives for the Electric Vehicle



Conditions

1. Must submit the whole investment “Package” with at least a BEV production project.
2. Within 3 years from the date of issuance of promotion certificate : Must produce all types of electric vehicles under the project, as well as a battery (with module production)
3. Within 3 years from the date of production :
 - Must produce at least 1 additional key part (Traction Motor, DCU, BMS)
 - For HEV and PHEV must produce at least 2 additional xEV parts (from activities 4.8.3)
4. For domestic sale, the products must be certified with standard such as UN R100 R13H R94/95 and Euro5 (For HEV/PHEV).

Incentives

Invest Package Including :
 BEV Production And Manufacture of Battery, Traction Motor, BMS and DCU.

HEV, PHEV and BEV production can be counted as production unit of Eco-car project.

Invest Totaling at least 5,000 million baht

HEV : NO CIT
 PHEV : CIT 3 Years
 BEV : CIT 8 Years + CIT 1-3 For R&D

Invest Totaling under 5,000 million baht

HEV : NO CIT
 PHEV : CIT 3 Years
 BEV : CIT 3 Years
 + CIT 2 years, If start production by 2022
 + CIT 1 year/1 part (additional from basic conditions)
 + CIT 1 year If produce BEV >10,000 cars/year (any of the first 3 years)
 + CIT 1-3 years for R&D

Exemption of import duties on machinery for HEV, PHEV and BEV

Incentives for the Electric Vehicle



Electric Bike

- Exemption of import duties on machinery.
- CIT Exemption for 3-11 years



3-Wheel Electric Car

- Exemption of import duties on machinery.
- CIT Exemption for 3-10 years



Battery Electric Bus/Truck

- Exemption of import duties on machinery.
- CIT Exemption for 3-10 years

Incentives for EV Parts

17 Key Parts for EVs

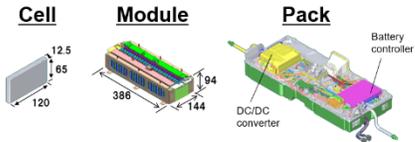
- Air Conditioning System
- DC-DC converter
- Front / Rear Axle for EV bus
- Electrical Circuit Breaker
- Portable EV Charger
- Smart Charging System
- On-board Charger
- Traction Motor
- BMS
- **Battery***
- DCU
- Inverter
- High Voltage Harness
- Reduction Gear
- Battery Cooling System
- Regenerative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

- **A2** - 8 years exemption of corporate income tax
- Exemption of import duties on machinery and raw/essential material (Only for export)

Incentives for EV Battery

- Pack Assembly - CIT 5 Years
- Module Production - CIT 8 Years
- Cell Production - CIT 8 Years (No cap)

- 5-8 Years of Corporate Income Tax Exemption
- 90% Reduction of import duties on raw/essential materials for 2 years



Incentives for Battery Charging Station

Battery Charging Station



Propose EV Smart Charging System Development plan

Build at least 40 chargers (with at least 25% are quick type)

Receive ISO 18000 as the standard within 3 years after certified for promotion

Applicants must not get privileges from other government sectors

Propose procurement plan for parts and equipment

- 5 Years of Corporate Income Tax Exemption
- Import Duties on Machinery Exemption



Thank You
for
Your Attention