ESCAP Regional Cooperation Mechanism on Low Carbon Transport: Regional Meeting on the Identification of Climate Financing Mechanisms

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Sri Lanka: Country Overview

Physical Features & Climate

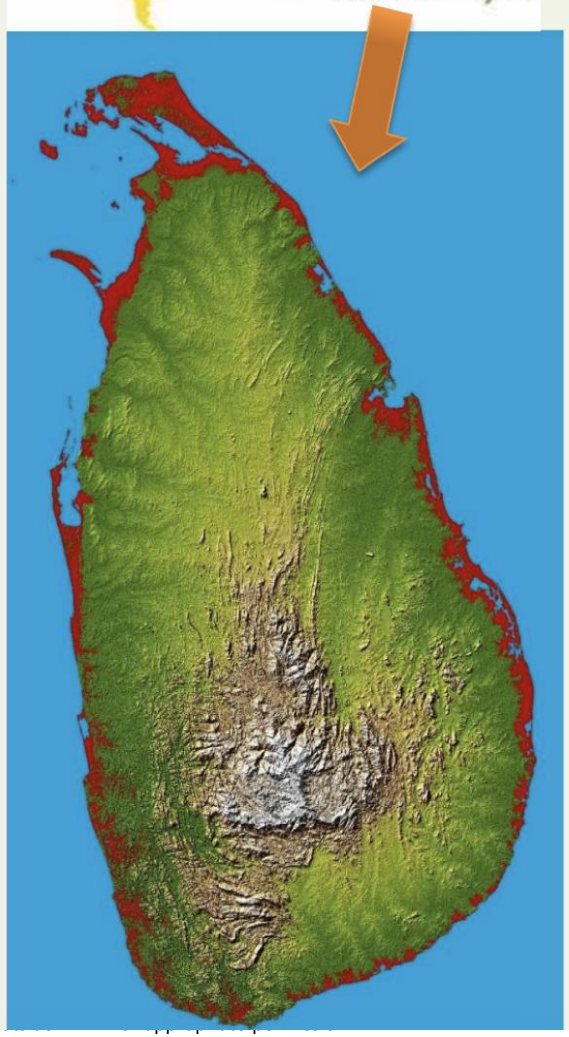
Total Area	: 65,610km^2
Land Area	: 62,705km^2
Inland waters	: 2,905km^2

Population & Vital Statistics

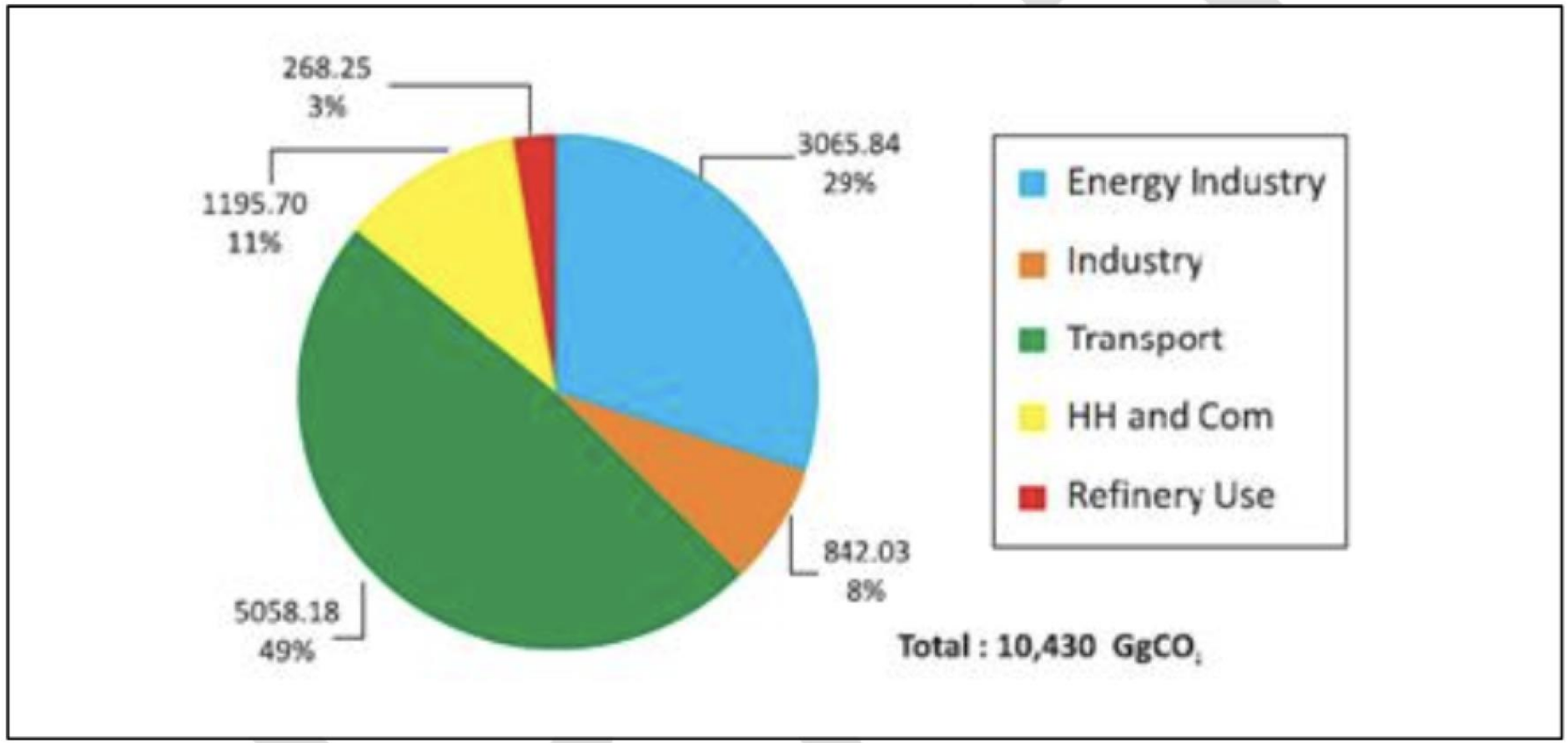
Mid Year population (2014)	: 20.67Mn.
Population Density	: 330 (per km^2)
Urban Population	: 15.1%
Rural Population	: 84.9%
Infant Mortality rate (2010)	: 9.9 per 1,000 live births
Dependency Ratio (2014)	: 49.5%
Average Household Size (2013)	: 3.9 persons
Expectation of life at birth	: 74.3%
Literacy Rate (2013)	: 92.5 (Female – 93.5; Male – 91.6)
Human Development Index	: Rank 73rd place among 187 countries

Economic Indicators

Per capita income	: 3,625 US$
Gross Domestic Product (GDP)	: 7.4 %
Sectoral Composition of GDP	: Agriculture (11.9); Industry (28.7); Services (59.3)
Inflation Rate	: 1.7%



Transport Sector Overview



ESCAP Regional Cooperation Mechanism on Low Carbon Transport:

With regard to the net zero drive, the country has prioritized the sectors to work on which are the most damaging in terms of GHGs. They are **energy sector, transport sector, industry sector, waste sector and agriculture, forestry and other land use sector.** In general the following directives had been identified across all the sectors;

- Promote low carbon technologies in all economic sectors through technology transfer and development.

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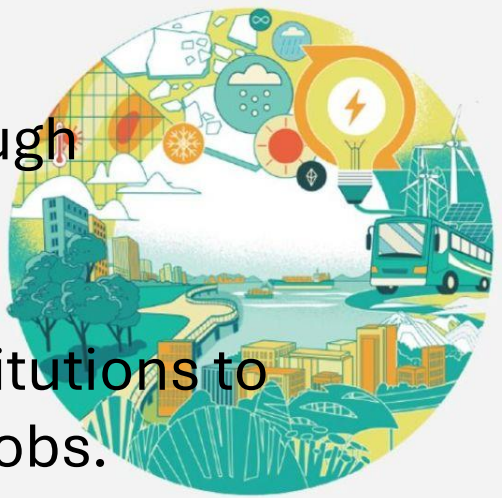
- To build the capacity of key economic sectors and relevant institutions to address low carbon development pathways and promote green jobs.



1- Introduce new policies and policy supportive measures:- EV POLICY

2- Promote public passenger transport and well managed public transportation network:

2.1 Encourage and foster the use of non -motorized transportation;

2.2 Encourage increasing investment into public transport;

2.3 Improve road and railway transport infrastructure and facility;

2.4 Develop and improve walking and cycling infrastructure;

2.5 Making island water transport modes more attractive for users

3- **Management of Fuel Quality Standards (FQS) of vehicles**:
Manage the FQS to minimize environmentally harmful emission and improvement of energy efficiency in vehicles; Reducing carbon intensity of fuels by substituting petroleum-based products by low carbon/zero carbon emission fuels (natural gas, biofuel etc;).

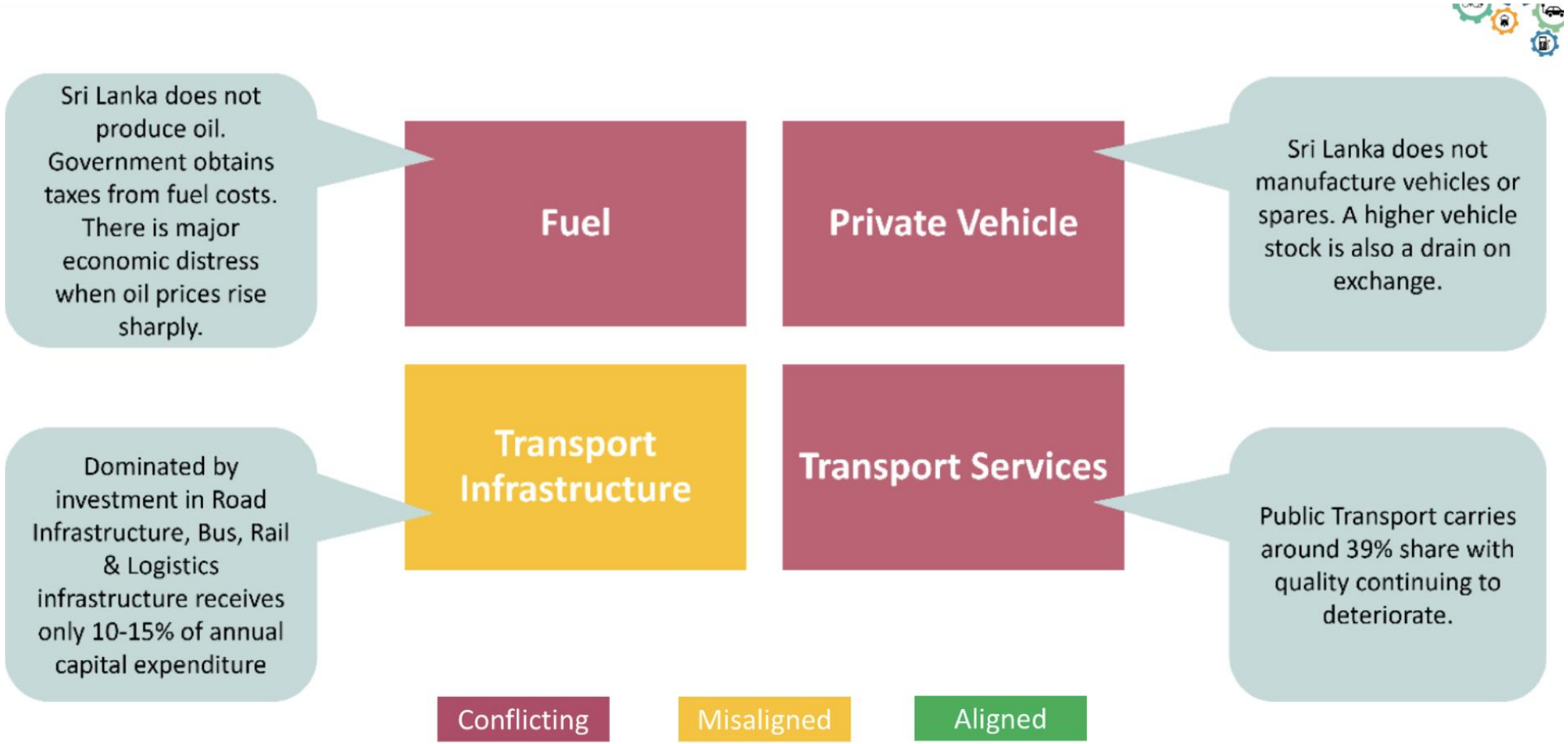
4- **Encourage and promote electric mobility and low emission hybrid vehicles:**
Encourage and promote to use of electrified or hybrid vehicles; Facilitate the infrastructure development for use of those vehicles and increase tax concessions for electrical and hybrid vehicles.

5- **Improve vehicle fleet efficiency**: Improve efficiencies of existing vehicle fleet; Promote the import of fuel-efficient vehicles; Introduce programmes to change driver behaviours.

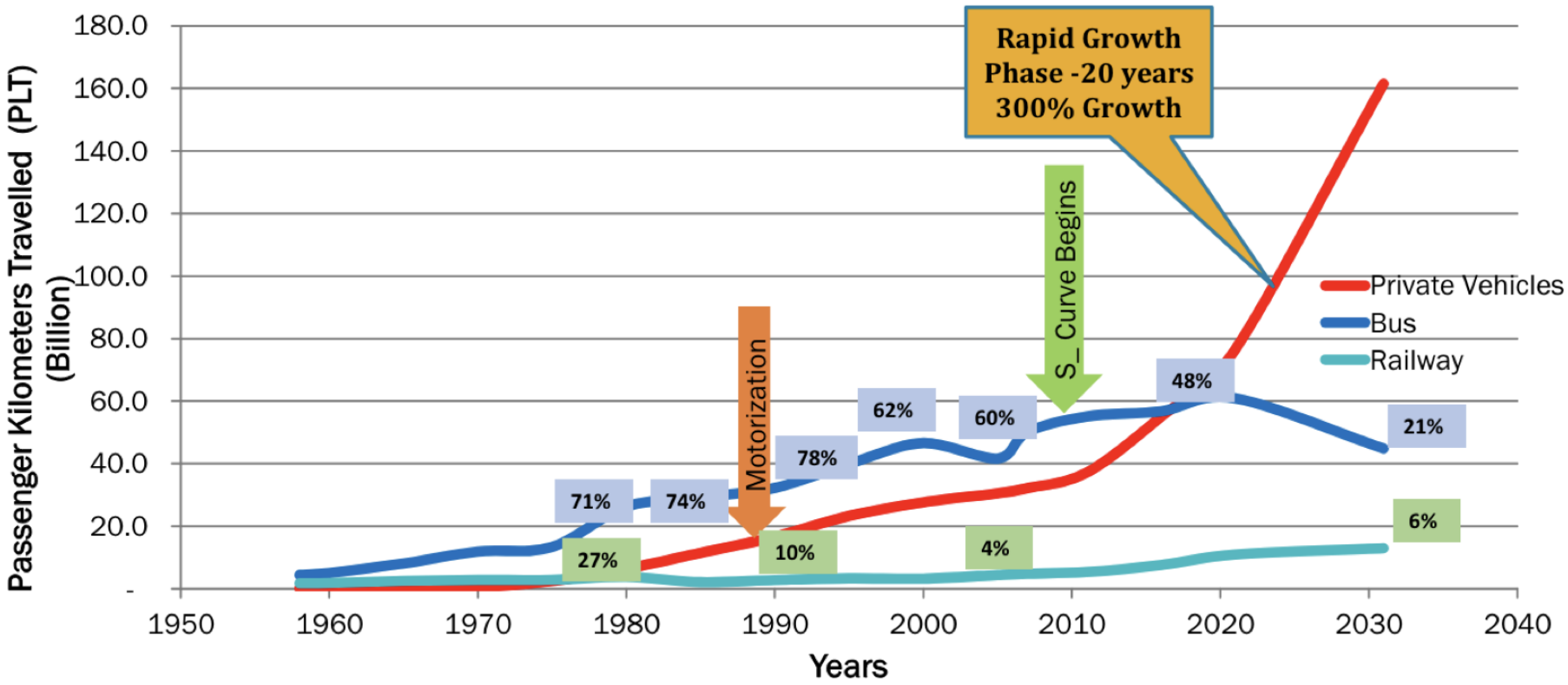
6- **Change lifestyles for avoiding/reducing travel**: Encouraging teleworking, and remote working and further promotion of Government online services to reduce and prevent the need to travel especially to and from specific ‘traffic hotspots’, and during peak hours.

7- Modernizing and upgrading of railway and road infrastructure development: Electrification of railway lines; Develop new railway lines and expansion of existing railway network; Development of provincial and rural road infrastructure for improved mobility; Expansion of expressway network.

8- Improve the marine transportation system: Promote Sea transportation; Introduce energy-efficient measures for coastal shipping and fishing vessels.



SRI LANKA'S DEMAND FOR TRAVEL BY MODE (1958-2035)



20 October 2023

Development of a draft outline and Policy Framework for Transition to E-mobility.

01

15 November 2023

Draft Policy Framework for Transition to E-mobility.

02

31st December 2023

Final Policy Framework and Implementation Plan for Transition to E-mobility in Sri Lanka.

03

SRI LANKA'S READINESS FOR E-MOBILITY TRANSITION

Policy

- Energy Policy
- Transport Policy
- Economic/Fiscal Policy
- Industrial Policy

Planning

- Mobility Forecasting
- Energy Planning
- Technology Planning
- Policy Revisions

Institutional Capacity

- Agency Responsible to implement E-Mobility Policy
- Technical Coordination
- Advisor to the IMFFEM

Financial Sustainability

- Incentivized Market Pricing
- Secure Carbon/Green Funding

Inter-Ministerial Forum for E-Mobility (IMFFEM)

E-Mobility Secretariat

CURRENT CONTRIBUTIONS OF NON-GOVERNMENT STAKEHOLDERS

Organisation	EV initiative
Automotive Component Manufacturers of Sri Lanka (SLACMA)	• Database on all automobile components manufacturers • EV-related component manufacturing
EV Club of Sri Lanka	• Acting as the focal point of EV users in delivering their ideas to the industry and the government • Mapping of charging station locations • Addressing the issues of EV users
United Nations Environment Programme (UNEP)	• Funded programs on promoting EVs with the government
United Nations Development Programme (UNDP)	• Financing Electric Three-Wheeler conversions
United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)	• EV policy development in Sri Lanka

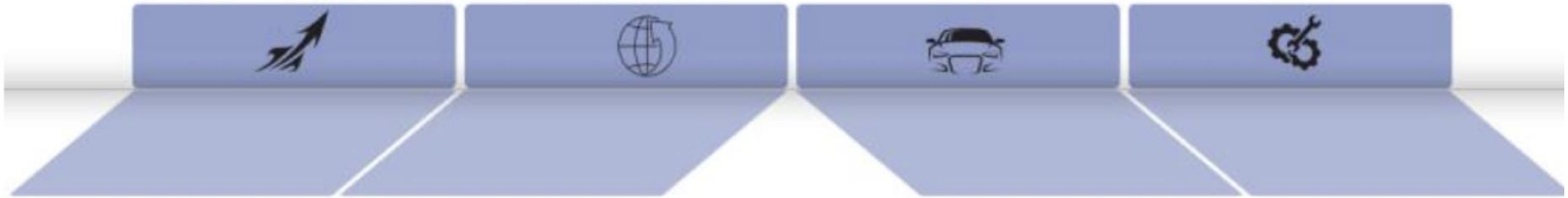
E-Mobility Strategy	Year	Bus & Railway Share	Motor Vehicle Fleet (million)	Annual Fuel Use (mn litres)	EV Penetration of Fleet				Annual Electricity Consumption GWh	Annual GHGases (CO_2 Ggm)	Annual Economic Cost of Transport Inputs USD bn	Mobility Cost as % of GDP
					Cars and Dual Purpose %	2/3 wheel %	Buses %	Goods vehs %				
Baseline												
Last Year of Normal Operations Recorded	2019	49%	5.6	4,027	0	0	0	0	0	9,943	9.6	11%
Non-Intervention												
Business- as-Usual Transport Policy: No Specific EV Targets **50% Public Transport by 2050**	2030	41%	8.0	5,397	2%	9%	2%	0%	223	13,109	11.8	13%
	2040	46%	11.1	7,452	10%	39%	8%	2%	1,689	17,897	16.6	11%
	2050	52%	13.6	8,158	22%	80%	17%	8%	4,839	19,554	18.4	7%
Moderate Intervention												
Reach 100% EV Registrations by 2050 **50% Public Transport by 2040**	2030	44%	7.2	4,984	3%	12%	4%	2%	404	12,149	10.6	11%
	2040	50%	9.4	5,663	23%	52%	19%	10%	3,223	13,723	14.0	9%
	2050	53%	11.8	4,208	58%	96%	46%	37%	10,407	10,215	15.6	6%
Aggressive Intervention												
Reach 100% EV Registrations by 2040 **50% Public Transport by 2030**	2030	50%	6.5	4,423	7%	12%	5%	2%	564	10,842	8.9	9%
	2040	56%	8.1	3,915	43%	52%	27%	26%	4,751	9,619	10.7	7%
	2050	61%	10.2	1,915	80%	95%	58%	64%	12,485	4,753	12.1	4%

Vehicle Type	2025	2030	2040	2050
Motorcycles	Provide Local industry incentives	Only Electric Registrations	52% Fleet	95% Fleet
Three Wheelers	Begin Electric Registrations Only. Provide Local industry incentives.	Only Electric Registrations		
Cars and Vans	Electric or Plug-in-Hybrid-Electric only for large engines, but no incentive. Smaller ICE and hybrid cars and vans allowed.	Electric or Plug-in-Hybrid-Electric only for medium and large engines, but no incentive. Smaller ICE and hybrid cars and vans allowed.	Only Electric Registrations	80% of Fleet
Buses	50% of all modernized routes will have E-buses. Seek low-cost financing.	100% of all modernized routes will have E-buses. Seek low-cost financing.	Only Electric Registrations	68% of Fleet
Trucks	Incentivize lower engine capacity as EVs	Only electric for low engine capacity registrations	Only Electric Registrations	64% of Fleet
Railways	Plan for electrification	Begin Suburban Electrification	100% Colombo suburban electrification	

Regulations/Standards development	Remarks	Responsible Institution
Type approval and registration of Electric Vehicles	• Locally manufactured EVs • Assembling of EVs (SKD/CKD) • EV imports	DMT/NERD center
Registration procedure for converted EV	• Three-wheelers, Buses, Motorcycles	DMT/NERD center
EV battery standards	Development of standards to assure, • safety • durability • performance	Ministry of Industries
EV battery recycling	• Storage of batteries till recycling • Recycling locally • Exporting for recycling • Used battery importation	CEA
EV powertrain standards	• Minimum power requirement • Electrical safety standards (ISO, IEC, SAE)	Ministry of Industries
EV Performance testing procedures	• Performance/ safety testing • Additionally electrical safety testing	DMT/NERD center
Charging standards	• Level 2 charging/ DC fast charging	PUCSL/CEB
Monitoring reporting and verification system	• To estimate and validate carbon reduction	Ministry of transport and ministry of environment

20 YEARS MASTER PLAN

STAGE 1 2021	STAGE 2 2026	STAGE 3 2031	STAGE 4 2037
2021 – 2026 Launch of SOP	Approaching global supply chain for exports	Sri Lanka automotive logistical hub	Sri Lanka as global automotive manufacturing hub
19 Assemblies with Ministry of Industry approvals	Growth from 19 to 30 Assemblies	Growth from 30 to 40 Assemblies	75 Assemblies
Component manufacturers Growth from 7 to 24	Component manufacturers Growth from 24 to 100	Component manufacturers from 100 to 175	Component manufacturers, growth 200 +
IATF 16949 Certification for all component manufacturers	QMS / TQM + Lean & best manufacturing practices	Employment of more than 25,000 jobs	Employment of more than 35,000 to 45,000 jobs
Infrastructure development to state of the art factories which includes zero carbon emission factories & equal working rights	Auto parts industrial park Green mobility – development of EV batteries, charging & battery swapping stations	Development of Automotive software & hardware	World class automotive chip manufacturer and battery manufacturer using value added Sri Lankan raw materials
Joint venture + Technical Collaborations Magna, Lear, Motherson, Michellin & Continental which is currently in Sri Lanka	Joint venture + Technical Collaborations with other OEM + Tier 1 component manufacturers		



Women’s participation in the transport sector

Establishing a low-carbon society poses a number of policy challenges and difficulties for emerging and low-income economies.

Low Carbon Transport / EV Transition

1- Create awareness-

2- Community Empowerment

3- Exposure Opportunities

Need to be approached in a structured manner

Initiate Community-based project

EV Policy

Three-Wheeler Project

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