Vietnam Register

Trend and Development of Electrical Vehicles in Vietnam

Bangkok, 10-11-2022
According to UNFCCC, COP26 aims to work towards the following goals:

- Reach carbon neutrality by 2050 and keep global warming below 1.5 degrees Celsius
- Bring in adaptation measures to protect communities and natural habitats
- Mobilize climate finance to enable member states to achieve their climate goals
- Coordinate to finalize Paris Rulebook
Vietnam - one of the hardest-hit countries by climate change. Implementing climate resilience planning and economic development in line with international standards:

- Reach net-zero carbon emission target by 2050
- Propose the stronger measures to reduce greenhouse gas emissions on its own abilities as well as international support in terms of finance and technology transfer. Commit to continue implementing goals as stated in the Paris Agreement.
- Commit to ending deforestation by 2030 and phasing out coal-fueled power generation by 2040.
- Targets to reduce greenhouse gas (GHG) emissions by 9% by domestic resources and 27% by international support at 2030 as per the Nationally Determined Contribution (NDC).
- There are about 60 millions motorcycles and over 4.5 millions cars, trucks and other vehicles work in road traffic in Vietnam. They are one of the main sources of atmospheric pollution in urban areas and effect to the climate change, additional amounts of greenhouse gases, heat world, crisis of energies and health of people.

- Vietnam’s goal is on right track but implementation will be key.
TREND OF ELECTRIC VEHICLES IN VIETNAM

Skytrain in Urban

Electric bycles

Electric Scooters and Bikes

Electric cars

Electric special purpose vehicles

Electric buses

Dedicated to Safety and Environment Protection
## DEVELOPMENT OF ELECTRIC VEHICLE

### STATISTICS AMOUNTS OF ELECTRIC VEHICLES IN VIETNAM

#### B1. Import

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#### B2. Assembly

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Elements are related to Development of Electric Vehicles

Dedicated to Safety and Environment Protection
➢ Developing national policies to increase renewable energy sources in production
➢ Policies impact to the EV ownership, taxes and operation cost
➢ Policies concern to infrastructure investments, manufacturing and network development of EV
➢ Implementing the technical regulation, national standard on EV safety and Environment Protection
➢ Orienting and Implementing EV road-maps
➢ Cooperating activities research with international organizations, testing centers and International Relationship in EV supporting Industry
➢ Propagating people about the advantages of EV

Dedicated to Safety and Environment Protection
➢ Addition Policies impact to taxes building, invests to infrastructure system
➢ Support Policies to infrastructures for EV
➢ Developing the technical regulation, national standard to stations of EV
➢ Unifying the charger’s system, which is accordant to Vietnam’s condition

➢ The operation costs (including energy and investment), taxes are not in line with Vietnam’s conditions

➢ Limitations of The technical EV such as:
  - Life of Battery
  - Time of recharge (8-10h)
  - Safety
  - Compatible of Charger Ports (US, EU, JAPAN, CHINA) and Charger System
  - Limitations of Infrastructure: Distribution of Stations, Battery Swap Stations (Charging points for E-Bikes, E-cars in Many buildings in the big cities)
Adopting Resolution 55 – NQ/TW of the Politburo on the national energy development strategy to 2030, with a vision to 2050

**Vietnam increases renewable energy sources in production**

According to the national renewable energy development strategy through 2030, with a vision to 2050, Vietnam will gradually increase the ratio of renewable energy in energy production and consumption to reduce dependence on fossil fuels, thus contributing to energy security, mitigating climate change, protecting the environment and obtaining sustainable development.

- **Reduce greenhouse gas emissions in energy activities (%)**
  - 5
  - 25
  - 45

- **Reduce imported fuel for energy purposes (million tonnes)**
  - Coal or oil products
  - 3.7
  - 10.5
  - 40
  - 150

- **Proportion of renewable energy in total energy consumption (%)**
  - 31
  - 32.3
  - 44

- **Electricity production from renewable energy (billion kWh)**
  - 101
  - 186
  - 452

- **Proportion of electricity produced from renewable energy in the nation's total electricity production (%)**
  - 38
  - 32
  - 43

*Notes: 2020, 2030, 2050*

Dedicated to Safety and Environment Protection
QCVN on Electric road vehicles
- 07 QCVNs (Regulations) For E-bikes; E-Motors
- Refer ISO standards
- Refer ECE documents and International Standards

TCVN on Electric road vehicles
- 30 TCVNs (National Standards)
- Refer ISO standards
- Refer ECE documents
ACTIONS TO DEVELOP ELECTRIC VEHICLES

Electric Vehicles on cities in Vietnam

Dedicated to Safety and Environment Protection
ACTIONS TO DEVELOP ELECTRIC VEHICLES

VINFAST
Vietnamese Automotive Manufacturer

Charging stations: 800
Distribute 60/63 provinces

Dedicated to Safety and Environment Protection
PRIME MINISTER OF VIETNAM - DECISION No. 876/QD-TTg
July 22, 2022
APPROVING THE ACTION PROGRAM FOR TRANSITION TO GREEN ENERGY AND MITIGATION OF CARBON DIOXIDE AND METHANE EMISSIONS FROM TRANSPORTATION

Objectives

a) Overall objective: Develop green transportation system towards the goal of net-zero greenhouse gas (GHG) emissions by 2050.

b) Specific objectives:

- By 2030, improve the energy efficiency, speed up transition to electricity and green energy in transportation which are available in terms of technology, institutions, and sources in order to fulfill the commitment in the Nationally Determined Contributions (NDC) and the goal of mitigating methane emissions in Vietnam.

- By 2050, develop rationally modes of transport, vigorously implement the transformation of all means, equipment, and transport infrastructure to use electricity and green energy, aiming to net greenhouse gas emissions to “zero” at 2050.
Road Vehicles

- The 2022 - 2030 period

  + Improve manufacture, assembly, import and transition to electricity-powered road vehicles; promote blending and use of E5 gas for 100% of road motor vehicles.

  + Develop charging infrastructures meeting demand of individuals and enterprises.

  + Encourage the transition to green energy for new and existing bus stations and rest stops.

- The 2031 - 2050 period

  + By 2040, phase out manufacture, assembly and import of automobiles, motorcycles and mopeds with fossil fuels for domestic use.

  + By 2050: use electricity and green energy for 100% heavy equipment involved in traffic, meet green criteria for bus stations and rest stops; transition to use electricity and green energy for all material handling equipment using fossil fuels.

  + Completing charging infrastructure providing green energy nationwide to meet the exigency of people and enterprises.
Urban traffic

- **The 2022 - 2030 period**

+ From 2025, use electricity and green energy for 100% new buses.

+ Public transport coverage is expected to reach 45% - 50% in Hanoi; 25% in Ho Chi Minh City; 25% - 35% in Da Nang; 20% in Can Tho; 10% - 15% in Hai Phong; at least 5% in class-I urban areas.

- **The 2031 - 2050 period**

+ From 2030, achieve at least 50% vehicles using electricity and green energy; use electricity and green energy for 100% new taxis.

+ By 2050, use electricity and green energy for 100% buses and taxis.

+ Public transport coverage is expected to reach at least 40% and 10% in special urban areas and class-I urban areas, in turn.
THANKS FOR YOUR ATTENTION

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