

VIJAYAWADA ANDHRA PRADESH



CITY REPORT

11TH FEB 2021



ICCE

INTERNATIONAL COUNCIL FOR CIRCULAR ECONOMY

**10.50 lakh
Population**

**61.8 sq. km
area**

**4th rank in
India in clean
city awards of
2020**

**Second
largest
city of AP**

**Surrounded
by hills in
the
N, NW & SW**

Well known
for
processing of
agricultural
product

Major
economic,
cultural and
administrative
center

Asia's largest
auto
industry hubs,
the Jawahar Lal
Nehru Auto
Nagar Industrial
Estate

Fertile
agricultural
lands
with three major
irrigation canals

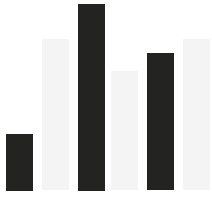
SOLID WASTE MANAGEMENT

Almost 550 tons of solid waste is generated by Vijayawada everyday. A 100% collection proficiency is claimed by the VMC. At present, 536 tricycles, 656 wheel-barrows, 60 collection vehicles, and 410 dumper bins are engaged for daily primary & secondary waste collection. Three processing units have been enlisted for the treat and processing of municipal waste by the Vijayawada municipal corporation. These are however not yet functional. The compost plant established in 1996 was brought to an end in 2016 due to several factors. A similar fate was met by a bio-methanation plant which was established in 2009. Vijayawada does not possess an engineered landfill site. SW is dumped at an open site 10km from the city known as Jakkam Pudi. The oldest dumping ground in the city is Ajit Singh Nagar. As a part of its effort to clear and process garbage, the government has recently signed an MoU with Zigma Global Environ Solutions to clear the garbage dump at Ajit Singh Nagar.

E-WASTE

Vijayawada generates 200 tonnes of e-waste in a year, a large proportion of which usually remains unsegregated. VMC has been taking measures to streamline the process of E-Waste collection, transportation and disposal. The selected agency would be tasked with collecting residential, commercial and industrial e-waste from kiosks and bins designated for this purpose, transporting them to the processing plant and disposing them safely everyday.





Air Quality Index

Vijayawada, records a dangerously high suspended particulate matter of more than 100-110 mgm/cubic metre. The city stands at the 45th position in the list of India's most polluted cities. A dwindling green cover along with a rapid increase in construction activity and vehicular emissions have together been held responsible for the declining air quality in the city. The National Green Tribunal (NGT) issued a directive to the APPCB to take concrete measures for reducing air pollution levels in Vijayawada.

Following this, the APPCB has been drafting a plan of action with the cooperation of the municipal corporation and the transport department for bringing the rising air pollution in Vijayawada under control. As part of this plan, enforcement drives aimed at collecting dust and waste accumulating on the pavements are periodically undertaken by the municipal corporation. Measures are being taken to clean the roads without inflicting any damage to the environment such as sweeping the roads with machines and then watering and sprinkling to prevent the dust from rising. Along with this, compact machines have been utilized to lift garbage. Vijayawada is also one among the 28 selected cities that have been sanctioned ₹10 crores for reducing air pollution by the National Clean Air Programme (NCAP).

FACTORS IMPACTING THE ENVIRONMENT OF VIJAYAWADA

Unregulated mining

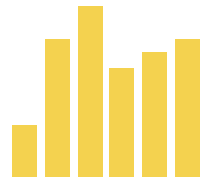
Rapidly declining green cover

Emissions from vehicles, industries, Thermal Power Station and processing units

Extensive concrete bunds and sand dunes reflecting re-radiation with wind flow within ambient environment

UNDER THE GREEN INDIA MISSION, THE VMC HAS UNDERTAKEN A MASSIVE CAMPAIGN TO MINIMIZE THE IMPACT OF CLIMATE CHANGE ON VIJAYAWADA AND TO INCREASE THE EFFICIENCY AND RESILIENCE OF ITS ENVIRONMENT PROTECTION PROGRAMS

INITIATIVES UNDER GREEN INDIA MISSION



- To identify areas within the city where urban and peri-urban forestry can be undertaken through Geographical Management Information System and remote sensing technology and mapping.
- To increase the vegetation and green cover in the city with the intention of providing for larger carbon sinks.
- To use enhanced tree cover to improve the flood protection basins of the Krishna & Budameru rivers.
- To encourage the planting of medicinal and nutritional plants in the households to offset negative climatic variations.
- To encourage mechanisms that are efficient for energy conservation.
- To promote the usage of natural resources through methods such as rainwater harvesting and using Solar energy.
- To put in place effective laws for the contraction of building and using of lands.
- To create awareness among the citizenry on the ill effects of GreenHouse gases on the environment through campaigns.
- To encourage adoption of sustainable practices at an institutional as well as individual level.
- Ensure that industries effectively implement Environmental Management.
- Install green or cool roof systems in commercial buildings and households. It has been estimated that commercial buildings can annually save as much as 13 to 14 kWh/m² of energy by switching to cool roofs.
- Making use of solar energy systems to light roads and highways.
- Adapting a multi-departmental approach while planning new projects as well as incorporating the assistance of NGOs and other institutions.

Vijayawada has been receiving increasing recognition for its efforts to increase sustainability. Ministry of Civil Aviation has conferred on Vijayawada Airport the status of a green project for making use of a solar power generator of 1 MW capacity.

Vijayawada railway station has been endowed with a Gold Rating by the Indian Green Building Council. The station is equipped with 100% LED lighting along with five stars rated fans, pumps and motors and solar water heating systems..

Gunjan Khan (Research Intern-LSR)
with Shalini Goyal Bhalla

ICCE is studying several cities in India on several parameters. This is an initiative under Circular Cities project.