Roadmap for Clean Air
Regional consultation on vehicle import policy

Zanzibar, Tanzania
May 31, 2018
Introduction

- **Ethiopia** is a country found in Eastern Africa,
- It is the most populous nation in Eastern Africa and the second-most populous in Africa next to Nigeria
- It has over **100,000,000** population.
- **Economically**, Ethiopia is one of the world’s fastest-growing countries
  - It is *continuously growing* for the last 15 years successively.
  - It intends to reach a *middle-income* status by 2025
  - It aims to do so by building a *green economy*
Ethiopia Develops a Climate-Resilient Green Economy (CRGE) Strategy

The country aims to limit its GHG emissions not to exceed 150 Mt CO2e

On a conventional way it may emit more than 450 Mt CO2e by 2030

The green economy plan is based on four pillars:

1. Agriculture: Improving crop and livestock production practices for higher food security and farmer income while reducing emissions

2. Forest: Protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks

3. Power: Expanding electricity generation from renewable energy for domestic and regional markets

4. Transport, industrial sectors and buildings: Leapfrogging to modern and energy efficient Technologies
As a Result of the **CRGE** Strategy Ethiopia gives special emphasis to the **Renewable Energy Sources**:

- It builds many
  - **Hydro electric Dams and generates hydro power**, (14 completed, 7 under construction),
  - **Solar energy**,
  - **wind energy**, 324 MW, 3 projects
  - **Geothermal energy**, 570 MW from 2 projects
  - **Waste Energy**: 50 MW
  - **Bio fuel Energy**: more than 9 million Energy Efficient Stoves Distributed up to 2015
  - **Ethiopian Renaissance Dam** is under Construction which will Generate 6,450 MW
  - Massively distributes Solar stoves and lights to the rural people.
  - Ethiopia produces more power than it consumes, it has become a regional power exporter. It sells electricity to **Kenya, Sudan and Djibouti** and has future contracts for power sales to Tanzania, Rwanda and South Sudan.
Transport Sector in Ethiopia

✓ Road transport
✓ Air transport
✓ Railway transport

- Mass transport system
- Mid bus transport
- Min bus transport
- Small scale transport

- In Addis Ababa Bus Rapid Transit (BRT) is under construction
Ethiopia has more than 860,000 vehicles

88% of the Green House Gas emission in Ethiopia comes from transport and energy sectors
Challenges Faced Ethiopian Transport

- Imbalance of Transport Demand and Supply
- Traffic congestions in major cities: due to this
  - Air pollutions because of old and polluted vehicles
  - Time wasting
  - High fuel waste
- Lack of integration with in different mode of transport
- Lack of professionals and technological (ITS) in the sector
  - Management problems
  - Rent seeking and good governance problems
  - Capacity problems
  - Lack of infrastructure for NMT
  - Vehicle tax policy encourage to import old vehicles than new vehicles
Measures taken . . .

1. Encouraging Mass transport system and changing the old public vehicles.
As part of the CRGE strategy the government works in the transport sector and makes a lot of changes

As a result

- Introduces Light Rail Transit in the Capital City,
- Cross boundary Train transport up to Djibouti port
- Nation wide Train transport under construction
- These all uses Electric power,
2. Controlling the emission by annual vehicle inspection and vehicle on spot check

- Controlling the emission by annual vehicle inspection... done by private sector
- Vehicle on spot check... done by Government office
3. doing on Vehicle tax policy to discourage old vehicles than new vehicles

Parameters of vehicle taxation in Ethiopia

- Manufacturing year
- Engine capacity
- Vehicle type
- Loading capacity and seating capacity

➤ According to Ethiopia import tax laws, every vehicle imported to Ethiopia is liable to five different taxes under three category unless exempted by low as follows.
<table>
<thead>
<tr>
<th>No</th>
<th>Goods /Items</th>
<th>Customs Duty %</th>
<th>Excise Tax %</th>
<th>Import Sur Tax %</th>
<th>VAT %</th>
<th>With holding %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Public Transport</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Less than 15 and greater or equal to 10 seats</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>15 or more seats</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Passenger cars Less than 10 seats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Cylinder capacity not exceeding 1300 cc</td>
<td>35</td>
<td>30</td>
<td>10</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Cylinder exceeding 1300 cc but less than 1800cc</td>
<td>35</td>
<td>60</td>
<td>10</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Cylinder exceeding 1800 cc not exceeding 3000 cc</td>
<td>35</td>
<td>100</td>
<td>10</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Electric/Battery Vehicles</td>
<td>35</td>
<td>30</td>
<td>10</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Trucks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Cargo vehicles (based on weight) up to 1500 kg</td>
<td>35</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>Cargo vehicles &gt;1500 kg</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>Heavy Duty, 5 - 20 ton</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>3</td>
</tr>
</tbody>
</table>
Vehicle tax policy

Cost depreciation amount with in that years.

• \( \leq 2 \) year \( \rightarrow \) 10% deduction from the total cost of the vehicles

• \( \geq 2 \) year and \( \leq 3 \) years \( \rightarrow \) 20% deduction from the total cost of the vehicles (CIF)

• \( \geq 3 \) year \( \rightarrow \) 30% deduction.

• This shows that as the vehicle age increases (getting newer) the tax also increase
Vehicle tax policy

• That is the reason why Ethiopian vehicle importers are prefer to import used cars and the air pollution by vehicles is higher than other pollutant.

• It is not the only side effect but also for-
  ✓ traffic management
  ✓ repair cost
  ✓ shortage of vehicles service life
Vehicle tax policy

• Regarding the age profile of the country’s fleet.
  1. 15% are under five years old (0-5)
  2. 16% are between 6 and 10 years (6-10)
  3. 12% are between 11 and 15 (11-15)
  4. 42% are over 15 years old (16+)
  5. 15% are unknown (…..)
Vehicle tax policy

• Gasoline based vehicles expenditure rises by at least US$ 330 for every three year old vehicles and by at least 25% every year for old commercial diesel vehicles.
• Vehicles cost rise with age
• Cost of parts and maintenance is highly correlated with age of the vehicles.
Vehicle tax policy

• Newer vehicles are more cost effective, more environment friendly, less accident prone
• For local vehicle manufacturers of Ethiopia no tax at all

➢ Due to this reason, Ethiopian policy on used car importation needs an amendment to avoid the above side effect.
Proposed policy on vehicle importation and tax

Minster of Transport submit the document to limit the vehicle and engine age by a maximum 8 years to reduce the air pollution and other side effects.
Continue…

• Banning the importation of any vehicles and engine whose manufacturers have stopped production

• Introducing three tax rate structures
  ✓ higher rate for used vehicles
  ✓ Medium level for new vehicles
  ✓ Low level for electric/solar vehicles and locally assembled vehicles.
• Introducing vehicle fuel consumption and emission standard and imposing mandatory requirement of certificate of vehicles to be imported

• Introducing a hybrid, electric solar cell powered vehicles by offering tax incentives

➢ But the policy still under progress because the Government collect 40% the total tax revenue from used cars.
4. Interms of fuel efficiency

- minimum sulphur content unleaded fuel. It is 500 PPM
- Government is working over the efficiency of fuels to have 50 PPM
Questions & Answers