



Sustainable Transport System

BMTC - An Example

By
Managing Director
Bangalore Metropolitan Transport Corporation



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BANGALORE

- 5th largest city in India and one of the fastest growing cities in the world
- Has grown from 70 Sq. Kms. in 1941 to 531 Sq. Kms. in 2001
- Bangalore has now become Greater Bangalore with a total area of about 800 Sq. Kms.
- Population rose from 0.41 million in 1941 to 5.69 million in 2001 (Projected to reach 15 million in 2031)
- Registered vehicles have increased from 0.4 million in 1987 to 2.5 million in 2006
- 88% of total vehicles are personal vehicles
- Two wheelers constitute about 72% of total vehicles

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BMTC- *An Overview*



Came into existence from 15-8-1997 after bifurcating from Karnataka State Road Transport Corporation (KSRTC)

Daily (1st Feb 2007)

- We operate 4,105 bus schedules
- We perform 0.91 million service kms
- We make Over 60,000 bus trips
- We earn Over Rs. 20 million (0.44 million US\$)
- We carry Over 3.5 million commuters

Fleet owned: 4,354 buses

Infrastructure

- Bus Depots - 27
- Bus Stations - 30

Man power deployment: 20,267

Bus staff ratio: 5.0



NWKRTC
Hubli

NEKRTC
Gulbarga

KSRTC
Bangalore

BMTC
Bangalore

Restructure

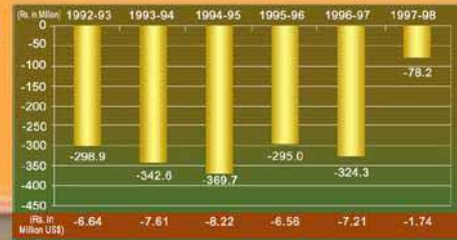




BMTC - Prior to 15th August 1997

Before Bifurcation

- BMTC was called Bangalore Transport Service (BTS)
- Unviability - Organisation continuously incurred huge losses

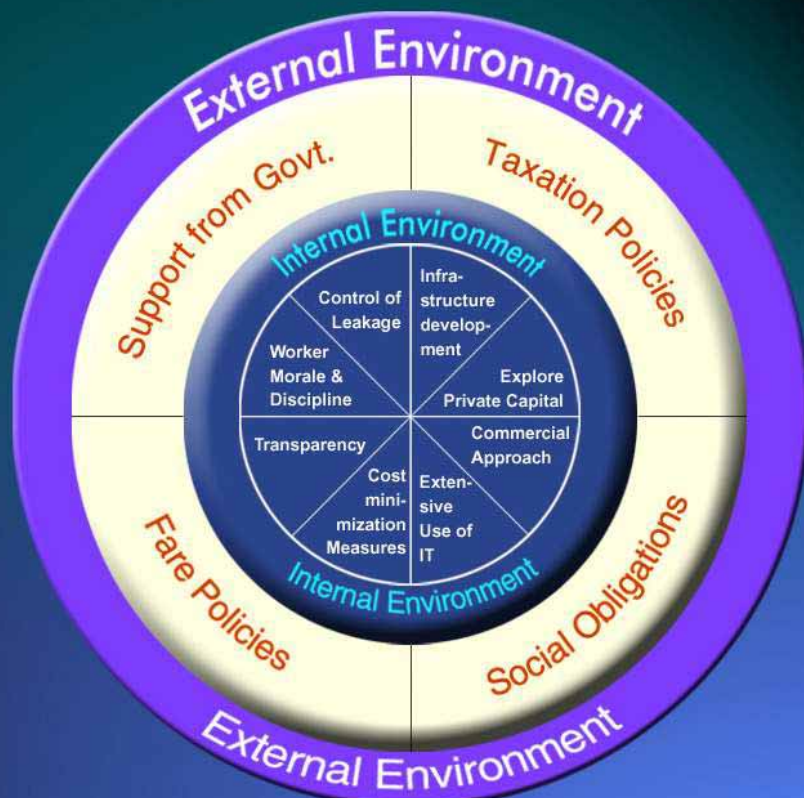


BTS

BMTC



Factors that shaped BMTC's Success

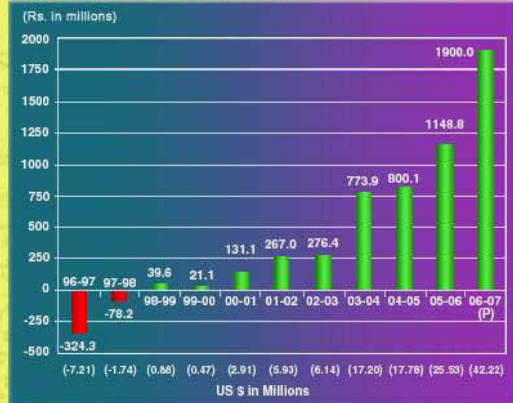




BMTC - A Story of Positive Transformation (From 1998-99 to 2006-07)

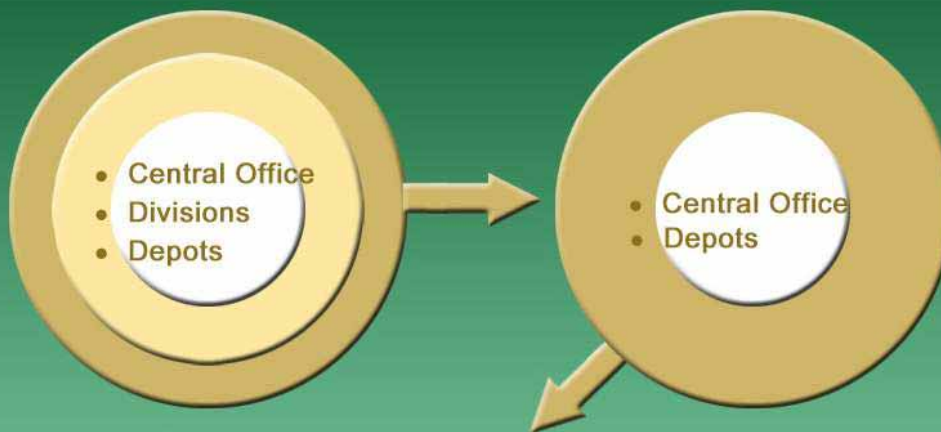
A series of reforms initiated

- Structural reforms
- Strengthening of Infrastructure
- Fleet modernization
- Augmentation of services
- Revenue mobilization measures
- Improvement in Systems and Processes
- Extensive use of IT
- Cost minimization measures
- Transparency in HR policies
- Outsourcing of activities with PPP



Structural Reform

Changed from 3 Tier Management to 2 Tier Management



- Resulted in effective supervision and control
- Eliminated duplication of work



Infrastructure Development

- No. of depots rose from 13 to 27
- Added modern bus stations with better commuter amenities
- Created parking facilities at bus stations
- Hygienic pay-and-use toilet facilities at bus stations



Enhancement of Services



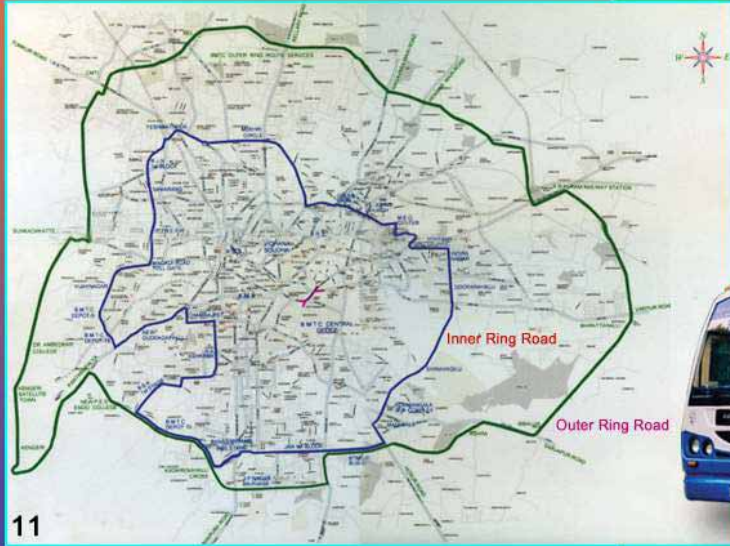
- Added 2,530 bus schedules
- Daily service kms increased from 0.4 million to 0.9 million





Enhancement of Services

- 143 bus services introduced on Outer Ring Road and Inner Ring Road for faster connectivity
- Non-stop services introduced
- 93 Night Services introduced from Central Business District to other places



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Enhancement of Services

- Introduced direction oriented services on 25 Grid Routes
- 140 buses operating with frequencies ranging from 15-35 minutes
- Planned to provide this service at a frequency of 5 minutes



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Enhancement of Services



Hospital Special

Women's Special



Pass Special



Introduced special services to provide more comfort & convenience to commuters

Mall Special



Modernization of Fleet



- Added 4,442 quality buses
- Replaced 1654 aged buses
- Added 39 Volvo low entry buses
- BMTC has the youngest fleet in the country (358 Thousand kms, 4.4 years)





Revenue Mobilization Measures



- Introduced Monthly Pass System
 - 'Rainbow Benefits' provided for monthly pass commuters
 - Features:**
 - Rs. 1,00,000 life insurance coverage
 - Rs. 20,000 towards medical treatment
 - Various other facilities
- Passes made available at post offices, franchising centers, BMTC counters and also with conductors
- Introduced Daily and Weekly passes
- Around 40% of revenue is realized through passes



Extensive use of IT

- **E-Depot:** Depot activities Computerized
- **E-Route Information:** Bus route information on internet
- **E-Procurement:** E-Tendering System adopted for Procurement of goods & services
- **E-Salary:** ECS system of salary disbursement
- **E-Cart:** Quick issue system of casual contract services
- **E-GPS:** On-line vehicle tracking and monitoring system on 1,200 vehicles
- **E-Ticketing:** 400 Electronic Ticketing Machines for ticket issue by conductors introduced on pilot basis
- **PIS:** Passenger Information System & IVRS on the anvil
- **Call centre facility provided**
- **Website:** www.bmtcinfo.com

9:28 225C ETA 09:30
At Bapujinagar

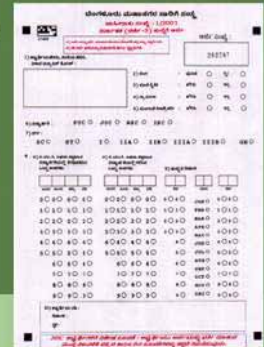


Recruitment process made transparent



- Selection of personal is purely based on academic merit
- Selection of drivers is through skill-test evaluation combined with academic merit

The process resulted in induction of quality personnel



Outsourcing of activities with PPP



- Bus body building (Resulted in savings of Rs. 0.1 Million per vehicle)
- Hiring of privately owned buses for operation on kilometer basis
- Sale of tickets/ passes through franchising agencies
- Software, Hardware and Security personnel hired on contract
- Online GPS based vehicle tracking process outsourced





Savings through cost cutting and outsourcing measures

[from 2003-04 to 2005-06]

- From Swapping of High Cost Loans - Rs. 14.80 Million
- Prompt Payment Discount - Rs. 53.31 Million
- Savings on HSD tendering - Rs. 152.34 Million
- Through Recruitment consultancy outsourcing - Rs. 27.10 Million
- Interest Earned on ST Deposits - Rs. 53.67 Million



Concern for Environment

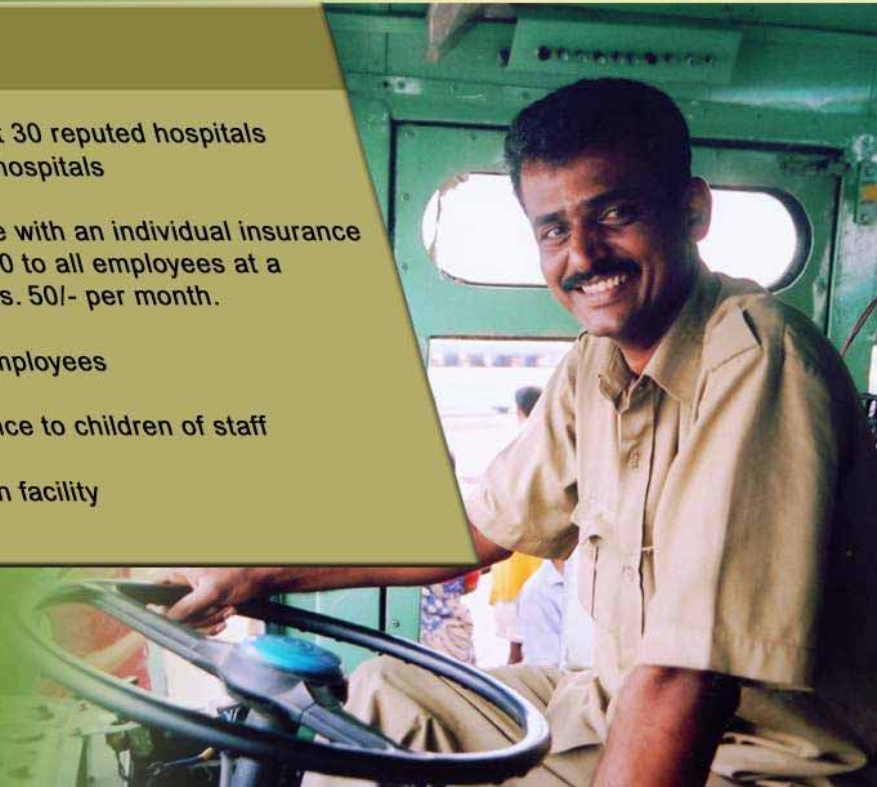
- All depots are equipped with emission testing facilities
- All vehicles are subjected to regular stringent checks to ensure conformity with emission norms
- Use of Ultra Low Sulphur HSD
- Use of alternate fuel
[Vehicles are run using bio-fuel
(10% bio-fuel : 90% diesel) on pilot basis]



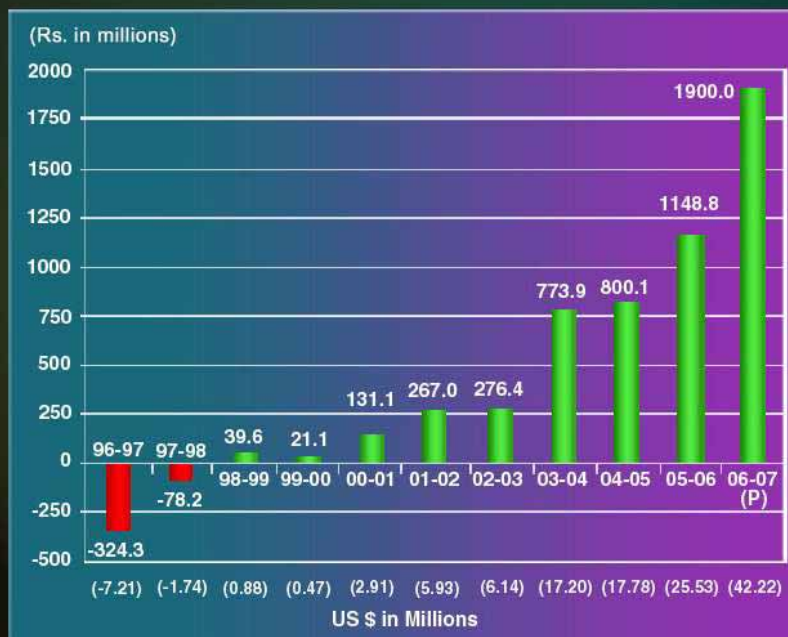


Staff Welfare

- Medical facilities to staff at 30 reputed hospitals including multi-speciality hospitals
- Group insurance scheme with an individual insurance coverage of Rs. 3,00,000 to all employees at a minimum premium of Rs. 50/- per month.
- Welfare centers for employees
- Educational assistance to children of staff
- Home loan/site loan facility



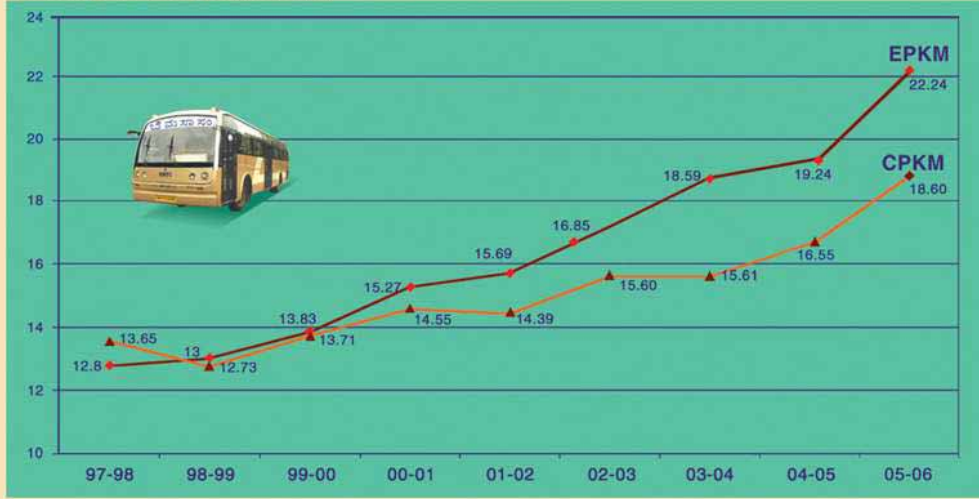
Financial Status - Profit



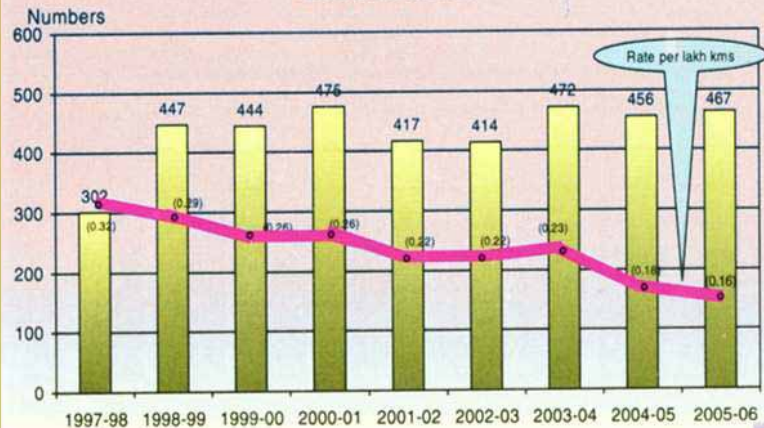


Financial Strength

Earning and Cost per Km (In Rs.)



Accidents



BMTC has maintained lowest accident rates among urban STU's in the country consecutively for the past five years

(* From 15-8-1997)





Earning the confidence of citizens and commuters

The Third Citizens' Report Card on Bangalore's Public Service brought out by 'Public Affairs Centre', an independent organization, rated BMTC at the top with 96% Overall Citizens' Satisfaction



Introduced "SARATHI" patrolling vehicle

- To monitor bus operations on route
- To ensure proper stoppage of buses at bus stops
- To ensure proper occupation of reserved seats for women, senior citizens and physically challenged commuters



Net Worth

(As on 31st March)



Accumulated Losses / Profits

(As on 31st March)



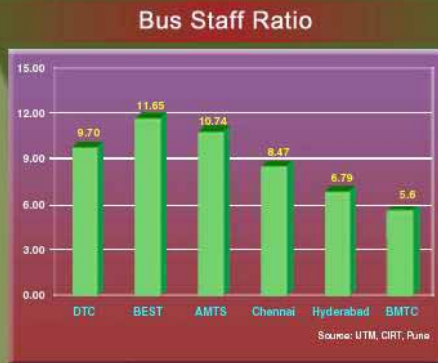


How does BMTC compare with other urban STU's in India?

Fleet Size V/S Population in Urban STUs

City(STUs)	Population (Millions) (1-3-2001)*	No.of Buses in STUs (June-2006)	Bus to population Ratio
Bangalore(BMTC)	5.69	4163	1 : 1367
Chennai(CNI)	6.42	2773	1 : 2315
Delhi(DTC)	12.79	3463	1 : 3693
Mumbai(BEST)	16.37	3394	1 : 4823
Ahmedabad(AMTC)	4.52	685	1 : 6599

* Source:www.citypopulation.de



How does BMTC compare with other urban STU's in India?

BMTC riding along the path of profit

It remains the only profit-making urban transport undertaking in the country

A report published in 'The Hindu', a leading national newspaper with a circulation of over 1.2 million copies

Financial Status of other urban STU's during 2005-06 (P)
(Source:CIRT, Pune)

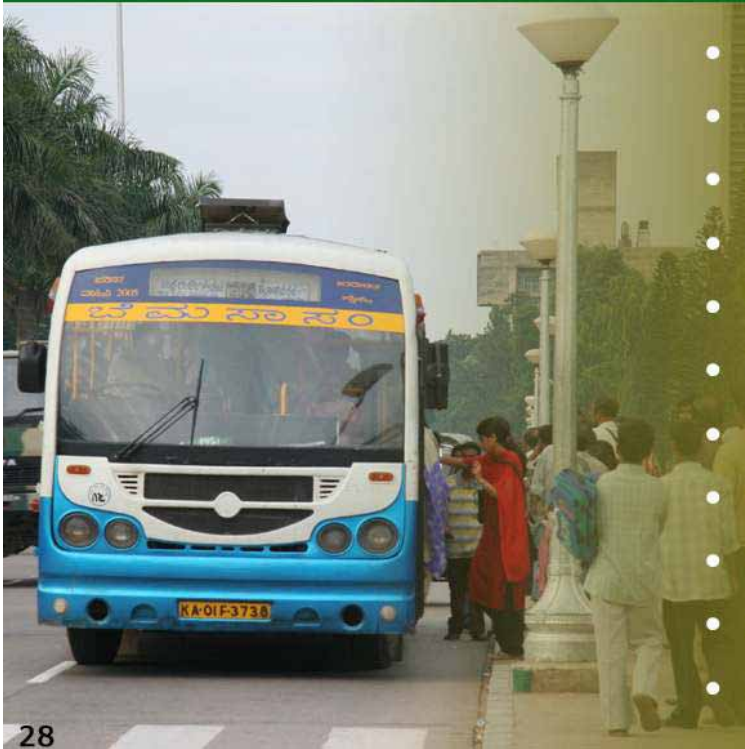
Benchmark	BMTC (Bangalore)	BEST (Mumbai)	DTC (Delhi)	MTC (Chennai)	STC (Calcutta)
Fuel Efficiency (km/ltr)	4.66	3.31	3.94	3.77	3.7
Bus utilisation/day (in km)	217.9	194.2	204.6	208.7	124.1
Effective km per staff/day	45.59	19.2	24.93	32.62	18.66
Staff per bus	5	11.5	9.07	8.15	11.54
Revenue per bus/day (in Rs.)	4,952	7,573	4,055	5,946	2,990
Cost per bus/day (in Rs.)	4,188	9,692	11,064	7,019	7,373
Number of buses in fleet	3,977	3,391	3,467	2,778	1,144
Average age of buses	4.47	5.56	4.7	8.39	6.41
Net profit/loss (Rs. in Million)	1,148.8	-2379.3	-5913.3	-851.6	-1054.1



Its counterparts -- BEST in Mumbai, DTC in Delhi, Calcutta, STC in Kolkata and...
2.7...
rose to Rs. 80.01 crore in 2004-05.
Indeed, BMTC fares are the highest among those of urban transport undertakings in the...



How BMTC has been a profitable public corporation?



- Tax rationalization by government
- Commuter friendly measures
- Public-private partnership
- Increase in commercial revenue
- Rationalization of routes
- Improvement in operational efficiency
- Diesel procurement through tendering
- Tendering of chassis procurement
- Prompt payment discount system
- Better manpower management
- Swapping of loans

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A Big Picture of Goals

1. To promote Sustainable Transportation and Mobility by providing 24 x 7 services
2. To reduce emissions and introduce Eco-audit
3. Up-gradation of technology to increase passenger load factor
4. To bring in Zero accident tolerance to reduce the level of accident rate from the present 0.16 to 0.08 (by 50%) per 1,00,000 kms performed by public transport vehicles
5. To reduce 2 wheeler and 4 wheeler population growth by 50%
6. To increase modal share of BMTC from the 50% or 3.5 million commuters per day to 5 million per day
7. To enhance average speed of buses to 22.5 kmph from the present 17.5 kmph
8. To popularize Direction oriented services through Grid System replacing the present Destination oriented services
9. To bring Clean Development Mechanism (CDM)
10. To improve the service standards to ISO 9001 and Environmental standards to ISO 14001

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- BMTCL has emerged as a fine example of sustainable urban transport model due to its innovative and reform-driven policies.
- Its success is also due its singular focus on commuter satisfaction.
- It has continued to make persistent efforts in every sphere of its activities to further consolidate its position as a sustainable and dependable urban transport system.



Thank You