The International on
Our Right of Way: Walk and Cycle

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Non-Motorized Transport Initiatives in Sri Lanka

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OVERVIEW

- Introduction
- Transport Sector in Sri Lanka
- Non-Motorized Transport

INTRODUCTION

- Country at a Glance

Country Data

Population **20.45 Million**
No. of HHs **4.7 Million**
Per Capita GDP **2300 US$**

Transport Sector

❑ Infrastructure

- **Road: 12,000 km**
  - **National Roads: 4,200 km**
  - **Provincial Roads: 7,800 km**
- **Rail: 1,200 km**
- **Road Density: 0.59 km/1000 persons**

❑ Performance Indices

- **Passenger Transport**
  - **Road: 94.8 billion km/y (94.6%)**
  - **Rail: 5.4 billion km/y (5.4%)**
- **Freight**
  - **Road: 6436 million ton-km/y (97.9%)**
  - **Rail: 135 million ton-km/y (2.1%)**

❑ Vehicle Population

- **Road Vehicles: 3.2 Million**
- **Rail:**
  - **Locomotives: 120**
  - **Passenger Coaches: 800**
  - **Good wagons: 1200**
- **Bicycles: Over 3.5 Millions**

INTRODUCTION

- Clean Air Sri Lanka (CleanAirSL)
  - **Established in 2004 as a non-stock, nonprofit organization to work on combating air pollution.**
    - ✓ **Non-governmental arm of Air Resource Management Center (AirMAC), which was established in July 2001 at the Ministry of Environment as a partnership institute of government, private sector and civil society to facilitate AQM programs.**
    - ✓ **Established to overcome issues in AirMAC Structure**
      - **Bureaucracy of government**
      - **Limitations in access to funds**
  - **Assists all government agencies in implementing AQM programs and climate change mitigation programs**
    - ✓ **Objectives are almost similar to those of AirMAC**
    - ✓ **Policy development, Capacity building, Facilitation of research, Advisory services, Knowledge sharing**

INTRODUCTION

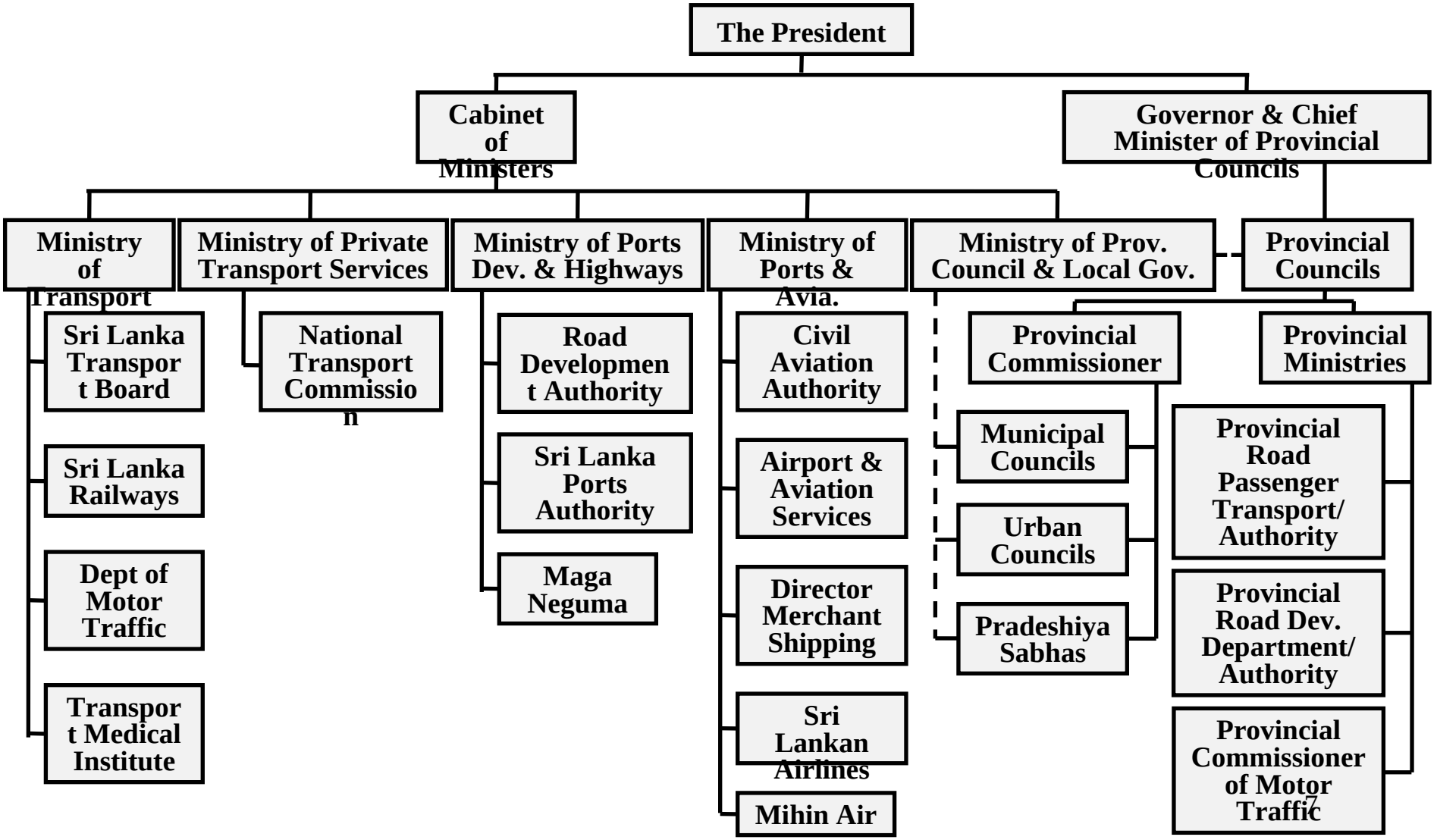
- CleanAir Sri Lanka
  - **Operates as a partnership of a group of professionals and environmentalists from**
    - ✓ **Government organizations,**
    - ✓ **Private sector**
    - ✓ **Non-government organizations,**
    - ✓ **Academia and R&D agencies.**
  - **Works closely with the institutes under the Ministry of Environment and Ministry of Transport.**
    - ✓ **Development and execution of Clean Air Action Plan**
      - **Implementation of Vehicle Emission Testing Programme**
      - **Development and enforcement of Emission Standards for Stationary Sources**
      - **Promotion of EST / NMT**

INTRODUCTION

- Sri Lanka Sustainable Energy Authority (SLSEA)
  - **Established in 2007 by an Act of the Parliament to oversee and manage sustainable energy sector.**
    - ✓ **Government agency under the Ministry of Power and Energy.**
  - **Main Objects**
    - ✓ **Development of Renewable Energy Resources**
    - ✓ **Energy Efficiency Improvements / Energy Conservation & Management**
    - ✓ **Energy Modesty – Change in Life Style**
  - **Scope of Activities**
    - ✓ **Policies, Laws, Regulations and Guidelines**
    - ✓ **Financial Mechanisms**
    - ✓ **Awareness and Knowledge creation**
    - ✓ **Covers all energy sectors including Transport**

TRANSPORT SECTOR IN SRI LANKA

- Transport Administrative Structures



TRANSPORT SECTOR IN SRI LANKA

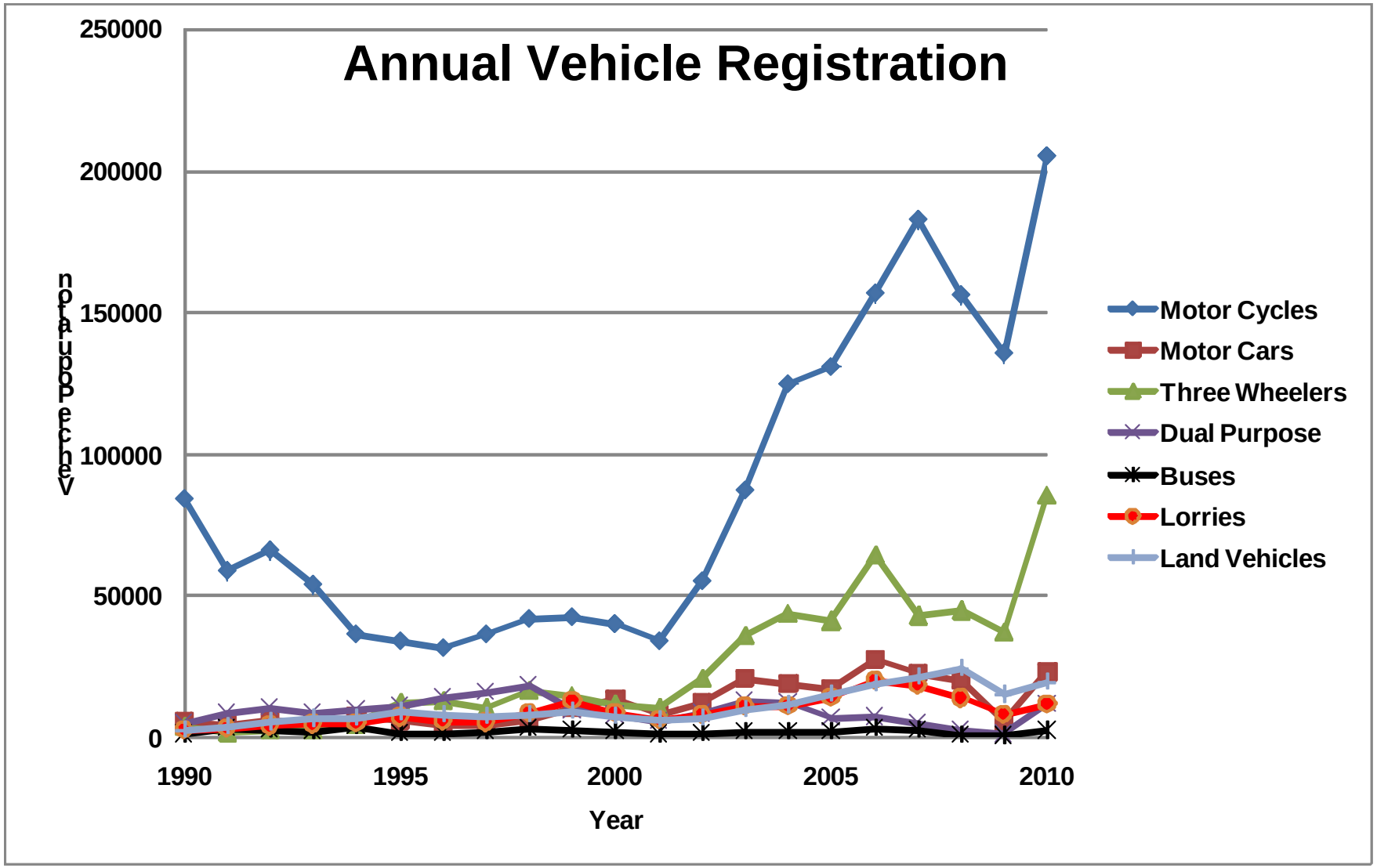
- Transport Sector Performance in 2011
  - **Value of Turnover- 15% of GDP – Rs 1,000 billion**
  - **Jobs – 1.5 million (85% informal)**
  - **People Moved– 12+ mn motorized trips daily → 100 billion passenger km/yr**
  - **Freight Moved – 7 billion tonne-km/y**
  - **Vehicle Movement: 27 billion vehicle km operated/y**
  - **Accident Deaths : 2,400+ per annum (1 in 50 deaths)**
  - **Pollution: estimated 5,000+ pre mature deaths (1 in 25)**
  - **Transport Energy**
    - ✓ **Transportation accounts for approximately 60% of total Petroleum consumption in Sri Lanka (locally).**
    - ✓ **The total Consumption of Gasoline, Auto Diesel and Super Diesel for transportation was approximately 2.1 Million MT in 2010, costing US$ 3.8 billion for importation.**
    - ✓ **The Public Passenger Transportation consumes only around 15% of this amount, while shouldering to over 60% of the travel demand**

TRANSPORT SECTOR IN SRI LANKA

- Transport Sector Performance in 2011
  - **Expenditure**
    - ✓ **Public Sector Expenditure: Rs 160 billion**
    - ✓ **Private Expenditure: Rs 660 billion**
      - **Commercially provided - Rs 260 billion**
        (Trucks – Rs 150 bn; Buses – Rs 70 bn; Taxis/3W – Rs 40 bn)
      - **Privately provided – Rs 400 billion**
  - **Private/Social Losses**
    - ✓ **Cost of Accidents : Rs 32 billion/y**
    - ✓ **Cost of Congestion: Rs 40 billion/y**
    - ✓ **Cost of Lost Time in Public Transport: Rs 30 billion/y**
    - ✓ **Cost of Losses in Supply Chain: Rs 100 billion (??)**

TRANSPORT SECTOR IN SRI LANKA

- Characteristics of Vehicle Fleet



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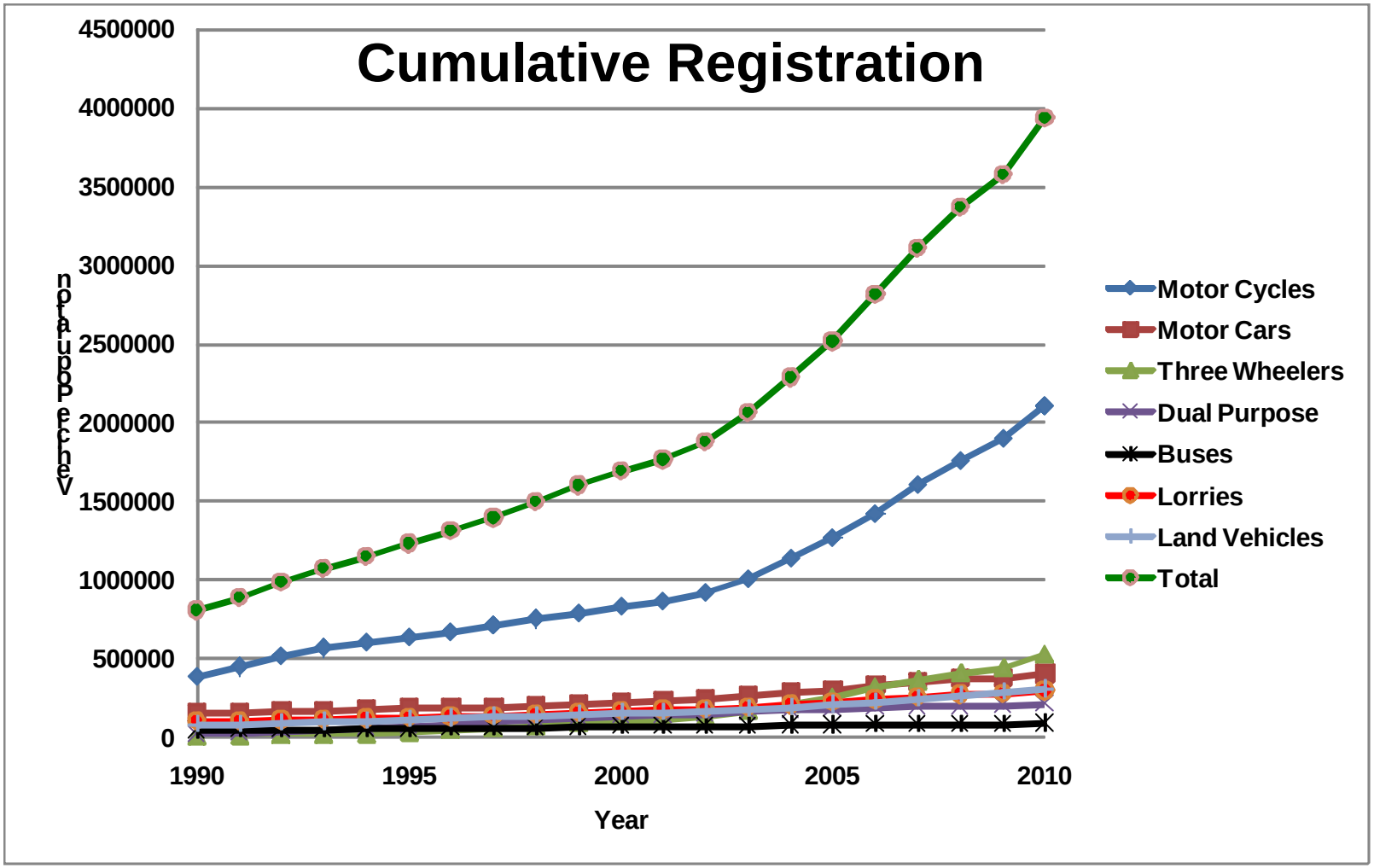

TRANSPORT SECTOR IN SRI LANKA

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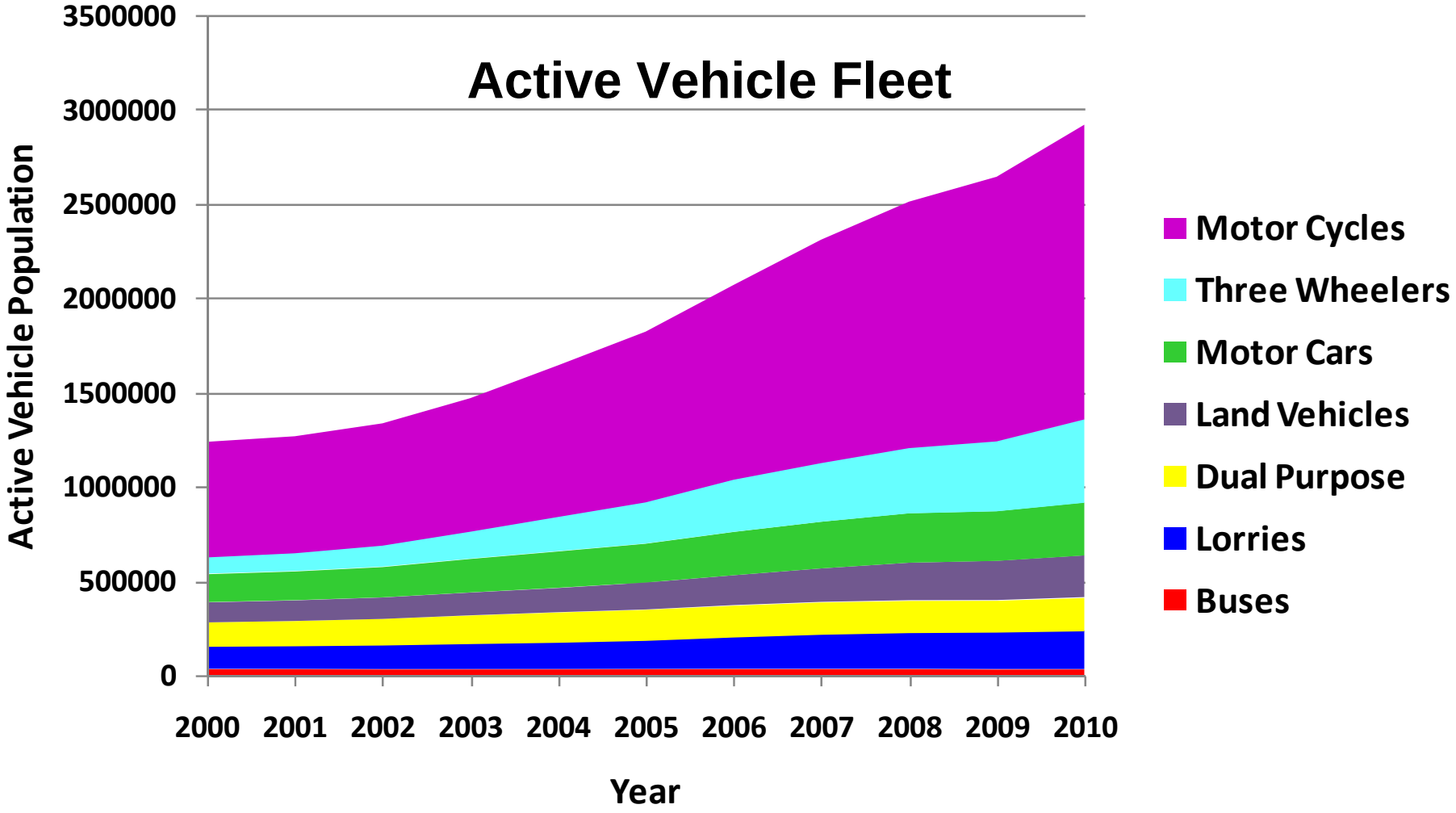


TRANSPORT SECTOR IN SRI LANKA

- Characteristics of Vehicle Fleet

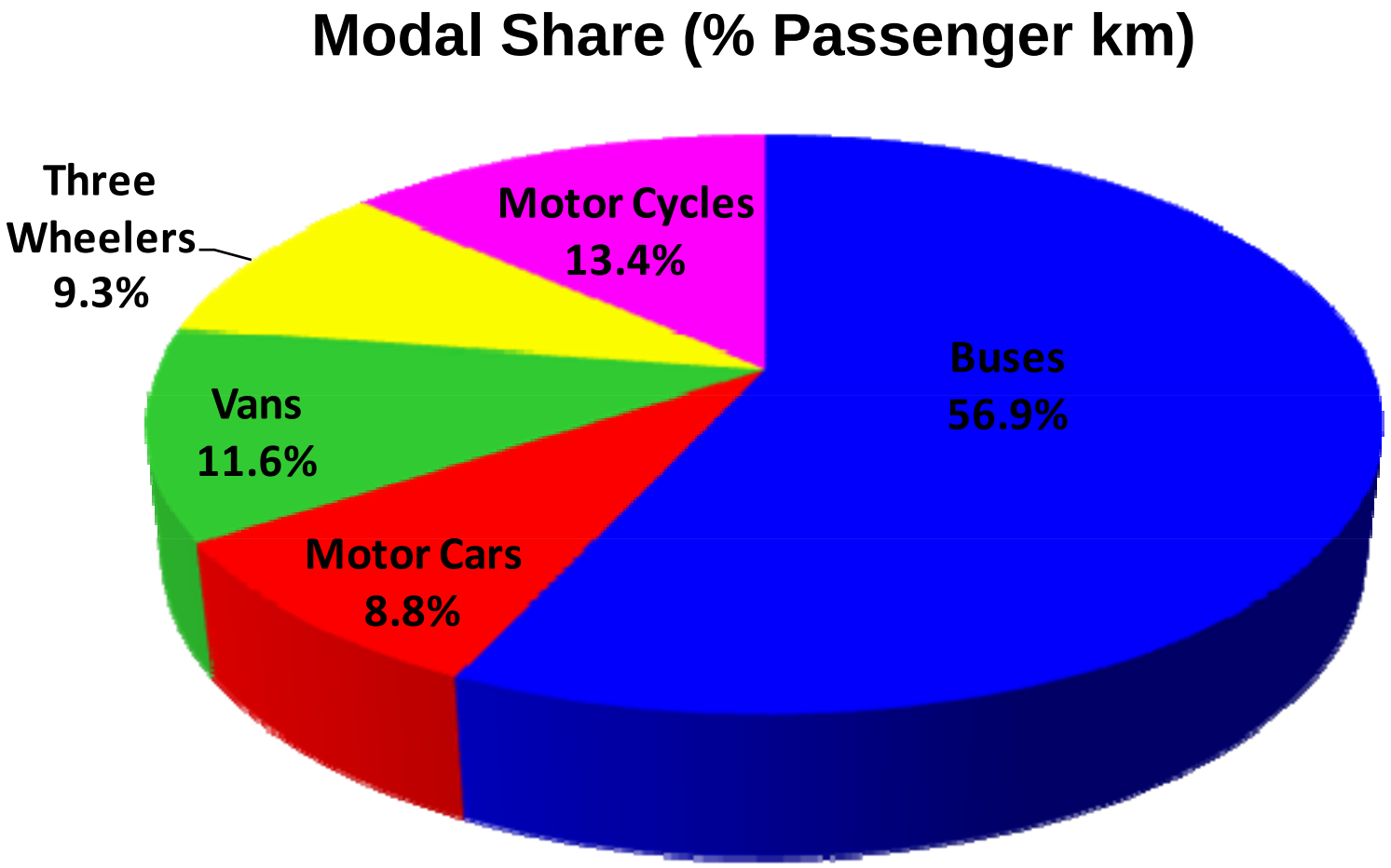
Active Vehicle Fleet (estimation @ January 2011)

Vehicle Type	Fuel	No. of Vehicles	%
Cars	Gasoline	259,562	8.9
Cars	Diesel	18,862	0.6
Dual Purpose	Gasoline	28,521	1.0
Dual Purpose	Diesel	151,860	5.2
Buses	Diesel	30,815	1.1
Lories	Diesel	204,653	7.0
Motor Cycles	Gasoline	1,560,198	53.7
Motor Tricycles	Gasoline	430,773	14.8
Motor Tricycles	Diesel	13,565	0.5
Land Vehicles	Diesel	204,773	7.1
Total		2,903,582	100.0

69%

TRANSPORT SECTOR IN SRI LANKA

- Characteristics of Vehicle Fleet



TRANSPORT SECTOR IN SRI LANKA

- New Challenges
  - **Economic Development**
    - ✓ **Economy is expected to grow over 9% p.a.**
    - ✓ **Per-capita income of people would Double by 2015**
  - **Implications in Transport**
    - ✓ **Conditions would evolve ...**
      - **Greater affordability of the clients**
      - **Look for quality and comfort**
      - **Higher value assigned for travel time**
      - **More competitive, with wider modal choice**
      - **Efficiency becomes increasingly important.**
    - ✓ **Increase in use of private modes of transport**
      - **Increased private vehicles**
      - **Increased fuel consumption and pollution**
      - **Increased congestion and accidents**

TRANSPORT SECTOR IN SRI LANKA

- New Challenges
  - **Implications in Transport**
    - ✓ **Growth of other economic sectors with high Transport and logistics intensity.**
      - **Tourism**
      - **Fisheries**
      - **Domestic Trading.**
    - ✓ **This would imply an additional 8 billion private vehicle km on the road by 2015**
    - ✓ **Will require an additional demand for petroleum products of 800 million litre of fuel (a 20% increase) required**
    - ✓ **Will imply at an added Cost of Rs 100 billion a year !**
    - ✓ **Further …**
      - **Travel facility expansion .... ?**
      - **Vehicles ..?**
      - **Road Space... ?**

TRANSPORT SECTOR IN SRI LANKA

- New Challenges
  - **Way Forward**
    - ✓ **Make development process “less transport intensive”**
    - ✓ **Pursue “Concentration model” for urban development**
    - ✓ **Promote “transport substituables” (eg : ICT sector)**
    - ✓ **Promote Public Transportation**
    - ✓ **Enhance combustion efficiency in Transportation**
    - ✓ **Promote non-motorized transport**

NON-MOTORIZED TRANSPORT

- Present Status
  - **Informal Sector, but has a significant contribution to the economy.**
    - ✓ **Bicycle is the most accessible multi-functional vehicle in remote areas and main mode of transport for poor families.**
      - **It is common to see students using the bicycles to go to school, and also transport of commercial items in small-scale**
      - **Some use the bicycle as an intermediate mode of transport where they park their bicycles near a railway or a bus station bicycling from home.**




NON-MOTORIZED TRANSPORT

- Present Status
  - **There was widespread use of bicycles and a strong bicycle manufacturing industry, until Sri Lanka adopted an open economic policy in 1977.**
    - ✓ **The increased in motorized transport has impacted upon the local bicycle manufacturing/repair industry.**
    - ✓ **The recent trend in importation of used bicycles from developed countries is further challenging the bicycle assembly industry.**
  - **On average every 2 in 3 households in rural areas owns a bicycle, with an estimated 3.5 million cycles used throughout the country.**
    - ✓ **These bicycle users are serviced by approximately 3500 bicycle repair shops.**

NON-MOTORIZED TRANSPORT

- Present Status
  - **Today the local value addition to a bicycle is marginal, yet bicycle use continues to rise with 150,000 to 200,000 bicycles/y added to the roads.**
  - **The use of bicycles for recreation, leisure activities, exercise and races by an affluent urban crowd has re-awakened the interest in bicycles in rural areas.**
  - **Currently, there are good dealer and distribution networks of bicycles and components in Sri Lanka, while also having relevant trade associations promoting common commercial interests.**
    - ✓ **There is the Bicycle Federation which have its affiliated bodies, bicycling associations and bicycling clubs.**
    - ✓ **There are bicycle user societies in workplaces and schools.**

NON-MOTORIZED TRANSPORT

- National Policy
  - **Identifies the importance of Non-Motorized Transport especially with the present Energy & Env. crises**
  - **Policy Interventions:**
    - ✓ **Ensure that the planning and development of infrastructure facilities includes reasonable provision for NMT systems.**
    - ✓ **Assure that separate infrastructure facilities exist for pedestrians and non-motorized vehicles on selected urban roads and designated regional roads.**
    - ✓ **Improve awareness of safety aspects in the use of such vehicles and popularizing the use of safety equipment.**
    - ✓ **Provide a special scheme for financing the purchase of bicycles through the rural banking system.**
    - ✓ **Take steps for schools and offices to encourage the use of bicycles and for the provision of parking**
    - ✓ **Develop park and ride facilities near railway stations and bus stops for bicycles.**

NON-MOTORIZED TRANSPORT

- Promotion of NMT
  - **Though included in the national transport policy, no significant actions have been taken to promote NMT.**
  - **Few "isolated" attempts could be highlighted:**
  - **The National Cyclist Forum (NCF)**
    - ✓ **Launched on 12th March 2010 by then Environment and Natural Resources Minister under the 'Haritha Lanka' project.**

NON-MOTORIZED TRANSPORT

- Promotion of NMT
  - **Programme of National Transport Commission (NTC)**
    - ✓ **NTC, which was setup for the purpose of handling transport by omnibus, faces the problem of providing transport for school children.**
    - ✓ **Usefulness of the bicycle in discharging the above responsibility has been realized and a programme was developed to distribute bicycles among school children**
    - ✓ **In 2010 about 2000 cycles were distributed and more recently another 500 cycles were distributed.**

NON-MOTORIZED TRANSPORT

- Promotion of NMT
  - **Cyclone: Programme of Practical Action**
    - ✓ **Cyclone is a public campaign promoting bicycling, developed by Practical Action.**
      - **This was first introduced in 2004 as a public mega bicycle rally in Colombo., with the participation of about 3000 bicyclists including then minister of Environment, Transport and**
      - **In 2006, Cyclone was held in Kurunegala with the participation of another 3,000 bicyclists along with provincial leaders and citizens.**
      - **These rallies were followed up with bicycle related awareness promotion and sports events..**
      - **Presently, the Cyclone 2012 is being organized, and it is expected to have participation of 5,000 bicyclists.**



NON-MOTORIZED TRANSPORT

- Promotion of NMT
  - **Environmentally Sustainable Transport Initiatives of AirMAC/CleanAirSL**
    - ✓ **Series of seminars and workshops have been organized on EST including NMT.**
    - ✓ **Walkability survey was carried out in Colombo, with the objective of identifying information on the current pedestrian infrastructure and to develop and propose pedestrian-focused solutions the city.**

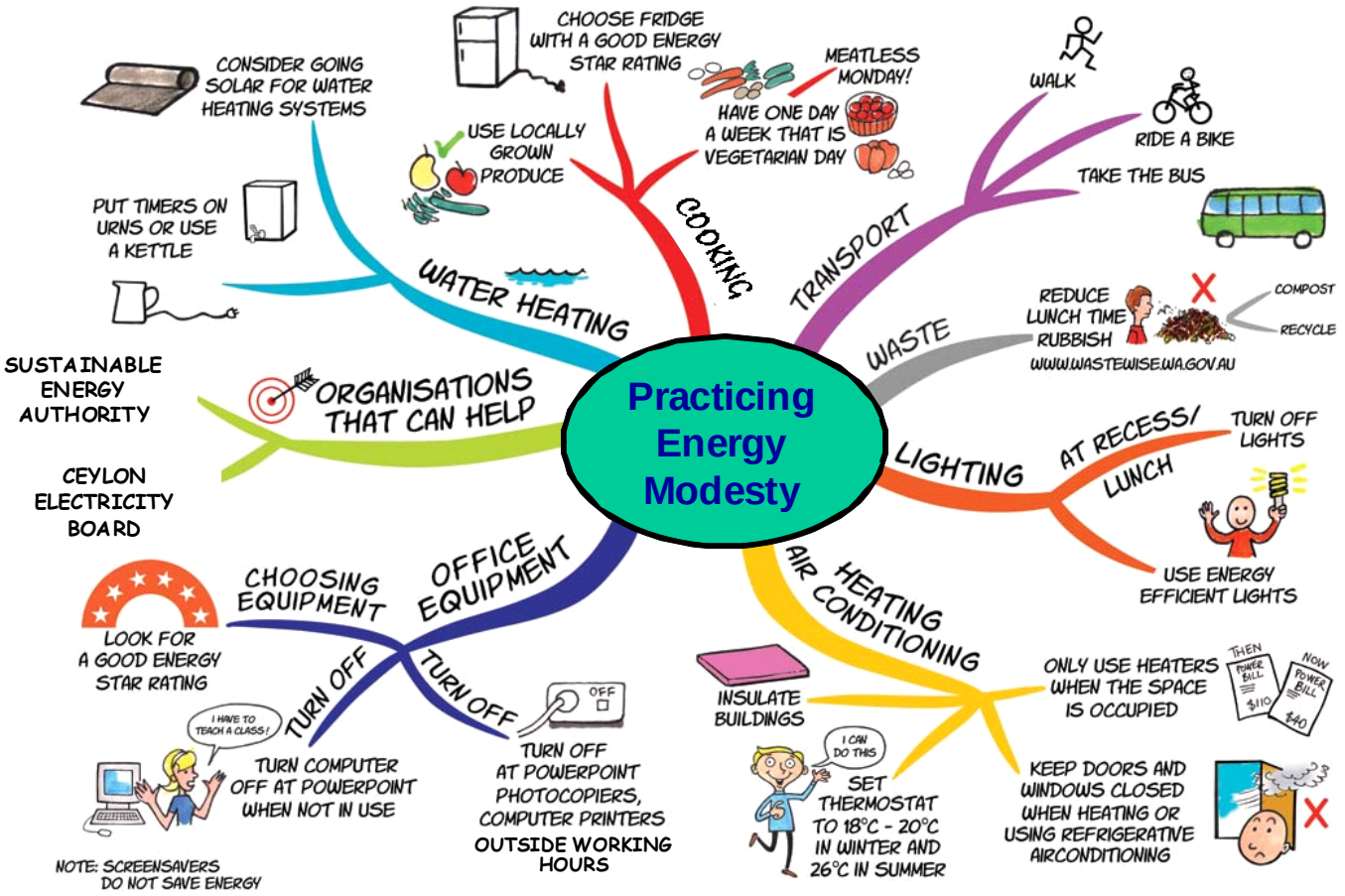
NON-MOTORIZED TRANSPORT

- Promotion of NMT
  - **Energy Efficient and Environmentally Sustainable Transport Initiatives of SLSEA**
    - ✓ **5-year National Energy Management Plan is being developed to embark on an Integrated and cohesive programme of work with a long term perspective to realize better energy efficiency in all sectors, including transport.**
    - ✓ **Integrated effort from the society: Establishment of Renewable Energy and Energy Efficiency (RE3) Zones**

Need effective linkage between Local authorities, Civil Society and Sustainable development ⇨ **Renewable Energy and Energy Efficiency Zones**

NON-MOTORIZED TRANSPORT

- Promotion of NMT
  - **Energy Efficient and Environmentally Sustainable Transport Initiatives of SLSEA**
    - ✓ **Change in Life Style: Household Energy Modesty Index**

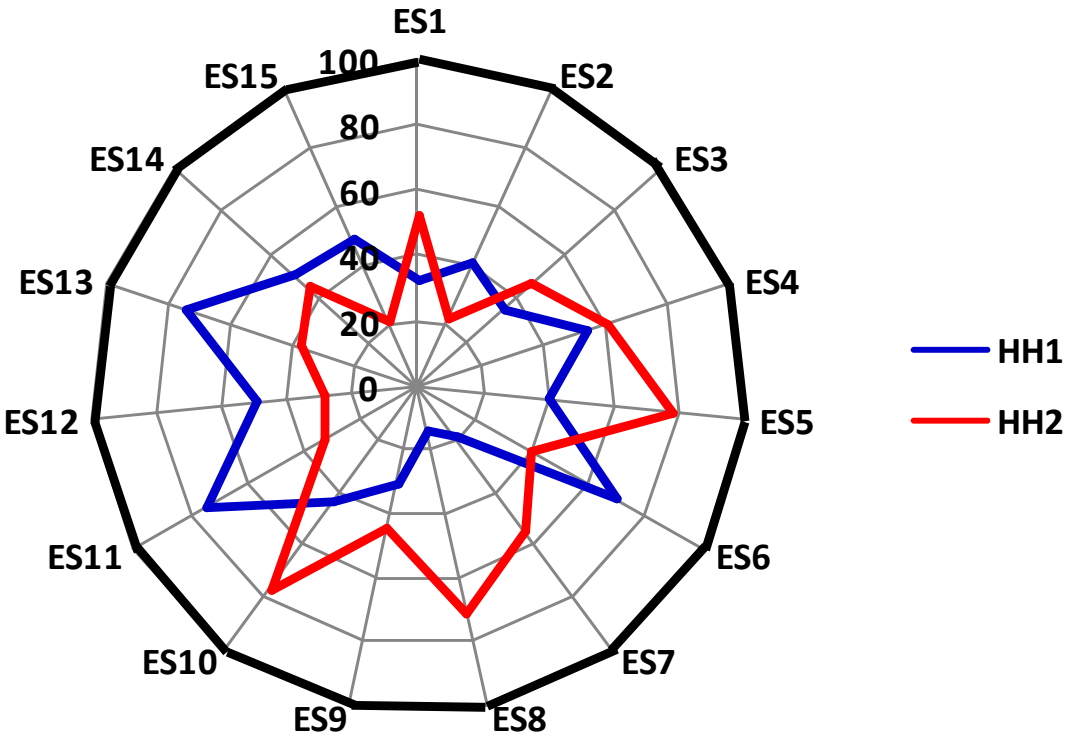


NON-MOTORIZED TRANSPORT

- Promotion of NMT
  - **Energy Efficient and Environmentally Sustainable Transport Initiatives of SLSEA**
    - ✓ **Change in Life Style: Household Energy Modesty Index**

Energy Services

ES1:
Lighting
ES2:
Refrigeration
ES3:
Cloth Washing and Ironing
ES4:
Food preparation
ES5:
Cooking
ES6:
Rice cooker / Oven / Microwave
ES7:
Water Heating / boiling
ES8:
Water pump
ES9:



Thank You