REVIEW OF TEN YEAR PROGRAMME OF WORK ON SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

The Government Ministries and Agencies responsible for Management and Improvement of the Transport System include: the Ministry of Road and Transport, Highway Authority, Department of Feeder Roads, Department of Urban Roads, the Civil Aviation Authority; Driver and Vehicle Licensing Authority; National Road Safety Commission; Ghana Airways; the Shipping Commission; the Ghana Ports and Harbors Authority; and Volta Lake Transport Company.

The Ministry of Roads and Transport is the main formulator of Transportation Policy but solicits inputs from other Stakeholders in finalizing its policy. Legislation on Transport is debated in Parliament. Interested parties also submit comments on transportation legislation placed before parliament.

Decision-Making: Legislation and Regulations

The 1952 Road Traffic ordinance and a number of transport regulation and statutes have controlled and regulated the transportation and traffic system.

The new Draft Bill has taken into account the prevailing change in the traffic environment technological advancement in the road transport and traffic and will ensure that sanctions are commensurate with offences committed.

Rules, Regulations, incentive measures, etc, put in place to induce participation in environmental-friendly transportation are the following:

- Establishment of emission standards backed by legislation,
- Education of operators and transporters on vehicle maintenance practices to meet the stipulated emission rules and laws,
- Provision of bicycle-ways,
- The use of public forum and seminars concepts to discuss issues concerning road projects before construction, and
- Transportation schemes and projects having to go through environmental and traffic impact assessment clearance procedures before implementation.

Sustainable fuel consumption

The banning of the importation of 10 years old vehicles and the imposition of higher tariffs on the importation of large engine capacity vehicles, are all aimed at ensuring sustainable fuel consumption and efficiency level in the country

Reduction of Vehicles emissions
Policy of government is to reduce pollution emission levels from vehicles. Vehicles exhaust analyzers have been obtained for DVLA and measures put in place to train maintenance and vehicle inspectorate personnel in their use.

**Development of alternative transport mode**

A feasibility study for the construction of mass light rail system to support the existing urban public road transport service has been effected funding is the main cause of the delay. Non-motorized facilities such as bicycle tracks have been constructed in some urban centers to promote the use of bicycle.

Ghana government has supported financial credit provision to public road transport service providers in acquisition of new vehicles and upgrading their vehicle fleet.

Member of the general public vehicle owners and operators and their associations are party to decision-making in relation to transport policies, reviews, management and procedures. The private sector also manages and provides public transport services.

**Programmes and Projects**

Major programmes undertaken include the following:

- Better meeting commercial, private and public needs for mobility in urban and rural areas include the construction, rehabilitation and refurbishment of a number of lorry parks.
- The main international airport being expanded and refurbished to accommodate the operation of wide-bodied aircrafts to cater for anticipated increase in passenger load factors.
- Road condition improvements and lean capacity expansion has reduced congestion and traffic in sections of the urban road networks.
- The central business district has been decongested by relocating retail outlets and controlling street vending. Commercial Vehicles Parks have been constructed to reduce the adverse impact of on-street parking.
- Non-motorized ways have been constructed in Urban Centers, for bicycle users. Road capacity in urban areas has been increased to facilitate free flow of traffic during the peak periods. The installation of traffic signals at main intersections and construction of grade-separated interchanges have reduced congestion a number of areas in urban centers.

**Status**

The existing road network is extensive; however, financial resources are required for the construction of missing links and the reconstruction of deteriorated sections of the road network. The Volta Lake which could be used as an important transport water-way linking the Southern half of the country to the
North is poorly utilized. Large sections of the lake are not navigable because of existence of debris shoals, and tree stumps in the lake.

**Capacity-building, Education, training and Awareness-raising**

The Ministry of Roads and Transport and its Agencies undertake sensitization and awareness programmes on the impact of transport on the environment. Adverse impact on the environment from transportation activities and measures for abating them are impacted to all stakeholders such as contractors, operators through seminars, workshops and media campaigns. The National Road Safety Commission (NRSC) as part of the on-going programme of promoting road safety education awareness undertakes road safety campaigns through the media, safety awareness courses for driving schools, drivers and police officers and other stakeholder in transportation industry.

NRSC officials and policy officers visit schools periodically to educate children on how to behave within a road environment especially the safe way for crossing the road.

In-house and out of the country training and refresher courses are provided for engineers and other experts as a means towards capacity building within the transport and traffic sector of the economy. Seminars and workshops are also conducted for road contractors and other providers of transport infrastructure to enhance their skills and expertise.

**Information**

For the road sector, traffic data is collected by the various transport agencies responsible for the implementation of transportation schemes and measures or their commissioned agents. The Police, together with Building and Road Research Institute (BRRI) collect information on road safety and accidents on the road network. Accident data is analyzed by BRRI. Results from these findings are used as a basis for designing schemes and measures ameliorating accidents at hazardous spots. With respect to air and maritime transport, their respective agencies such as the Ghana Civil Aviation Authority, Ghana Airways, the Ghana Ports and Harbors Authority, the Shippers Council and the Shipping Commission are responsible for ensuring that data is gathered for their respective functions.

**Research and Technologies**

No information is available

**Financing**

Building infrastructure – source of funding are the consolidated fund and donor support. Supply fund for fuel is from the consolidated fund.
There is little financial support for Research and Development alternative fuels and transport.

Finance is sourced from the consolidated fund for the enforcement of regulations and standards.

Introductions of road tolling, increases in fuel levy and road user fees as inputs for the road fund has been introduced for road maintenance investment.

**Cooperation**

Ghana periodically participates in international, bilateral, and regional conferences to discuss transportation issues and comply with international, regional conventions and protocols as signatories. The country receives technical assistance for transport project schemes mainly from bilateral sources and other international donor sources.

<table>
<thead>
<tr>
<th>A. SECTOR AND ISSUES</th>
<th>CURRENT GOVERNMENT PRIORIT</th>
<th>EXPECTED FUTURE PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid waste management</td>
<td>Development of engineered/sanitary landfills</td>
<td>Development of incineration facilities</td>
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<tr>
<td>- Waste disposal</td>
<td></td>
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<tr>
<td>- Reuse and recycling</td>
<td>Promote recycling of plastic wastes and composting of organic wastes</td>
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<tr>
<td>- Waste reduction</td>
<td>Sustained public education and awareness</td>
<td></td>
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<tr>
<td>- Others</td>
<td>Improvement in collection and transport of wastes</td>
<td></td>
</tr>
</tbody>
</table>
| Transport | Promoting fuel efficiency, conservation and pollution control measures | • Introduce fuel efficiency devices on vehicles
• Limit the importation and increase taxes and duties on vehicles and engines more than ten years old
• Use of alternative fuels to supplement petroleum products
• Set and enforce emission standards |
<table>
<thead>
<tr>
<th>Area</th>
<th>Activities</th>
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</thead>
<tbody>
<tr>
<td><strong>Public and alternative-transportation</strong></td>
<td>Promote mass transportation in urban areas</td>
</tr>
<tr>
<td><strong>Urban and regional transportation</strong></td>
<td>Ensure provision, expansion and maintenance of transport infrastructure</td>
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<tr>
<td><strong>Cleaner production</strong></td>
<td>Operation of a Ghana Cleaner Production Centre to provide services to the public on adoption of cleaner production strategies in all sectors</td>
</tr>
<tr>
<td><strong>Energy efficiency and renewable energy</strong></td>
<td>• Installation of capacitor banks and high efficiency motors &lt;br&gt; • Promote load management in industry &lt;br&gt; • Promoting the use of energy efficiency bulbs &lt;br&gt; • Promote resource use (including energy use) efficiency in industry</td>
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<tr>
<td><strong>Household energy efficiency</strong></td>
<td>• Awareness campaign aimed at promoting household energy efficiency. &lt;br&gt; • Encourage the use of CFL’s for lighting, modern fuel for cooking (where applicable) efficient cooking technologies, improved cook stoves. &lt;br&gt; • Use of the appliance label standard for domestic appliances and facing out the use of CFCs in refrigeration</td>
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<tr>
<td><strong>Renewable energy markets</strong></td>
<td>Development of RE regulations to promote modern RE market &lt;br&gt; Increase modern RE to 10% in the energy mix and 5% biofuel in transport fuel</td>
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<tr>
<td><strong>Housing and construction</strong></td>
<td>• Use of energy efficient bulbs and equipment &lt;br&gt; Eliminate importation of old plants and equipment</td>
</tr>
<tr>
<td><strong>Energy efficiency</strong></td>
<td>• Keeping cost low through taxation and efficiency &lt;br&gt; • Offering technical support to firms through research and development &lt;br&gt; Promote use of local building materials</td>
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<tr>
<td><strong>Construction standards</strong></td>
<td>• Developing capacity of Building Inspectors &lt;br&gt; • Building capacities of artisans and private &lt;br&gt; Enforcement of building control regulations</td>
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<tr>
<td>developers</td>
<td>Adherence to Building Regulation requirements by players</td>
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<tr>
<td>- Building operations</td>
<td>- Others</td>
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<tr>
<td>- Organic products</td>
<td>Chemical management</td>
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<tr>
<td>- Hazardous waste</td>
<td>Enforcement of pesticides law</td>
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<tr>
<td>- Others</td>
<td>Food clothing</td>
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<tr>
<td>- Food</td>
<td>- Clothing</td>
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<tr>
<td>- Food clothing</td>
<td>- Chemical management</td>
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<tr>
<td>- Hazardous waste</td>
<td>Environmental permit fees are based on the scale of impact of the operation on the environment</td>
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<tr>
<td>- Polluter-pays principle</td>
<td>- Integrated product policies</td>
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<tr>
<td>- Integrated product policies</td>
<td>Changing consumer behavior</td>
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<tr>
<td>- Education and public information</td>
<td>Provided by Ghana Standards Board and Food &amp; Drugs Board</td>
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<tr>
<td>- Consumer information</td>
<td>Provided by Ghana Standards Board and Food &amp; Drugs Board until a Consumer Authority is established</td>
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<tr>
<td>- Labeling, eco-labels</td>
<td>Enforced by Ghana Standards Board and Food &amp; Drugs Board</td>
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<tr>
<td>- Consumer organizations</td>
<td>Consumer Association</td>
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<tr>
<td>Changing production patterns</td>
<td>Procurement is based on economic considerations</td>
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<td>- Public procurement policies</td>
<td>Procurement is based on economic considerations</td>
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<td>- Others</td>
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<tr>
<td><strong>Changing production patterns</strong></td>
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<tr>
<td>- Regulations of emissions and effluents</td>
<td>Guidelines developed to regulate emissions and effluent discharges</td>
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<tr>
<td>- Charges or incentives of cleaner production</td>
<td>Establishment of a Cleaner Production Center to promote resource use efficiency in industries and hence cut down cost of production</td>
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<td>- Products standards (e.g. energy efficiency)</td>
<td>Use of appliance label standard for domestic appliances</td>
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<tr>
<td>- Cleaner production programmes</td>
<td>Dissemination of concept through seminars and workshops</td>
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<tr>
<td>- (R&amp;D, training, technical assistance)</td>
<td>State institutions like CSIR, GRATTIS, NBSSI, ITTU etc offer such services</td>
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<tr>
<td>- Pollutants reporting and registers</td>
<td>Monthly/quarterly reporting of pollutants by industries to EPA</td>
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<tr>
<td>- Strategic industrial and technology planning</td>
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<td>- Investment incentives</td>
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<td>- Voluntary initiatives and codes of conduct</td>
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<tr>
<td>- Corporate social/environmental responsibility</td>
<td>Industries determine the kind of corporate service it could offer</td>
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<td>- Improved management accounting</td>
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<td>- Investment analysis</td>
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<tr>
<td>- Others</td>
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<tr>
<td><strong>Analytical tools</strong></td>
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<tr>
<td>- Life-cycle analysis</td>
<td>-</td>
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<tr>
<td>- Indicators of sustainability</td>
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<tr>
<td>- Technology impact assessment</td>
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<td>- Policy impact assessment</td>
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<tr>
<td>- Impacts of globalization and urbanization</td>
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<td>- Impacts of changes in international markets</td>
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<tr>
<td>Others</td>
<td>Environmental Impact Assessment</td>
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<td></td>
<td>EIA requirement for projects likely to have significant impact on the environment</td>
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<td></td>
<td>Conduct SEAs of sector policies eg energy, agriculture, tourism and transport</td>
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</tbody>
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