



**Ministry of Natural Resources and Environmental Conservation**  
**Environmental Conservation Department**



# The Current Status of Emissions and Fuel Efficiency Transportation Policies in Myanmar

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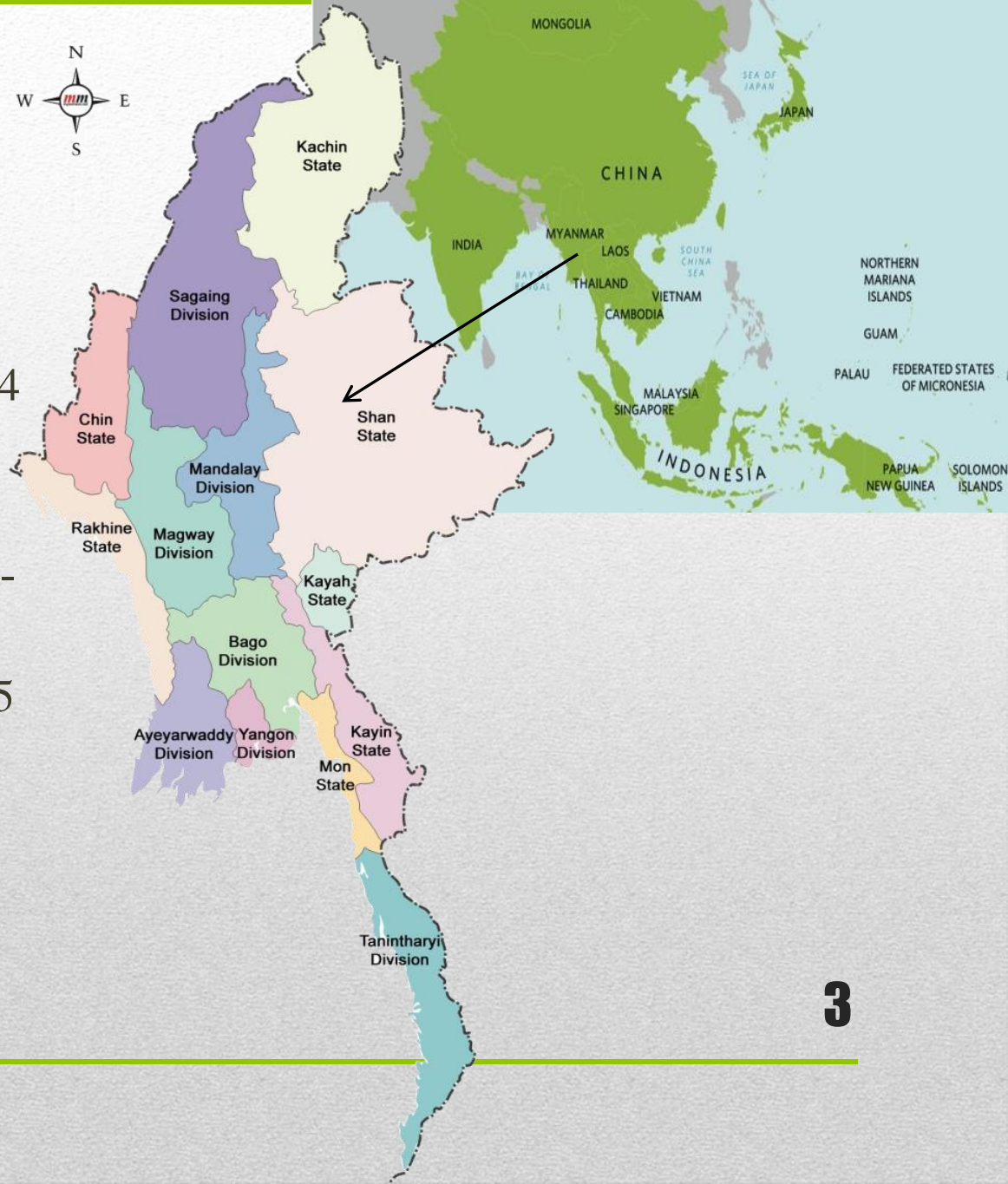
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# Country Profile



- **Area:** 676,577 km<sup>2</sup>

- **Forest cover:** 44.2% of total land area (FAO,2015)

- **Population:** 51.49 million (2014 Census)

- **Tropical Monsoon Climate**

- Hot Season (March to May - 3months)
- Rainy Season (June to Oct -5 months)
- Cold Season (Nov to Feb-4 months)

# National Environmental Policy of Myanmar (2019)

- Currently, the Government of the Republic of the Union of Myanmar adopts the **“National Environmental Policy”** in 2019.

- **Vision**

**“A clean environment, with healthy and functioning ecosystems, that ensures inclusive development and wellbeing for all people in Myanmar”**

- **Mission**

**“To establish national environmental policy principles for guiding environmental protection and sustainable development and for mainstreaming environmental considerations into all policies, laws, regulations, plans, strategies, programmes and projects in Myanmar”**

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# Environmental Conservation Law – 2012

## Environmental Objectives

- To implement the Myanmar **National Environmental Policy;**
- To lay down the basic principles and give guidance for systematic **integration of the matters of environmental conservation** in the sustainable development process;
- To emerge a **healthy and clean environment** and to conserve **natural and cultural heritage** for the benefit of present and future generations;
- To reclaim **ecosystems** which are starting to degenerate and disappear;

# Environmental Conservation Law – 2012 (Cont'd)

- To manage and implement for decrease and loss of **natural resources** and for enabling **the sustainable use** beneficially;
- To implement for **promoting public awareness and cooperation** in educational programmes;
- To promote **international, regional and bilateral cooperation;**
- **To cooperate with** Government departments, organizations, INGO, NGO and individuals.



# Automotive Policy (2019)

## Vision

- To increase the usage of vehicles with affordable prices in each and every sector

## Objectives

- To emerge a sustainable Automotive Policy
- To support the nation's transportation and economy through the development of Auto-related Industries
- To develop Auto-related Industries such as Production, Distribution, Sales and Services as well as the Maintenance-related Technologies
- To define and promulgate standards for quality assurance and least impact on environment
- To earn more job opportunities and attract foreign investments effectively
- To establish Auto-related Industrial Sector by connecting and entering into Global Market and Production Network

# Automotive Policy of Myanmar (2019)

- ❑ Significant Tax Relaxations and Reliefs shall be allowed for productions and imports of Fuel-efficient, Eco-friendly or Environmentally friendly Vehicles.

The following shall be done to reduce the Environment Impacts:

- (a) Emission Standards and Fuel Quality shall be set up in accordance with the Region-wide Standards.
- (b) Regarding to Emission Standard, notifications shall be declared by relevant Ministries as a minimum of Euro 4 for imported/ manufactured Passenger Cars, and Commercial Vehicles, Euro 4 for Motorcycles and Euro 4 for the Fuel Properties of gasoline and diesel.
- (c) Special Taxation System and Privileges shall be applied for manufacturing and import of Fuel-efficient, Eco-friendly or Environmentally friendly Vehicles (e.g Hybrid Cars, Electric Vehicles etc)



# Related Laws and Policy for Vehicles

- ❑ **Motor Vehicle Law (2015)**
  - The New Motor Vehicle Law had already promulgated at Pyidaungsu Hluttaw on 7<sup>th</sup> September, 2015 by the overlap of previous 1964 Motor Vehicle Law.
- ❑ **Motor Vehicle Rules (1989 Motor Vehicle Rules)**
- ❑ **Law on Standardization (2014)**
- ❑ **Automotive Policy (2019)**

Vehicle management and road safety Law (MoTC)

Import/Export Law (MoC)

Tax Related Law (MoPF)

Myanmar Investment Law (MIC)

Other Related Laws....

- Vehicles' Registration and issuance of driving license  
- Arrangement of road safety

- Import/Export License Permit  
- Permission for Show Rooms and Sale Centers

- Taxation Scheme (Custom Duty, Special Goods Tax, etc ...)

- Permission for Auto-related business  
- Incentive

# Current government's policy on motor vehicles importation

- Old cars replacement with new car policy
- Set up the Supervisory Committee for Motor vehicles Importation
- Issued annual car importation policy
- A series of motor vehicles importation notification issued by MOC



# Electronic Motor Car Importation in Myanmar

No	Type of Vehicle	2014	2015	2016	2017	2018	Remark
1	Hybrid	949	1683	1306	1158	16	5112
2	Electric Vehicle		24	141	6	2	173

# Public Consultation Process on Roadmap of Emission Regulation & Fuel Properties

Review, comments & endorsement for Roadmap to set up in accordance with the Nation-wide:

Date	Activities	Organizations
24-5-2016	Review Meeting on Roadmap for <b>Emission Regulation &amp; Fuel Properties base on Euro 2/3</b>	MOTC, MOC, MOEE, MES, UMFCFI
13-6-2016	Take comment on Emission Standards base on <b>Euro 3/4</b>	MOTC, MOEE, MOE, MESM MAMDA
28-6-2016	National Consultation Workshop on ASEAN MRA and <b>Emission Standards (Euro 3/4)</b>	MOTC, MOCCommerce, MoEE, MoE, MoIFER, MonREC, MoConstruction, UAGO UMFCFI, MES, MAMDA, AAM
2-10-2016	Review/ Comments on <b>Emission Standards of Myanmar at MES (Euro 3/4)</b>	MES, MOI
22-9-2017	Stakeholder Meeting on Automotive Policy and <b>Emission Standards (Euro 3/4)</b>	MoTC, MoEE, MoC, MoPF, MIC, MES, UMFCFI, MAMDA, AAM
25-1-2019	Comment & Entrancement on <b>Emission Standards &amp; Fuel Properties for Euro 4</b>	MoTC , MoEE



# Specification of Motor Gasoline from Foreign Export

No	Characteristics	Test Method	92 RON Motor Gasoline Specification	95 RON Motor Gasoline Specification	97 RON Motor Gasoline Specification
1.	Colour	Visual	Undyed Light Yellow	Undyed Light Yellow	Undyed Light Yellow
2.	Density at 15 °C, kg/L	ASTM D1298	Report	Report	Min 0.72
3.	Research Octane Number (RON)	ASTM D2699	Min 92	Min 95	Min 97
4.	Reid Vapour Pressure (RVP), psi	ASTM D323	Max 10.0	Max 10.0	Max 10.0
5.	Sulphur Content, % wt	ASTM D1266	Max 0.05	Max 0.05	Max 0.05
6.	Lead, g/L	ASTM D3341	Max 0.013	Max 0.013	Max 0.013
7.	Copper Strip Corrosion (3 hrs at 50 °C)	ASTM D130	Max 1	Max 1	Max 1
8.	Existent Gum, mg/ 100 ml	ASTM D381	Max 4	Max 4	Max 4
9.	Induction Period, Minutes	ASTM D525	Min 240	Min 240	Min 240
10.	Doctor Test	ASTM D484	Negative	Negative	Negative

# Specification of Motor Gasoline from Foreign Export (Cont'd)

No	Characteristics	Test Method	92 RON Motor Gasoline Specification	95 RON Motor Gasoline Specification	97 RON Motor Gasoline Specification
11.	Metcaptan Sulphur Content, ppm	ASTM D3227	Max 15	Max 15	Max 15
12.	Metcaptan Sulphur Content, % wt	ASTM D3227	Max 0.0015	Max 0.0015	Max 0.0015
13.	Distillation Initial Boiling Point, C 10% Vol Evaporated, C 50% Vol Evaporated, C 90% Vol Evaporated, C Final Boiling Point, C Residue, % Vol Loss, % Vol	ASTM D86	Report Max 74 Min 80- Max127 Max 190 Max 225 Max 2.0 Max 2.0	Report Max 74 Min 80- Max127 Max 190 Max 225 Max 2.0 Max 2.0	Report Max 74 Min 80- Max127 Max 190 Max 225 Max 2.0 Max 2.0
14.	Benzene Content, % Vol	ASTM D5580	Max 5	Max 5	Max 5
15.	Odor	-	Marketable	Marketable	Marketable
16.	Acetone, wt ppm	Low O <sub>x</sub>	Max 100	Max 100	Max 100



# Specification of Motor Gasoline from Foreign Export (Cont'd)

No	Characteristics	Test Method	92 RON Motor Gasoline Specification	95 RON Motor Gasoline Specification	97 RON Motor Gasoline Specification
17.	Oxygenates, % Vol	ASTM D4815	Max 14	Max 14	Max 14 (of which Maximum MTBE content of 10.0)
18.	Aromatic, % Vol	ASTM D5580	Report	Report	Max 35
19.	Alcohol	ASTM D4815	No Addition of any Alcohol	No Addition of any Alcohol	No Addition of any Alcohol
20.	Metallic Additives	AAS	Non-Added	Non-Added	Non-Added

# Specification of High Speed Diesel from Foreign Export

No.	Characteristics	Test Method	HSD (0.05 % S) (500 ppm S) ရိုးရိုးဒီဇယ်ဆီ	HSD (0.005 % S) (50 ppm S) ပရီမီယမ်ဒီဇယ်ဆီ
1.	Density at 15 °C, kg/L	ASTM D1298	0.82 - 0.86	0.82 - 0.86
2.	Appearance	Visual	Bright & Clear without undissolved sediment or free water	Bright & Clear without undissolved sediment or free water
3.	Colour	ASTM D1500	MAX 2.0	MAX 2.0
4.	Cetane Index	ASTM D976	MIN 48.0	MIN 48.0
5.	Viscosity Kinematic at 40 °C, cst	ASTM D445	2.0 – 4.5	2.0 – 4.5
6.	Pour Point, °C	ASTM D97	MAX 9	MAX 9
7.	Sulphur Content, % wt	ASTM D5453	MAX 0.05	MAX 0.005
8.	Conradson Carbon Residue on 10% Bottom, % wt	ASTM D189	MAX 0.2	MAX 0.2 <b>16</b>
9.	Water by Distillation, % Vol and Sediment by Extraction, % wt	ASTM D95 ASTM D473	MAX 0.05 MAX 0.01	MAX 0.05 MAX 0.01



## Specification of High Speed Diesel from Foreign Export (Cont'd)

No.	Characteristics	Test Method	HSD (0.05 % S) (500 ppm S) ရိုးရိုးဒီဇယ်ဆီ	HSD (0.005 % S) (50 ppm S) ပရိမီယမ်ဒီဇယ်ဆီ
10.	OR Water and Sediment, % Vol	ASTM D2709	MAX 0.05	MAX 0.05
11.	Flash Point, °C	ASTM D93	MIN 60	MIN 60
12.	Copper Strip Corrosion (3 hrs at 50 °C)	ASTM D130	MAX No-1	MAX No-1
13.	Ash Content, % wt	ASTM D482	MAX 0.01	MAX 0.01
14.	Distillation , °C 90% Vol recovered 95% Vol recovered Vol% recovered @ 250 °C Vol% recovered@ 350 °C	ASTM D86	MAX 370	MAX 360
15.	Total Acid Number , mg KOH/g	ASTM D974	MAX 0.5	MAX 0.5

# Problem and Challenge

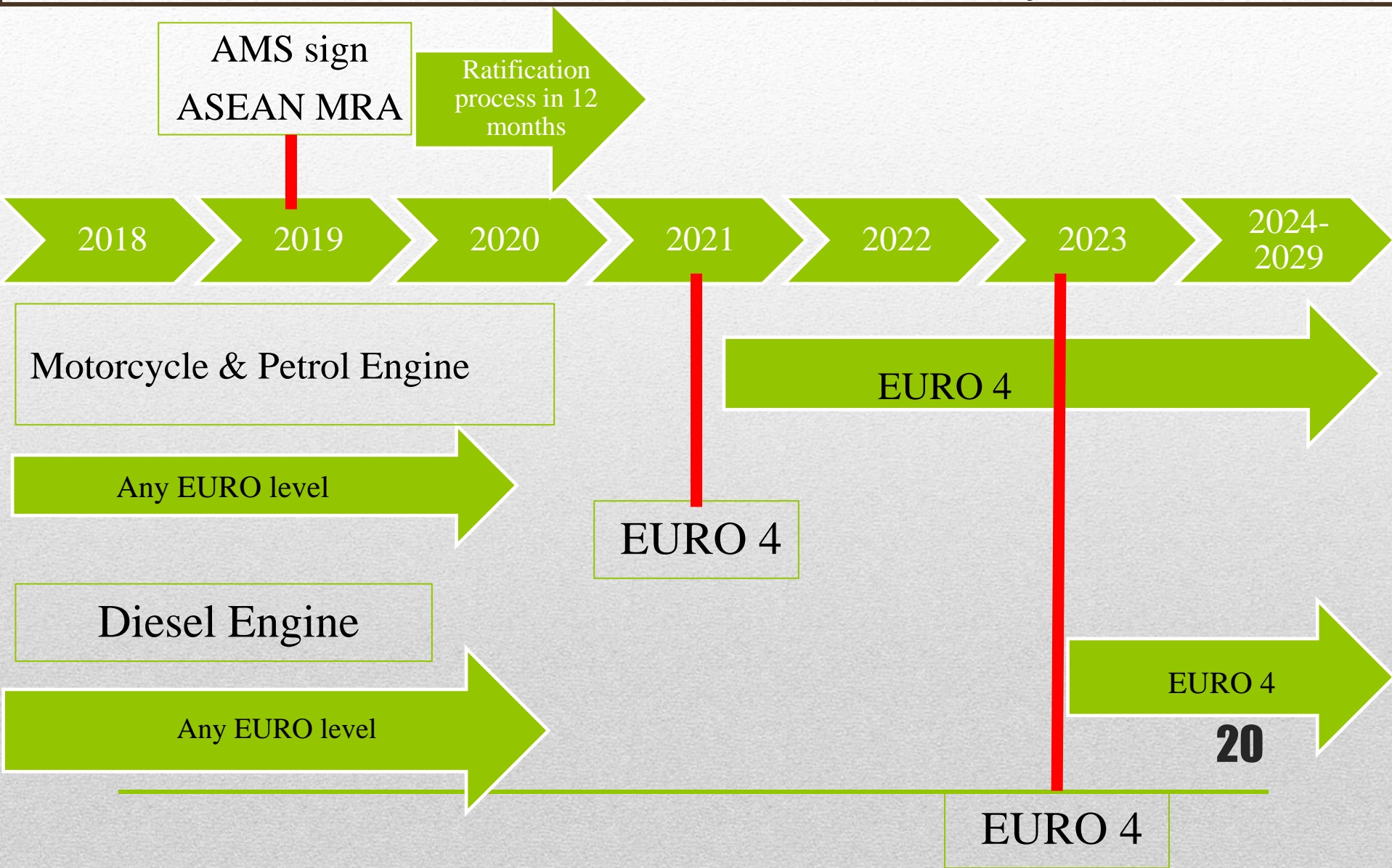
- Lack of equipment and Laboratory to conduct the fuel quality control
- Need to improve capacity building at level the good performance on air pollution control
- Lack of cooperation partnership public, private sector and international organization
- Need to develop regulatory framework at the national of decentralization concept



# On Going Plan

- Despite being non-Annex I countries, some Association of Southeast Asian Nations (ASEAN) has pledged to commit to actions to mitigate climate change
- Accept ASEAN Mutual Recognition Arrangement
- Fuel Quality Standard is Adoption of ASEAN vehicle safety requirement standards
- International best practice for emissions and Fuel Standards set out for key objectives.

# Propose Timeline of Harmonization on UN Regulations for Exhaust Emission (Myanmar)





**Thanks for your attention!**