“GREEN ECONOMY” - “THE WAY FOR SUSTAINABLE PUBLIC TRANSPORT” - KSRTC Highlights

by

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The UN Environment Programme defines the Green Economy as one that results in **improved human well-being and social equity**, while significantly reducing environmental risks and ecological scarcities.

A green economy can be thought of as one which is **low carbon, resource efficient** and **socially inclusive**.

The question therefore is to find out more about the Green Economy and assess whether, in our country, we are being included in it.
Presentation overview

- KSRTC Highlights.

- Intervention by KSRTC to practice “Green Economy”
  - What has been done so far?
    * Energy optimization - Fuel and power.
    * Resource conservation.
    * Monitoring and evaluation - smoke emission of buses.
  - What needs to be done?
    * Evaluate and optimize carbon footprint from Transport operation.
    * Technology intervention like IT in transport planning and operation.
    * Adoption of Renewable for Transport operation.
    * Incentive for PT over private modes.

- Challenges.
  - High cost of renewable fuels like bio-diesel.
  - Willingness of OEM’s to produce bi-fuel/hybrid vehicles.
  - Will of the OMC’s to distribute Green fuels.

- Vision

- Way Forward.
  - Public will and determination to use public transport.
Since 01-08-1961

Transporting Karnataka

Towards Prosperity
KSRTC in 2012

- Incorporated August 1961
- 7749 buses from 72 depots
- 870 million km covered a year
- 866 million passengers a year
- 2317.68 crores revenue
- 19.91 crores litres fuel consumed
Our **mantra** or motto is innovation

Our **sutra** or formula for success is commitment

Our **vahaan** or vehicle is technologically superior infrastructure, new initiatives and best practices
Recent value adds in “AWATAR”

- Prayanothsava.
- Mobile Booking.
- Paperless Ticket.
- KSRTC.IN Website using Content Management System.
- Map Based Search.
- E-mail and SMS campaign.
KSRTC Website (www.ksrtc.in)

KSRTC launched user friendly web site using the Drupal Content Management System for the Dynamic updates of KSRTC, like (Home Page Search, News, Images, Information etc). “www.ksrtc.in” site has won the best e-Governance website award.
KSRTC launched Map Based Booking for the Dynamic Search...
Environmental Initiatives

Smoke emission
- Routine and surprise smoke emission checks.
- Networking of PUC Centre's of KSRTC.
- Smoke meters provided to all the depots.
- Reward scheme for identifying a smoking bus.
- A reward of Rs 1000 will be given to citizens for identifying a smoking bus.
Water Conservation Measures

- **Water Recycling Plant:** Installed water recycling plant for reuse of water for bus wash at 28 depots, remaining 44 depots under process.

- **Rain Water Harvesting:** Implementation of Rain Water Harvesting of its units in a phased manner

- **Water Softeners:** Water quality of all depots tested & provided with suitable softener and deflouride plants.
Alternative Fuel programme of KSRTC

- **Bio Diesel**: Implemented at Doddaballapura Depot & expansion planned at 5 depots in the ratio of 10% (B10) in the first phase.

- **Ethanol**: 21 depots are commissioned for blending of Ethanol diesel (7.7% Ethanol + 0.5% Solubilizer + 91.8% Diesel) at KSRTC.
Energy Management

- Solar lightings: Solar lightings are implemented at rural bus stations and depots of KSRTC. 45 numbers of 2 KWp and 126 numbers of 300 Wp have been installed.

- Energy Audit: Energy Audit is carried out at Depots, Divisional Workshop and Central Office for conservation and optimization of energy conservation.
Afforestation

• Programme and monitoring carried out on regular basis.

• The units are given the targets every year to carry out the Afforestation activity.

• Over 3.5 lakhs saplings planted.
ISO Implementation

- OHSAS 18001:2007 for Central Office.
Seminar and Conferences & Training Programme

- Consultative committee set up to recommend for use of Ethanol.
- Seminars on renewable energy and energy conservation- “Green Economy- The way for sustainable Transport” is organized for 2012.
- Seminars on Innovative technologies.
Innovative Projects

Innovative Environment System project Component:

• Underground tank with dozing system for ethanol usage at Mysore city completed.

• Diesel Particulate Filters for vehicles of Mysore City to reduce Particulate emission.

• Flame Arrestors for Ethanol dozed vehicles of Mysore City to ensure safety.

• Fuel Efficiency improvement through innovative system of fitment of carbon pod.
Use of Bamboo in bus construction

- The Environmental friendly Phenol Bonded Densified Compressed Bamboo Mat Boards as per IS 13958:1994.
- Bamboo bus flooring is much superior and better than the conventional compressed ply boards in respect of strength, longer durability, better dimensional stability and fuel efficiency.
- BMB is 15% lighter than the regular ply boards.
Vision

- Intelligent Transport System in Mysore City.
- Automated Vehicle Location System.
- Automatic Fare Collection Systems.
- Fuel Cell powered buses.
- Electric/Hybrid buses.
- Reduction in per capita emissions through technology and green fuel options.
- Enhance commuters Safety.
Way Forward

- Fleet Modernization and technology up gradation.

- Optimization of fuel efficiency and emission control- *Fuel efficiency is technologically determined and maintenance dependent.*

- Karnataka SRTC also has the distinction of being the first bus operator in the country to introduce greener fuels in its operations and intends to expand the operations with replacement of 10% with green fuel blends.

- Extensive use of IT in Transport.

- Explore second and third generation bio fuels and lubricants in transport operation to reduce the carbon foot print.

- Focus on renewable energy for operation and practice resource conservation in transport operations.
Awards and Accolades

• In lieu of the above Environmental initiatives KSRTC has been honoured with several national and international accolades for its initiatives.
Thank you all for Your Attention

To know more about path-breaking innovation in transport write to md@ksrtc.org

Visit: www.ksrtc.in