

# AMDA

bulletin

Association of Municipalities and Development Authorities



Volume V, Issue 1

January-March 2015



Association of  
Municipalities and  
Development Authorities

Dear Members

**O**n behalf of AMDA, I wish all our members A Very Happy and Prosperous New Year.



Naini Jayaseelan  
Chairperson, AMDA

Since its establishment, AMDA has tried to contribute in the field of urban development through its Capacity Building & Training Programmes across the country and also by encouraging members to share and show case their innovative work so that other members can make their civic services more citizen friendly.

AMDA welcomes in its fold **Baddi Brotiwala Nalagarh Development Authority (BBNDA)**, Himanchal Pradesh, **Lucknow Municipal Corporation**, Uttar Pradesh and **Municipal Corporation Gurgaon**, Haryana as members of the AMDA family.

We request all Municipalities & Development Authorities, who are not members to enroll with AMDA to take advantage of its capacity building and other activities.

India's urban population is growing, as are its urban centers. According to the 2011 census there are 4041 statutory towns and 3894 census towns in India. Clearly, there is an urgent need to manage these urban centers effectively and AMDA believes that new technologies and their timely adoption will help the ULB's and Development Authorities to cope with the challenges of rapid urbanization and help Municipalities & Development Authorities in their attempts to provides citizen centric services .

To support this endeavor, last year, AMDA successfully organized two national level workshops in the Surat and Delhi on "**Innovative Initiatives in IT for urban Local Bodies & Development Authorities**". **On this occasion, AMDA also launched a Mobile app solution for Municipalities & Development Authorities which would be offered to the first 10 Municipalities & Development Authorities (who are AMDA members) at a subsidized cost of Rs. 60,000 only till 28th February 2015.** All our members have been informed about this and it is hoped that all our members will take advantage of this initiative by AMDA so as to ensure that citizens can avail of technological solutions to make municipal services more citizen friendly.

The demo of App is available on the AMDA website: [www.amdaindia.org](http://www.amdaindia.org)

Naini Jayaseelan

## inside

i	Editorial	
ii	AMDA Launches a Mobile App for Municipalities & Development Authorities.....	3
iii	Surat Solar Initiatives.....	8
iv	Urban Mobility.....	14
v	7 Cities That Are Starting To Go Car-Free.....	18
vi	AMDA Members.....	20

Chief Editor

Ms. Naini Jayaseelan. IAS  
Chairperson, AMDA

Managing Editor

Mr. Vishal  
Assistant Director  
Capacity Building & Training

## AMDA LAUNCHES A MOBILE APP FOR MUNICIPALITIES & DEVELOPMENT AUTHORITIES

**Mr. Jaideep Kharb**

*Ex. Assistant Director  
Planning & Capacity Building, AMDA*

**A**S a part of its capacity Building programmes, AMDA organized a National Workshop on the 17<sup>th</sup> of September at Delhi “**Innovative Initiatives in IT for Urban Local Bodies & Development Authorities**”, which was preceded by another on the same topic in Surat. This was AMDA’s third workshop on IT; earlier AMDA had organized a conference in Vishakhapatnam on 30-31st October 2013 highlighting the “**Role of IT in Property Tax collection for Municipal Corporations and Development Authorities**”.

CEOs, Chairmans, Vice Chairmans, Mayors, Commissioners, Executive Officers, IT Heads, Town Planners, Superintending engineers of Municipalities & Development Authorities and IT personnel of National Institute of Technologies (NIT) from different parts of the country participated in the workshop.

The main objective of the workshop was to make Municipalities & Development Authorities aware of the various possible contributions of information technology which could be helpful for Urban Local Bodies and Development Authorities to make their decision making faster & efficient.

On this occasion Ms. Naini Jayaseelan, Chairperson AMDA launched a mobile app solution for Municipalities & Development Authorities. All members felt that AMDA as an apex body can act as a catalyst for disseminating technical expertise and knowledge for its member Municipalities & Development Authorities. Therefore, to empower the Municipalities & Development Authorities, AMDA decided to develop a basic mobile application that could enable citizens to avail city level services such as

*contd...*

*In  
2020 there  
will be wide  
spread belief  
that world  
Wide Web is  
less important  
and useful  
than in the  
past and  
Apps are the  
dominant  
factor in  
people' lives.*

*- Internet News*



Inaugural Address by Ms. Naini Jayaseelan, Chairperson, AMDA.



Association of  
Municipalities and  
Development Authorities

- property tax payment,
- birth & death certificates,
- utilities bills payment,
- tender information etc.

conveniently on their smart phones. The app has been developed in association with Ascendia Technology Solutions India Pvt. Ltd, Hyderabad and will be offered to the first 10 Municipalities and Development Authorities (who are AMDA members) at a subsidized cost of Rs. 60,000 only till 28th February 2015.

The intent behind AMDA's developing this innovative modern application is to empower Municipalities & Development Authorities (mainly tier II & tier III towns) with technological solutions for its residents. The mobile application can be further customized as per requirements of different Municipalities and Development Authorities at an enhanced cost.

Chairperson AMDA briefed the participants about the mobile apps and intimated that

AMDA, being a non-profit making organization, would charge a basic minimum development cost from Municipalities & Development Authorities. She added that with the help of this apps, citizens could click a photo using their smart phones and send a complaint through the app to the concerned Municipalities and Development Authorities and also avail of property tax payment and other facilities on their smart phones.

Ascendia's Chief Managing Director, Mr. Ashwini Suman explained the detail features of this mobile app and also showcased the future road map of the app. He informed that the Municipalities & Development Authorities can subscribed this app simply by sending its consent by letter, email or fax.

Several officials participated from more than 15 Municipalities and Development Authorities also gave presentation on IT initiatives operationalised by their respective authorities/state. Mr. Arun Kumar, Director IT,



Chairperson AMDA Launching AMDA's Mobile app

*The future of  
mobile is  
incremental  
innovation with a  
transformational  
import.*

*- Reija Pold*

from Delhi Municipal Corporation, Mr. Nikunj Kumar Johari, Head IT, from Ghaziabad Development Authority, Mr. Sanjay Sharma, General Manager IT, Haryana Urban Development Authority, Mr. Vasantha Kumar, Director, Geospatial Delhi Limited, Mr. Sameera Kumar, Transport Researcher, Clean Air Asia and Mr. Ashok Kumar & Jitendra Yadav ICICI bank shared valuable information about the usefulness of IT in offering citizen-centric services.

The participants appreciated the program and were of the unanimous view that more such programs be organized by AMDA to raise awareness on use of IT for municipal services.

Feedback performa were circulated for obtaining the opinion of the participants on the course content, quality of reading material, presentation by the speakers, usefulness of the programme, benefits of interaction with fellow participants etc. The

feedback received was positive, as participants appreciated the course content and found the interaction interesting. They were, however, of the view that a few more topics on best practices could be included and the duration of the programme should be extended upto 2-3 days. They also suggested of such programmes be frequently organized.

Copies of all presentations, along with a CD of workshop photographs, have since been sent to all the participants and all AMDA members.

#### ABOUT MOBILE APP:

AMDA's mobile application has been developed to facilitate the citizens in registering their grievances, requesting emergency extinguishing services medical, police or fire, sensitizing citizen on environmental issues and surroundings of the local city government and even to tourists to locate places of interest. People can now pay their property tax and utilities bills, any time,

*AMDA will provide this app to first 10 Municipalities / Development Authorities at subsidized cost of only Rs 60,000/-*



Participants at the workshop on 17<sup>th</sup> September, 2014



Association of  
Municipalities and  
Development Authorities

*Bhopal Municipal Corporation with a vision to improve quality life through better administration and citizen services has implemented solutions from SAP to automate and centralize public service offerings*

*- SAP News*



Participants in the workshop

anywhere. Users can send pictures of a neglected site to the concerned authority using their smart phone so, that suitable steps can be taken. Primarily the app will be available in English language but can be modified in a regional language. Application and Customer Relationship Management (CRM) platforms support all major regional languages including Hindi, Punjabi, Marathi, Urdu, Tamil, Telugu, Gujarati, and Bengali etc. People may notify progress through automatic notifications via email or mobile messages.

### OVERVIEW OF MOBILE APPLICATION

The AMDA mobile app allows people to report problems to the municipalities such as lack of cleanliness in their locality, street littering, stray animals, dirty public toilets, damaged footpaths, blockage in sewer lines, and breakage in water supply lines, smoking & drinking at public places etc. to the respective authority for necessary action. It also connects citizens to local government authorities for providing emergency services such as police,

ambulance or fire brigade, together with locational details through Geographical Positioning System (GPS). Local authorities can also send warning messages to the citizens in the event of an emergency, or announce public messages such as one regarding the organization an event, or the declaration of a public holiday, or even give information on an impending heavy rain, flood, etc.

#### Mobile app Features:

- 1.1 Payment's (Property Tax, Dues, Installments, Fees etc.)
- 1.2 Water Meter Details and Payment
- 1.3 Birth and Death Registration details
- 1.4 Tenders information
- 1.5 Complaint
- 1.6 Feedback
- 1.7 Where Can I
- 1.8 About us
- 1.9 Shops and Establishments
- 1.10 Institutions
- 1.11 Weather information
- 1.12 Emergency Toolkit

Users can log in through social media platforms such as Facebook, LinkedIn, Mail ID or Twitter, thus eliminating the need for any separate login ID. The automatic data upgradation facility will be provided on the

servers. This site offers an excellent dashboard data with visualize aids to enable better understanding of the current state of city or ward issues by the masses. The status of personal enquires and progress made by local government department can easily be tracked.

#### App Subscription Fee to Municipalities & Development Authorities:

Subscription Cost for the 1 <sup>st</sup> 10 ULBs and Development Authorities			
S. No.	Description	AMDA Members	Non-Members
		Cost (INR)	Cost (INR)
1	Mobile App and CMS ( <b>One time cost</b> )	60,000	2,00,000
2	Data Integration and App Customization ( <b>One time cost</b> )	50,000	70,000
3(a)	Maintenance for 2 Years	10,000/Month	10,000/Month
(b)	Maintenance for 2 years with separate cloud based hosting	15,000/Month	15,000/Month

**Note: Service charges applicable as per the Government of India rules**

Subscription Cost for the 11 <sup>th</sup> and subsequent ULBs and Development Authorities			
S. No.	Description	AMDA Members	Non-Members
		Cost (INR)	Cost (INR)
1	Mobile App and CMS ( <b>One time cost</b> )	1,00,000	2,00,000
2	Data Integration and App Customization ( <b>One time cost</b> )	70,000	70,000
3(a)	Maintenance for 2 Years	10,000/Month	10,000/Month
(b)	Maintenance for 2 years with separate cloud based hosting	15,000/Month	15,000/Month

**Note: Service charges applicable as per the Government of India rules**

At present 78 Municipalities & Development Authorities are enrolled with AMDA. For taking benefits of AMDA's future welfare activities please enroll your organization. The membership fee details are given in table below:

Membership Categories	Metros	Non-Metros
Life Membership Fee (Rs.)	6.00 lakh	3.00 Lakhs
10-Year Membership Fee (Rs)	3.00 lakh	1.50 Lakhs

*Karnataka  
launches  
country's first  
multi-mode  
mobile  
governance*

*- Press Trust of India*



Association of  
Municipalities and  
Development Authorities

*Every time you  
admire something  
in nature. It's a  
prayer to the  
Creator.*

*- Vernon Harper*

## SURAT SOLAR INITIATIVES

**Mr. H. Patel**

Executive Engineer (Ele)  
Light & Energy Efficiency Cell.  
Surat Municipal Corporation, Surat

**U**rbanization and economic development are leading to a rapid rise in energy demand in the urban areas of our country causing numerous Green House Gases (GHG) emissions. Several Indian cities and towns are experiencing rapid growth in the electricity demand. The local governments are finding it increasingly difficult to cope with this rapid rise in demand and as a result most of the cities and towns are facing electricity shortages.

### What is Solar Energy?

Solar energy is the harnessed sunlight and heat obtained using a range of ever-evolving technologies such as solar heating, solar photovoltaic appliances, solar thermal energy, solar architecture and artificial photosynthesis. Solar energy is a clean renewable resource with no carbon emission and holds tremendous potential for country-wide production of clean energy.

With the aim of reducing dependence on conventional sources of energy to meet this rising demand, a Solar City programme has been initiated by the Ministry of New and Renewable Energy (MNRE), Government of India (GoI).

### SELECTION OF CITIES TO DEVELOP AS SOLAR CITY:-

The city is identified based on city population, potential and commitment for adoption of renewable energy sources, energy conservation initiatives already under taken by the city council, the local administration, private developers, the willingness of the

### What is a Solar City?

The Solar City aims at a minimum 10% reduction in projected demand of conventional energy at the end of five years, through a simultaneous attainment of enhanced supply from renewable energy sources in the city and implement energy efficiency measures.

In a Solar City, all types of renewable energy based projects like solar, wind, bio mass, small hydro etc. will be installed along with the execution of other energy efficiency measures depending on the need and resource availability in the city.

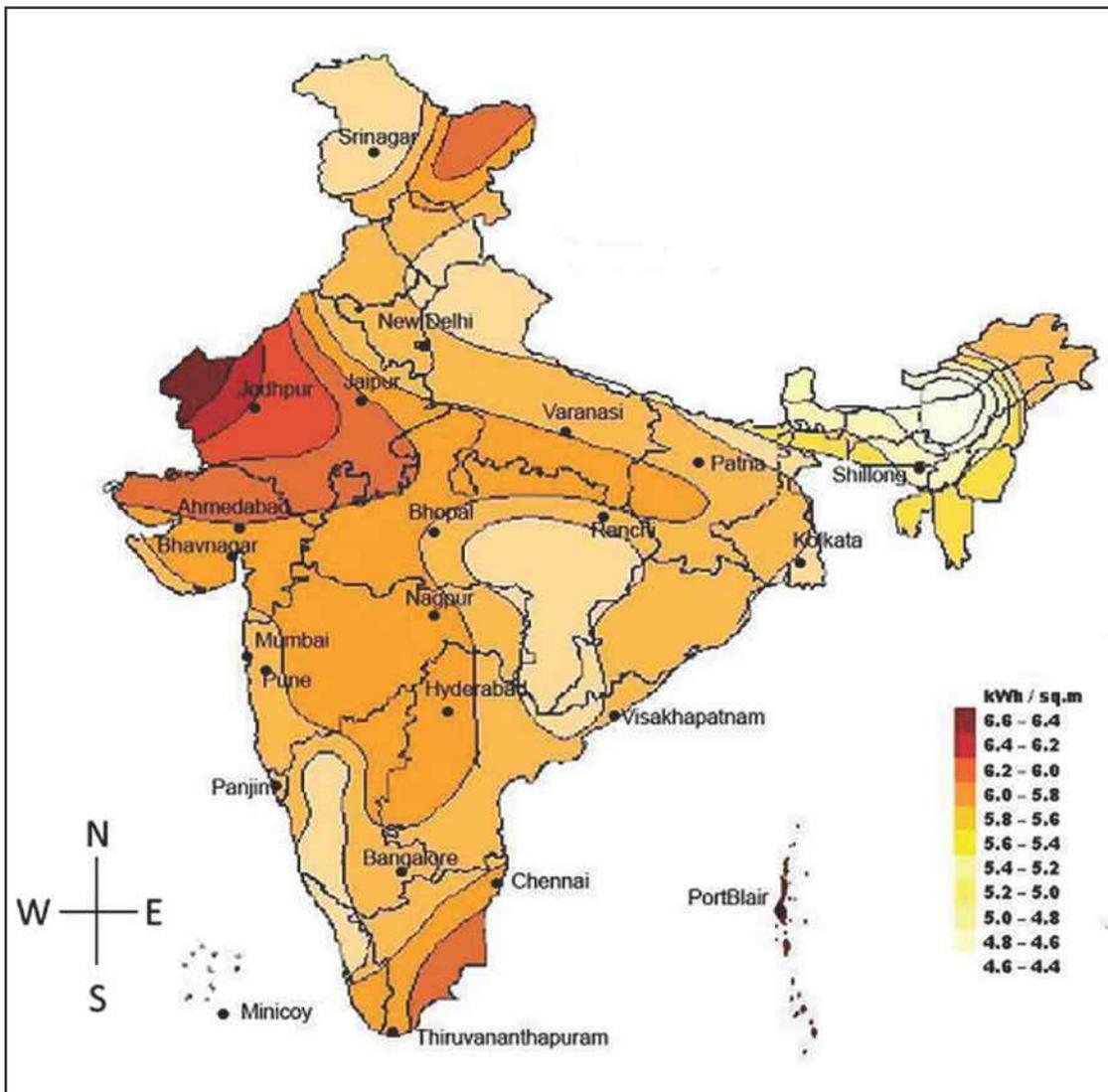
masses in promoting the use of renewable sources of energy and energy conservation, deploying renewable energy technologies, and carrying out necessary activities initiated.

The cities may have a population between 0.5 lakh and 50 lakh. Relaxation will be considered for special category states including the islands, the Union Territories, the North East States and others states that were previously excluded by geographical and political boundaries.

### What is the master plan of Solar City?

The master plan of the city will include the base line for energy consumption, demand forecasting, sector-wise strategies and an action plan for implementation of renewable energy projects so as to mitigate the fossil fuel consumption in the city. It will contain detail of the identified project sites to develop the project proposals.

Source: MNRE, Government of India



Solar Insolation map of India

A total of 60 cities and towns have been proposed to be supported for development as Solar Cities during the 11th Plan period. Minimum one city and maximum five cities will be supported in each state by the Ministry.

### CITIES TO BE DEVELOPED AS SOLAR CITIES

In-principle, approval is given to those cities which fulfill the requirements of the various criteria, including commitment for undertaking renewable energy installations and implementing energy efficiency measures and submit their proposals in the prescribed format. The proposals received and the cities

identified by some of the State Governments so far are 60 cities, which have been mentioned in the above table.

The Ministry has already initiated various programmes in the urban sector for promoting widespread use of solar water heating systems in houses, hotels, hostels, hospitals and industries of deployment of Solar Photovoltaic (SPV) systems / devices in urban areas for demonstration for awareness generation establishment of 'Akshya Urja Shops' designing of Solar Buildings and promotion of urban and industrial waste/ biomass to energy projects.

*Solar power is  
the last energy  
resource that isn't  
owned yet nobody  
taxes Sun yet.*

- Bonnie Raiff



Association of  
Municipalities and  
Development Authorities

*Next gen cities  
conclave with  
focus on  
technology for  
people centric  
urban development  
is being organized  
in different cities  
of India*

*-Governance now*

SN	State	Cities for which in-Principle approval given	SN	State	Cities for which in-Principle approval given
1	Andhra Pradesh	Vijaywada, Mahbubnagar	14	Madhya Pradesh	Indore, Gwalior, Bhopal, Rewa
2	Assam	Guwahati Jorhat	15	Manipur	Imphal
3	Arunachal Pradesh	Itanagar	16	Mizoram	Aizawl
4	Chandigarh	Chandigarh	17	Nagaland	Kohima, Dimapur
5	Chhattisgarh	Bilaspur Raipur	18	Delhi	New Delhi (NDMC area)
6	Gujarat	Rajkot, Gandhinagar, Surat	19	Orissa	Bhubaneswar
7	Goa	Panji City	20	Punjab	Amritsar, Ludhiana, SAS Nagar (Mohali)
8	Haryana	Gurgaon, Faridabad	21	Rajasthan	Ajmer, Jaipur, Jodhpur
9	Himachal Pradesh	Shimla Hamirpur	22	Tamil Nadu	Coimbatore
10	Karnataka	Mysore	23	Tripura	Agartala
11	Kerala	Thiruvananthapuram, Kochi	24	Uttarakhand	Dehradun, Haridwar, Rishi Kesh, Chamoli – Gopeshwar
12	Maharashtra	Nagpur' Thane' Kalyan-Dombiwali, Aurangabad	24	Uttar Pradesh	Agra, Moradabad, Allahabad
		Nanded, Shirdi	25	West Bengal	Howrah, Madhyamgram, New Town Kolkata
13	Pondicherry	Pondicherry	26	Jammu & Kashmir	Leh

Source: (Energetica India, June-2012)

### INTERNATIONAL EXAMPLE:

Germany's solar power industry has always been a world leader, but since the country closed eight nuclear power plants after the Japanese disaster and announced the establishment of the remaining nine by 2022, the pressure to find alternative energy has mounted. Other sources such as wind and biomass are expected to pick up the slack, but solar power has never been more important.

Recently, Germany fed a whopping 22 gigawatts of solar power per hour into the national grid, setting a whole new record by meeting nearly half of the country's weekend power demand. After the Fukushima disaster, Japan decided to shut down its

nuclear power stations and Germany followed suit after public agreement. This seems to have paved way for greater investment in solar energy projects. The Renewable Energy Industry (IWR) in Muenster announced that Saturday's solar energy generation met nearly 50 percent of the nation's midday electricity needs and was equal to 20 nuclear power stations functioning at full capacity.

### GUJARAT SOLAR POWER POLICY -2009:

Gujrat is India's pioneer state in harboring renewable sources of energy. It was the first state to launch its own solar policy in 2009, a year before the National Solar Mission (NSM) was announced. The initial target was to achieve 500 mega watt of installed capacity

### Growth of Solar Energy In India

*The Indian government has acknowledged the importance of solar energy for the country's economic growth. Solar energy has the power to transform urban and rural India.*

*Government of India launched a National Solar Mission in 2010. The initial growth has been dramatic, albeit from a tiny base. From less than 12 MW in 2009, solar-power generation in the country grew to 190 MW in 2011, and in 2013 it has grown to 430 MW.*

*However there still a long way to go before the goal of increasing solar-power generation to 20 gigawatts by 2020 is reached. Across the country, there are still thousands of villages receiving plenty of sunlight where a huge scope for creation of energy is being wasted, if ray's of the sun are not tapped.*

by the end of a specified period. Gujarat Energy Development Agency (GEDA) and Gujarat Power Corporation Limited (GPCL) have been appointed as nodal agencies for the facilitation and implementation of the policy. Gujarat Solar Power Policy is the only policy, which is awarding projects with a fixed FiT on a first-come-first serve basis. This has resulted in the allocation of a number of projects to in-experienced or unknown developers.

### ABOUT SURAT CITY:

Surat, the financial capital of Gujarat, is one of the fastest growing Indian cities in terms of economic prosperity. Located on the west coast of India, it falls in the sub-humid zone a hot and humid climate owing to its proximity to the Arabian Sea. Surat is blessed with good sunshine throughout the year. The average annual insolation in the city is 5.22 kW/ m<sup>2</sup>/ day, a number promising the generation of large amount of solar energy.

### BACKGROUND

The government of India plans to develop 60 solar cities during the 11th Five Year Plan to meet the sky-rocketing electricity demand and promote the ubiquitous use of renewable energy sources. Surat, Rajkot and Gandhinagar are the three cities in Gujrat that have been selected under this initiative.

The growth of the city has been phenomenal over last couple of decades between 1991-2001. The city population increased to 24,33,835 from 14,99,560, giving a decadal population rise of more than 62 percent. The present population of city has reached 5 million. Due to the expanding population and the rise in industrial waste & business production that is bound to lead to rise in demands for water supply, sewage disposal, street lighting, even the provision of basis services is becoming increasingly challenging to provide.

Consequently, the annual electricity bill has increased by 245 percent to Rs. 39.54 crores in 2000-01 from Rs. 11.46 crores in 1996-97. Water supply, sewage disposal & street lighting bills accounting for more than 92 percent of total bill of SMC.

***During 2001, the Municipal Commissioner had visited the United States of America for a study tour following which he created an***

#### India's First Solar Park

*On December 29th 2010, India's first solar park was inaugurated at Charanaka in Patan district of northern Gujarat. So far, land worth 176MW to 16 companies has been allotted in the solar park for projects the first and second phases of establishment. The total capacity of the solar park is 500MW with 30,000 sq. m per MW land allotted to Solar Thermal and 20,000 sq. m per MW of land allotted to PV projects.*

*SMC had created energy efficiency cell in October 2001 for dedicated efforts toward energy efficiency in municipal services having targets of reducing conventional energy consumption by 15%.*



Association of  
Municipalities and  
Development Authorities

*It's time for the  
human race to  
enter the solar  
system*

*– Dan Quayle*

***Energy Efficiency Cell in Oct-2001 to recognize dedicated efforts towards realizing energy efficiency in providing Municipal Services, with the ultimate goal of reducing conventional energy consumption by 15 percent.***

#### **SMC ENERGY EFFICIENCY INITIATIVES:**

Surat Municipal Corporation (SMC) is very keen on using renewable sources of energy generation such as wind, bio-gas, municipal solid waste etc. SMC has already installed 3 MW capacity Wind Power Plant and total 3.5 MW capacity of bio gas power plants running on gas produced from liquid sewage waste. More than 50 MW capacity wind power plants have been set up by industries in 2011-12 to 2012-13. SMC is installing a 8.4 MW wind power plant in Jamnagar district and the establishment of 100 KW SPV based power plant has been commissioned at the Science Centre. Installation of total 2.3 MW bio-gas based power plants is also going on. Moreover, the work of installation of 16.25 MW capacity solid waste based power plant has been entrusted.

The Surat Municipal Corporation (SMC) has prepared a Solar Master Plan supported by the Ministry of New and Renewable Energy to develop Surat into a 'Solar City'. Officials have stated that the plan will include a database of electricity consumption

#### **Hindrances:**

- Scarcity of land
- Very slow progress Rate
- Lack of technological awareness
- Very high primary cost
- Only latent potential
- Constrained government support

throughout the city and the estimated carbon emission levels.

The goal of a minimum of 10 percent reduction in the projected total demand of conventional energy at the end of five years has been set, which will be achieved by the energy by the energy implementing of efficient measures and energy generation from renewable energy installations.

#### **Reasons behind the initiative:**

- ❖ Energy conservation activities are carried out only by the concerned departments. Dedicated and concentrated efforts on energy conservation are absent because of unavailability of dedicated staff.
- ❖ Electrical energy is the prime factor for providing basic services of water supply, drainage and street lighting. This poses a big challenge for SMC, as the sources of income are limited but the electricity demand and its price increasing year after year.
- ❖ Electricity bill increased almost 3½ times during the 1996-97 to 2000-01 period. Noting this continual increment, SMC realized that energy efficiency is the key factor in meeting this challenge.
- ❖ The rate of rise was enormous due to increase in service volume and limited operational efficiency of the used electrical machineries and equipment.

#### **Outcome of Initiative:**

Energy conservation activities through Energy Efficiency Cell are done by all Municipal Corporations in Gujarat and GEDA. Considering the magnitude of benefits, such cells can be created in other government and semi-government organizations. The

**Cumulative Saving/ Benefits {Aug-2014}**

Department/ Activity	Energy Saving/ Benefits		Reduction in Greenhouse Gases Emission
	KWH	Rs.	(Tones)
Water Supply, Street Lighting & Others	165,222,363	692,258,758.00	138,787
Bio-Gas Based Power Generation (3.5 MWe)	42,417,092	200,646,226.00	242,625
Net Wind Power Generation (3 MW)	27,909,684	150,761,700.00	23,444
Net Wind Power Generation (8.4 MW)	20,100,315	110,910,809.00	16,884
Net Solar Power Generation (100 kWp)	210,786	2,266,466.00	177
Net Solar Power Generation (750 kWp)	419,426	4,852,759.00	352
<b>Total</b>	<b>256,279,666</b>	<b>1,161,696,718.00</b>	<b>402,310</b>

Source: Surat Municipal Corporation

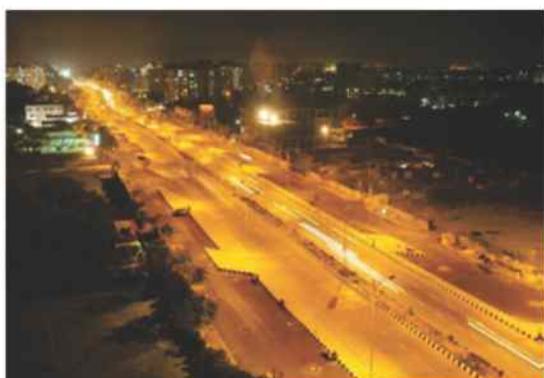
cumulative saving and greenhouse gas emission reduction by SMC are given as follow:

**Awards and Recognitions for Use and Development of Renewable Energy:**

1. An activity named “Re-engineering of Water Supply Routes for Effective Energy Savings” was among total 16 finalists in National Water Urban Awards 2008.
2. Water supply management & energy generation from bio-gas was awarded the second price under the category of Technical Innovation for National Urban Water Awards 2009.

3. Surat Municipal Corporation had been awarded a “Certificate of Merit” in the year 2011 in the Municipality Sector by the Bureau of Energy Efficiency for Use of Wind Power for Water Treatment Plants.

The Master Plan categorizes buildings into residential apartments, commercial complexes, industries, individual houses, corporate establishments and buildings of the government and SMC. In the future when all master plan proposals will be implemented, we sincerely hope that, the goal of energy conservation will be realized.



LED Street lights at Gaurav Path



100 kWp Solar Photovoltaic Power Plant at Science Centre

*Uninor launches  
'Mera Sheher  
Swachh Sheher'  
campaign for  
driving  
cleanliness in  
Varanasi*

*- Times of India*



Association of  
Municipalities and  
Development Authorities

*You can tell how  
good a society is  
by how much of  
its garbage is  
recycled.*

*- Tahani*

## URBAN MOBILITY

**Mr. Vishal**

Asst. Director  
(Capacity Building & Training)  
AMDA

Indian cities are experiencing rapid urbanization leading to increased travel demand. It has become imperative that the mobility of residents and goods should be planned appropriately to minimize congestion and other environmental impacts on the cities. Achieving better mobility is one of the great challenges of our society and a necessity for urban India for achieving better quality of life of urban citizens.

"Urban Mobility is a system that incorporates economic viability, environment stability, and social equity by meeting the needs of transport and land use of both current and future generations in an efficient manner".

### MOBILITY AND ACCESSIBILITY

Mobility and accessibility are two main components of transportation system. Mobility between origin and destination is measured as the distance travelled by public in person miles travelled, goods in ton-miles travelled and vehicle trips for both public and freight, and is enhanced by increasing the speed and mileage of the vehicle. In other words the demand for travel is the distance travelled by an individual between the origin and the destination using a specific transport mode, that includes a time dimension (as travel time, waiting time and parking time) opportunities (in terms of income, travel budget, education level etc.) and an assurance dimension (in terms of reliability, level of comfort, accidents, risks, and others). Any confrontation of supply and demand for opportunities because of restricted capacities

at any one destination results in greater mobility need and disutility.

On the other hand, accessibility is a measure of supply, namely, potential mobility, and is not a descriptor of user behaviour. Accessibility is also the management of travel demand across different income groups and gender that is achieved by providing transport infrastructural and logistic facilities to meet the mobility demand. The supply of infrastructure includes location of activities and various transport infrastructure and service characteristics such as maximum travel speed, manylanes, public transport schedules, and travel costs. Traditionally, improvements in accessibility were obtained by improvements in transport supply, particularly through the expansion of infrastructure (roads and rail) and associated services. In recent years, such accessibility gains attained by increasing inefficient (automobile-based) mobility are deemed undesirable and unsustainable. Instead accessibility improvements did through better land use planning policies such as mixed-use developments and job-housing balance, as well as by temporal policies such alternate work schedules, are considered socially more efficient. In addition, non-motorized transport system is considered sustainable along with compact and mixed land use that helps to increase walk able communities to reduce the amount of travel required to reach respective destinations.

### **Issues of urban transport that should be taken into account**

Several authors have mentioned various issues from economic, social and

environment perspective that are generated by the movement of goods and people. Most of these issues arise because of excessive use

of personalized vehicles. The issues are compiled in the table below.

**Table 1: Issues of Urban Transport System**

Economic	Social	Environmental
Traffic congestion	Mobility for vulnerable groups	Air pollution
Infrastructure costs	Human health impacts	Habitat loss
Consumer costs (fares, automobiles, etc.)	Community cohesion and street life loss	Hydrologic impacts
Mobility barriers	Community livability	Depletion of non-renewable resources
Accident damages	Aesthetics	Noise
Productive rural land loss	Isolation in suburbs	Urban sprawl
Urban land loss to bitumen surface	Public safety	Storm water run-off problem
Time loss due to sprawl		Photo chemical smog, lead and benzene

Source: (Litman & Burwell); (Newman & Kenworthy)

## SUSTAINABILITY AND MOBILITY

The travel demand of a settlement is governed by various factors like demographics, economic activity, vehicle ownership and maintenance cost, public transit availability and cost, level of congestion, non-motorized transport use conditions, vehicle sharing options, land use development patterns, and health and environmental concerns. Furthermore, urbanization, a by product of increased economic activity has consequences on the rate of motorization, thus increasing the travel demand and need for transport infrastructure and services. The increased travel demand of India can be seen through rise in the number of registered vehicles from 55 million in 2001 to 142 million in 2011, and with this the share of transport sector on GDP has also increased from 3.9% in 2001 to 4.7% in 2011. Whereas, during the same period the growth rate of roads was 3.4% as compare to 9.9% of vehicular growth rate, thus, creating a gap between the need for

transport infrastructure and supply of the same. This rate of motorization poses several mobility challenges like enough road capacity, low levels of clean air, high fatality rates, and lower access conditions.

**Table 2: Compound Annual Growth Rate (in %) of Vehicles and Road Length**

Period	Vehicles	Roads
1951-1961	8.1	2.7
1961-1971	10.9	5.7
1971-1981	11.2	5.0
1981-1991	14.8	3.0
1991-2001	9.9	2.1
2001-2011	9.9	3.4

Source: MoRTH

**Note:** Roads include – National Highways, State Highways; Other Public Works Department roads, Rural and Urban roads and various projects.

*Man shapes himself through decision that shape his environment.*

- Rene Dubos



Association of  
Municipalities and  
Development Authorities

*Sustainability  
is about  
ecology,  
economy and  
equity*

*- Ralph Bicknese.*

*Vehicles include-Two-Wheelers, Cars, Jeeps, Taxis, Buses, Goods vehicles, Tractors, Trailers, Three-wheelers (passenger vehicles/LM Vs) and other miscellaneous vehicles which are not classified separately.*

Therefore, sustainable urban mobility provides an alternate concept to understand the complex movement needs of public and goods in a city and amend the links between transport and land use. For this alternative approach, emphasis is given to the future of cities with respect to existing infrastructure (i.e.reality), desirability (what is the need and expectation of the community) and role of transport in order to meet the above expectations of the city. Based on empirical research, Banister (2008) quantifies sustainable city parameters with a population of 50,000 and more, with medium density of 40 persons per hectare, and mixed land use developments representing public transport accessibility or public transport mode used significantly. Several settlements of the above mentioned size and transport characteristics helps in creating an urban agglomeration with amenities in close proximity and of a scale which requires least use of personalized vehicles. Essential steps are required to achieve sustainable mobility, which includes reduction in the amount of travel, number of trips per person, and travel distances; increase in modal split travel and finally the use of efficient transport system.

An alternative approach which includes the social dimension, accessibility, focus on people (either walking or in vehicle),localin scale, street as a space and not just a means to travel, change in transport hierarchy with a bottom up approach for m odes of transport i.e. preference to cyclist and pedestrians, integrating people and traffic, travel management, and reduced travel times. Further adding to the list is a holistic approach

for the city rather than just traffic, scenario development & modelling, integration of social and environmental concerns, type of travel (i.e. derived demand and valued activity), management of mobility, reducing and slowing the movement, travel time reliability, reasonable travel times and integration of people and traffic.

### **SUSTAINABLE MOBILITY: A BROADER CONCEPT**

Sustainable mobility is not only about reducing one's own travel footprint but also to reduce the same of the society, therefore, a sustainable transport system should not only look into individual's mobility need but also the mobility need of the society at large.

Sustainable transport system goes beyond the concept of consuming lesser amounts of fossil fuels to improve energy security and pro actively work towards lowering carbone missions. It is about taking holistic approach by considering economy, society, and environment along with the mobility and accessibility requirement of the people.

The broader concept of sustainable urban mobility should incorporate the land use planning and sectorial allocation of land for different activities. The proper allocation of land for different activities will help in reducing the travel demand through reduced trip frequency and trip distance. The compactness of the various activities will also promote walk and non-motorized transport. The idea of eco-mobility in cities generates here.

### **ECO MOBILITY IN CITIES:**

Concept of Eco-mobility promotes integrated, socially inclusive, and environment-friendly transport options for city traveling. The approach behind eco-mobility is promotion of public and non-motorized transport modes in a city to generate lower emissions as

compared to the personal automobiles powered by fossil fuels.

In India, initiatives like development of integrated multi-mode transit systems to reduce pollution by improvements in public transit have already started and this is going to give a great support to eco-mobility. Electric vehicles & Non-Motorized Transport can also be helpful in this drive.

We also have to learn lessons from best practices that can be replicable in the Indian context. Concept of walkability, non-motorized transport Infrastructure, and pedestrian safety as well as the concept, vision, approach, perceived challenges for promoting eco-mobility in Indian cities need immediate attention for sustainable urban mobility.

## CONCLUSION

Achieving a broader approach for sustainable mobility has become complex in case of countries like India where because of the gap

between rich and poor there is a need for varied requirements of mobility as well as accessibility. In most cases, the poor becomes a captive non-motorized transport user there by becoming most vulnerable to safety issues. In addition to the above social constraint here is considerable amount of gap between the need of transport services and infrastructure as compared to the requirement for the same.

Thus we need to have a concept of urban mobility that incorporates the role of transportation and land use in meeting the travel demands of people along with a sustainable approach. To design the future action plan in the current environment, transport system cannot be looked in isolation where there are significant repercussions of it on society, economy, and environment. Integrating land use with transport infrastructure will give a holistic approach towards sustainable mobility.

*Chennai emerged  
as the best  
overall city in  
the country at  
the second  
edition of India  
Today Best  
City Award  
2014.*

*- India Today.*



**Association of Municipalities and Development Authorities**

**Now**

**Advertise vacancies of Urban Local Bodies & Development Authorities in the AMDA Bulletin**

AMDA offers an unique opportunity to advertise Job openings in AMDA Bulletin. This Service is available **free of cost** to all AMDA members.

*Kindly send the advertisements latest by 28/02/2015 for publication in the next AMDA Bulletin.*



Association of  
Municipalities and  
Development Authorities

*Urban planners  
are finally  
recognizing that  
streets should be  
designed for  
people*

## 7 CITIES THAT ARE STARTING TO GO CAR-FREE

**A**fter over a hundred years of living with cars, some cities are slowly starting to realize that the automobile doesn't make a lot of sense in the urban context. It isn't just the smog or the traffic deaths; in a city, cars aren't even a convenient way to get around.

Traffic in London today moves slower than an average cyclist (or a horse-drawn carriage). Commuters in L.A. spend 90 hours a year stuck in traffic. A U.K. study found that drivers spend 106 days of their lives looking for parking spots.

Now a growing number of cities are getting rid of cars in certain neighborhoods through fines, better design, new apps, and, in the case of Milan, even paying commuters to leave their car parked at home and take the train instead.

Unsurprisingly, the changes are happening fastest in European capitals that were designed hundreds or thousands of years before cars were ever built. In sprawling U.S. suburbs that were designed for driving, the path to eliminating cars is obviously more challenging. (And a few car-loving cities, like Sydney, Australia, are going in the other direction, and taking away pedestrian space on some downtown streets so there's more room for cars).

Here are a handful of the leaders moving toward car-free neighborhoods.

### MADRID

Madrid has already banned most traffic from certain city streets, and this month, the car-free zone will expand even further. Stretching over more than a square mile, the area will still allow neighborhoods its own residents to drive, but anyone else who enters will be hit with a fine over \$100. It's one step in a larger plan to completely pedestrianize central Madrid in the next five years. Twenty-four of the city's busiest streets will be redesigned for walking, not driving. Before the street layouts change, cars will also be discouraged in another way: Now the dirtiest, most polluting cars in the city have to pay more to park.

### PARIS

Last year, when smog levels spiked in Paris, the city briefly banned cars with even-numbered plates. Pollution dropped as much as 30% in some areas, and now the city plans to start permanently discouraging cars. In the city centre, people who don't live in local neighborhoods won't be able to drive in on weekends, and that rule could soon roll out to the whole week.

By 2020, the mayor plans to double the number of bike lanes in the city, ban diesel cars, and limit certain high-traffic streets to electric cars and other ultra-low-emission vehicles. The number of drivers in the city is already starting to drop. In 2001, **40%** of Parisians didn't own a car, now that number is **60%**.

### CHENGDU

A new satellite city planned in Southwest China could serve as a model for a modern suburb: Instead of a layout that makes it necessary to drive, the streets are designed so any location can be reached by 15 minutes on foot.

The plans, designed by Chicago-based architects Adrian Smith and Gordon Gill, don't call for completely banning cars, but only half of the road area will allow motorized vehicles. The city will also connect to the larger, nearby city of Chengdu with public transit. Out of an expected population of 80,000 people, most will be able to walk to work in local neighborhoods. The project was originally planned for completion in 2020, but that may be delayed—it's currently on hold because of zoning issues.

### HAMBURG

Though Hamburg isn't planning to ban cars from its city centre (as has been misreported elsewhere), the city is making it easier and easier not to drive. A new "green network," which will be completed in the next 15 to 20 years, will connect parks across the city, making it possible to bike or walk anywhere. The network will cover 40% of the city's space. The city is also covering

up sections of the infamously crowded A7 autobahn with parks—so neighborhoods that were once hard to cross on foot will soon be more inviting.

**HELSINKI**

Helsinki expects a flood of new residents over the next few decades, but the more people come, the fewer cars will be allowed on city streets. In a new plan, the city lays out a design that will transform car-dependent suburbs into dense, walkable communities linked to the city centre by fast-moving public transit. The city is also building new mobility-on-demand services to streamline life without a car. A new app in testing now let's citizens instantly call up a shared bike, car, or taxi, or find the nearest bus or train. In a decade, the city hopes to make it completely unnecessary to own a car.

**MILAN**

The smoggy city of Milan is testing a new way to keep cars out of the city centre: If commuters leave their vehicles at home, they'll get free public transit vouchers. An Internet-connected box on the dashboard keeps track of a car's location, so no one can cheat and drive to work. Each day someone's car stays at home, the city

sends a voucher with the same value as a ticket on the bus or train.

**COPENHAGEN**

Forty years ago, traffic was as bad in Copenhagen as any other large city. Now, over half of the city's population bikes to work every day—nine times more bike commuters than in Portland, Oregon, the city with the most bike commuters in the U.S.

Copenhagen started introducing pedestrian zones in the 1960s in the city centre, and car-free zones slowly spread over the next few decades. The city now has over 200 miles of bike lanes, with new bike superhighways under development to reach surrounding suburbs. The city has one of the lowest rates of car ownership in Europe.

None of these cities are planning—yet—to go completely car-free. And it's possible that may never happen; it's likely that future cities will have at least a small fleet of self-driving electric cars on hand that can eliminate some of the current challenges around parking, congestion and pollution.

**But it is also clear that urban planners are finally recognizing that streets should be designed for people, not cars.**

*In 2030 cities will generate more than 70% of India's GDP*

*- McKinsey report*

Source: [www.fastcoexist.com](http://www.fastcoexist.com)



Urban Mobility Beyond Cars



Association of  
Municipalities and  
Development Authorities

AMDA believes that the best way to learn is to learn together. We aspire to improve the service delivery of civic amenities, like water and sewage, sanitation, urban transport etc. Here is a list of all our members along with websites of their respective organizations. Do visit these websites, as they may offer your organization immense possibilities for improvement in the provision of civic services your organization offers.

S.No.	AMDA Members	Homepages
<b>DEVELOPMENT AUTHORITIES</b>		
1.	Hyderabad Metropolitan Development Authority	<a href="http://www.hudahyd.org">www.hudahyd.org</a>
2.	VGTM Urban Development Authority	<a href="http://www.vgtmuda.org">www.vgtmuda.org</a>
3.	Visakhapatnam Urban Development Authority	<a href="http://www.vuda.org">www.vuda.org</a>
4.	Kakatiya Urban Development Authority	<a href="http://www.kuda.in">www.kuda.in</a>
5.	Ahmedabad Urban Development Authority	<a href="http://www.auda.org.in">www.auda.org.in</a>
6.	Jamnagar Area Development Authority	<a href="http://www.jada.org.in">www.jada.org.in</a>
7.	Rajkot Urban Development Authority	<a href="http://www.rajkotuda.com">www.rajkotuda.com</a>
8.	Surat Urban Development Authority	<a href="http://www.sudaonline.com">www.sudaonline.com</a>
9.	Vadodara Urban Development Authority	<a href="http://www.vuda.co.in">www.vuda.co.in</a>
10.	Bhuj Area Development Authority	<a href="http://www.bhujada.com">www.bhujada.com</a>
11.	Bhavnagar Area Development Authority	<a href="http://www.bada-bhavnagar.com">www.bada-bhavnagar.com</a>
12.	Haryana Urban Development Authority	<a href="http://www.huda.gov.in">www.huda.gov.in</a>
13.	Bangalore Development Authority	<a href="http://www.bdabangalore.org">www.bdabangalore.org</a>
14.	Bangalore Metropolitan Region Development Authority	<a href="http://www.bmrda.kar.nic.in">www.bmrda.kar.nic.in</a>
15.	Bijapur Urban Development Authority	<a href="http://www.bdabijapur.org">www.bdabijapur.org</a>
16.	Chitradurga Urban Development Authority	<a href="http://www.chitradurga.nic.in">www.chitradurga.nic.in</a>
17.	Thiruvananthapuram Development Authority	<a href="http://www.tridatvm.org">www.tridatvm.org</a>
18.	Greater Cochin Development Authority	<a href="http://www.gcdaonline.com">www.gcdaonline.com</a>
19.	Calicut Development Authority	<a href="http://www.cda@asianetindia.org">www.cda@asianetindia.org</a>
20.	Goshree Islands Development Authority	<a href="http://www.gida_ekm@yahoo.com">www.gida_ekm@yahoo.com</a>
21.	Mumbai Metropolitan Region Development Authority	<a href="http://www.mmrdamumbai.org">www.mmrdamumbai.org</a>
22.	Punjab Urban Planning and Development Authority	<a href="http://www.puda.nic.in">www.puda.nic.in</a>
23.	Jaipur Development Authority	<a href="http://www.Jaipurjda.org">www.Jaipurjda.org</a>
24.	Chennai Metropolitan Development Authority	<a href="http://www.cmdachennai.gov.in">www.cmdachennai.gov.in</a>
25.	Lucknow Development Authority	<a href="http://www.ldalucknow.co.in">www.ldalucknow.co.in</a>
26.	Kanpur Development Authority	<a href="http://www.kda.co.in">www.kda.co.in</a>
27.	Agra Development Authority	<a href="http://www.ada-agra.com">www.ada-agra.com</a>
28.	New Okhla Industrial Development Authority	<a href="http://www.noidaauthorityonline.com">www.noidaauthorityonline.com</a>
29.	Varanasi Development Authority	<a href="http://www.vdavns.org">www.vdavns.org</a>
30.	Allahabad Development Authority	<a href="http://www.ada.iiita.ac.in">www.ada.iiita.ac.in</a>
31.	Meerut Development Authority	<a href="http://www.mdameerut.org">www.mdameerut.org</a>
32.	Ghaziabad Development Authority	<a href="http://www.gdaghaziabad.com">www.gdaghaziabad.com</a>
33.	Greater Noida Industrial Development Authority	<a href="http://www.greaternoidaauthority.in">www.greaternoidaauthority.in</a>
34.	Bulandshahr – Khurja Development Authority	<a href="http://www.bkdabsr.net">www.bkdabsr.net</a>
35.	Hapur-Pilkhuwa Development Authority	<a href="http://www.hpdaonline.org">www.hpdaonline.org</a>

S.No.	AMDA Members	Homepages
36.	Kolkata Metropolitan Development Authority	<a href="http://www.kmdaonline.org">www.kmdaonline.org</a>
37.	Haldia Development Authority	<a href="http://www.hdaindia.com">www.hdaindia.com</a>
38.	Asansol-Durgapur Development Authority	<a href="http://www.addaonline.org">www.addaonline.org</a>
39.	Siliguri Jalpaiguri Development Authority	<a href="http://www.sjda.org">www.sjda.org</a>
40.	Delhi Development Authority (DDA)	<a href="http://www.dda.org.in">www.dda.org.in</a>
41.	Special Area Development Authority, Gwalior	<a href="http://www.ncrgwalior.nic.in">www.ncrgwalior.nic.in</a>
42.	Greater Mohali Area Development Authority	<a href="http://www.gmda.gov.in">www.gmda.gov.in</a>
43.	Mussorie-Dehradun Development Authority	<a href="http://www.mddaonline.com">www.mddaonline.com</a>
44.	Baddi Barotiwala Nalagarh Development Authority	<a href="http://www.admis.hp.nic.in">www.admis.hp.nic.in</a>
<b>MUNICIPALITIES</b>		
45.	Municipal Corporation of Guntur	<a href="http://www.gunturcorporation.org">www.gunturcorporation.org</a>
46.	Greater Hyderabad Municipal Corporation	<a href="http://www.ghmc.gov.in">www.ghmc.gov.in</a>
47.	Greater Visakhapatnam Municipal Corporation	<a href="http://www.visakhapatnammunicipalcorporation.org">www.visakhapatnammunicipalcorporation.org</a>
48.	Ahmedabad Municipal Corporation	<a href="http://www.amcgujarat.com">www.amcgujarat.com</a>
49.	Vadodara Municipal Corporation	<a href="http://www.vadodaracity.org">www.vadodaracity.org</a>
50.	Rajkot Municipal Corporation	<a href="http://www.rmc.gov.in">www.rmc.gov.in</a>
51.	Surat Municipal Corporation	<a href="http://www.suratmunicipal.gov.in">www.suratmunicipal.gov.in</a>
52.	Bruhat Bangalore Mahanagar Palike	<a href="http://www.bmponline.org">www.bmponline.org</a>
53.	Guruvayur Municipality	<a href="http://www.Guruvayuronline.com">www.Guruvayuronline.com</a>
54.	Bhopal Municipal Corporation	<a href="http://www.bhopalmunicipal.com">www.bhopalmunicipal.com</a>
55.	Indore Municipal Corporation	<a href="http://www.imcindore.org">www.imcindore.org</a>
56.	Municipal Corporation Jabalpur	<a href="http://www.jmcjabalpur.org">www.jmcjabalpur.org</a>
57.	Nashik Municipal Corporation	<a href="http://www.nashikcorporation.com">www.nashikcorporation.com</a>
58.	Kolhapur Municipal Corporation	<a href="http://www.kolhapurcorporation.org">www.kolhapurcorporation.org</a>
59.	Dhule Municipal Corporation	<a href="http://www.dhulecorporation.org">www.dhulecorporation.org</a>
60.	Municipal Corporation of Greater Mumbai	<a href="http://www.mcg.gov.in">www.mcg.gov.in</a>
61.	Coimbatore City Municipal Corporation	<a href="http://www.coimbatorecorporation.com">www.coimbatorecorporation.com</a>
62.	Tiruchirapalli City Corporation	<a href="http://www.trichycorporation.gov.in">www.trichycorporation.gov.in</a>
63.	Tirunelveli City Municipal Corporation	<a href="http://www.tirunelvelicorp.in.gov.in">www.tirunelvelicorp.in.gov.in</a>
64.	Kanpur Nagar Nigam	<a href="http://www.kmc.up.nic.in">www.kmc.up.nic.in</a>
65.	Durgapur Municipal Corporation	<a href="http://www.durgapurmunicipalcorporation.org">www.durgapurmunicipalcorporation.org</a>
66.	North Delhi Municipal Corporation	<a href="http://www.mcdonline.gov.in">www.mcdonline.gov.in</a>
67.	South Delhi Municipal Corporation	<a href="http://www.mcdonline.gov.in">www.mcdonline.gov.in</a>
68.	East Delhi Municipal Corporation	<a href="http://www.mcdonline.gov.in">www.mcdonline.gov.in</a>
69.	New Delhi Municipal Council	<a href="http://www.ndmc.gov.in">www.ndmc.gov.in</a>
70.	Nanded Waghala City Municipal Corporation	<a href="http://www.nwmcnanded.org">www.nwmcnanded.org</a>
71.	Corporation of the City of Belgaum	<a href="http://www.belgaumcity.gov.in">www.belgaumcity.gov.in</a>
72.	Singrauli Municipal Corporation	<a href="http://www.singraulinagarnigam.com">www.singraulinagarnigam.com</a>
73.	Ujjain Municipal Corporation	<a href="http://www.nagarnigamujjain.org">www.nagarnigamujjain.org</a>
74.	Aizwal Municipal Council	<a href="http://www.amc.mizoram.gov.in">www.amc.mizoram.gov.in</a>
75.	Gujarat Municipal Finance Board	<a href="http://www.gmfb.in">www.gmfb.in</a>
76.	NCR Planning Board	<a href="http://www.ncrpb.nic.in">www.ncrpb.nic.in</a>
77.	Lucknow Municipal Corporation	<a href="http://www.lmc.up.nic.in">www.lmc.up.nic.in</a>
78.	Municipal Corporation Gurgaon	<a href="http://www.mcg.gov.in">www.mcg.gov.in</a>

Member Organisations are requested to verify the website address and inform about the changes, if any.

The Association of Municipalities and Development Authorities (AMDA), established in 1983, is an association of 78 Municipalities and Development Authorities in the country. As the name signifies, AMDA addresses issues pertaining to creating and enabling use of an interface between the state, municipal bodies and urban development authorities with respect to urbanization, urban development and urban governance.

The Association has emerged as a knowledge-integration and experience exchange platform across the country, besides performing an advocacy and interfacing role to increase efficiency of urban local bodies and development authorities. For over two decades, AMDA has been working on issues of planned development and management of cities by sensitising local, state and central governments.



For further information please contact:

**Director**

**Association of Municipalities and Development Authorities (AMDA)**

7/6, Sirifort Institutional Area, August Kranti Marg, New Delhi-110049, India

Phone : 91-11-26494486, 91-11-26497973, Fax : 91-11-26491675

E-mail : amdadelhi@gmail.com, Web : www.amdaindia.org

**ATTENTION! MUNICIPALITIES AND DEVELOPMENT AUTHORITIES**

**REACH OUT TO A LARGER WORLD**

AMDA BULLETIN invites brief writeups from Municipalities and Development Authorities from across the country initiatives and achievements for showcasing publication in future issues of AMDA BULLETIN.

Writeups should not exceed 3000 words. Pictures, if any, should be in jpeg format and not be less than 1 mb in file size.

Send your contributions to:

Director, AMDA

E-mail : amdadelhi@gmail.com Web : www.amdaindia.org