



## Investment in EV : Opportunities & Challenges

Invest Malaysia Kuala Lumpur 2022

PIVOTING FOR THE FUTURE

- IMKL SERIES 2: THE ROAD TO EV

9 November 2022

### Global Shift to CASE\* - Reshaping The Automotive Industry

Strategic partnership will enable growth - new technologies, ecosystem, human capital

CASE\*: Connectivity, Autonomous, Shared mobility, Electrification

Level 0 - no automation

Level 5 – steering wheel optional

Level 2 – hands-off Level 3 – eves off

Level 4 – mind off



#### **Financial Products and Services**

Car and battery leasing schemes,

Level 1 – hands-on/shared control Charging infra development











Recognition



Mobile Automotive Operator

**Telematics** Services **Platform** 

### **Connected**

















Leasing, Recycling, **Energy Storage** 

**Charging Points** Public, Private

## **Shared**

2



### **Community Building**

#### Car Sharing Scheme, Car Pooling

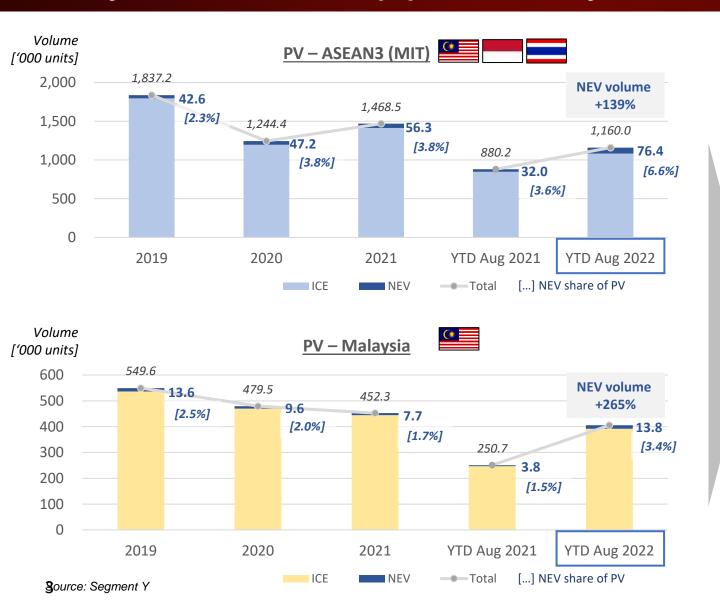
### Key areas of emphasis

- Finalization of strategic direction
- Investment in new technologies
- **Ecosystem inclusiveness**
- Infusion of digital application
- **Engagement with key** stakeholders
- **Human** capital development
- New business model

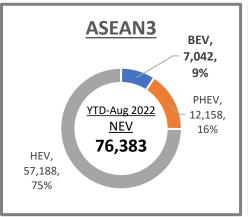
### As at Aug-2022 for ASEAN3, NEV Commands 6.6% of Passenger Vehicles

- NEV penetration in Malaysia increased to 3.4% with 13.8k units
- Hybrid EV (HEV) remains popular but Battery EV (BEV) improving traction in the market





#### **NEV Passenger Vehicle, YTD Aug-2022**



Thailand

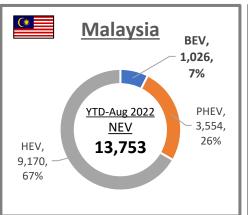
BEV,
4,368,
8%
PHEV,
8,594,
15%

55,540

HEV,
42,580,
77%

BEV is 9.2% among NEV market

BEV is 7.9% among NEV market; Top BEV is an entry-level EV model





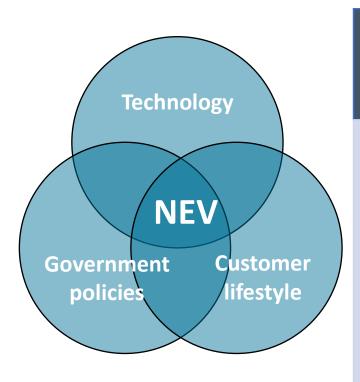
BEV is 7.5% among NEV market; Top BEV is a premium EV model

BEV is 23.2% among NEV market; Top BEV is a mid-size EV model

### New Energy Vehicles (NEV): Key Success Factors

Solutions for these NEV challenges required strong support from Government, industry readiness and customer preference shift towards EV





#### Consumer wants...

- 1. Attractive design
- 2. Affordable
- 3. EV range > 300km
- 4. Cost and convenience of ownership
- 5. Lifestyle upscaled

#### **OEM** to deliver...

- 1. Design & engineering
- 2. Cost competitiveness
- 3. EV technology
- 4. Ecosystem development, engagement and investment promotion scheme
- 5. Business model
- 6. Industrialization

### **Industrialization Support**

- 1. R&D programs
- 2. Supply chain
- 3. Technology investment
- 4. Infrastructure
- 5. Value chain learning
  - distribution
  - customer mgmt.
  - manufacturing
  - sourcing
  - IT & digitalization

Major challenges to overcome – requires time and collective effort

- Not many affordable EVs, slow adoption by consumers
- ❖ No clear view on EV charging infrastructure development
- Unsurfaced talent pool for EV development
- ❖ Investments in related technologies were not visible

### Initial Step: Penetrate EV Through collaboration of 'smart EV'

To establish foundation for EV sales & services, enhance EV awareness among consumers and develop EV capability









#### **Distributor agreement**

- ✓ 19 Jan 2022: **signed MOA** with smart.
- ✓ 18 Aug 2022 : signed General Distribution
  Agreement ("GDA") with smart.

#### **New Company (Pro-Net)**

√ 16 Aug 2022: Proton New Energy

Technology company (Pro-Net) was officially incorporated.

### **Operational preparation**

- ✓ Company recruitment started from May 2022
- ✓ Define **development scope & cost**.
- ✓ Identify <u>IT infrastructure, DMS and function</u> modules
- ✓ Negotiate with <u>potential dealers</u> and charging infra operators and



# "Thank You"