



Ujjain Smart City Projects

Ujjain City was selected in 2nd round of Smart City mission project and the project size is INR 1000 Crore approx.

- USCL is working to improve the economy of the City. The revenue of businesses in the city have increased many folds after inauguration of Shri Mahakal MahaLok Phase1. Considering the tourist induced by this project, the indirect economy is expected to increase approx. **INR 3 billion** annually.
- USCL has established *Integrated Command and Control Centre (ICCC)* for Disaster Management, Crowd management, COVID management, Traffic Management.
- USCL has done Separate installation of *Integrated Traffic Management System (ITMS)* with focus on traffic and crowd management. USCL has established *Video Surveillance System* integrated with AI.
- USCL has developed Solar equipped *Vehicle Parking* across the City to cater requirement of pilgrims.

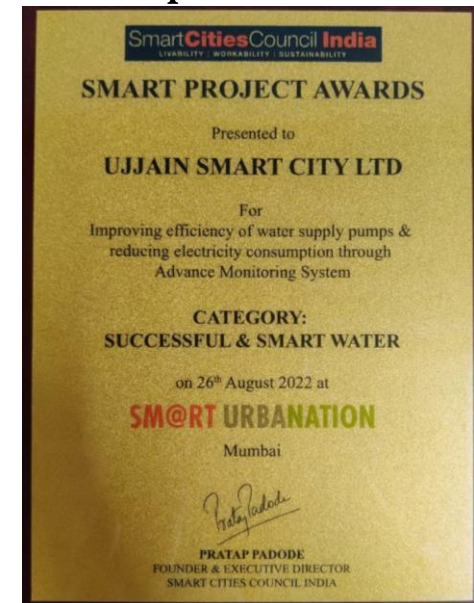
- USCL has built New Schools with sufficient amenities & Solar Roof Tops for utilizing renewable energy.
- USCL has transformed Normal Classrooms into *Smart Classrooms*.
- USCL has installed *Energy efficient LED Street Lights* through out the city.
- Heritage Conservation - USCL has improved Infrastructure of ancient Temples & installed facade lights
- USCL is doing water conservation through reviving Old water bodies such as Rudrasagar, Sapt Sagar etc.
- USCL has provided solution for waste management — Installed Bio Methanation Plant & Setup Swachh Bharat Mission Vehicle Tracking via ICCC.

Major Achievements

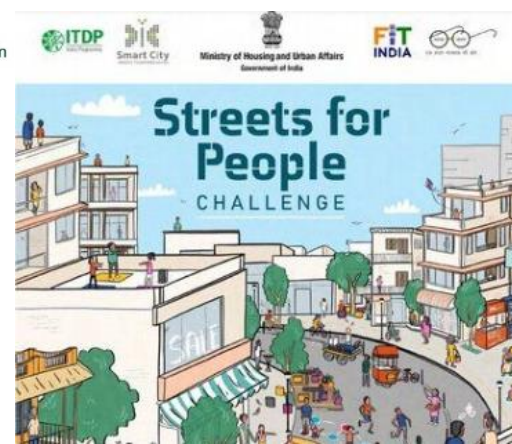
- Ujjain has been selected as one of the 12 cities in India for funding under **CITIIS program** and has been ranked 1st amongst 12 cities in progress
- Ujjain has an approved fund of Rs. 80 cr. from AFD and EU
- **Eat Smart Challenge** – 3rd rank Rs. 50 lacs for execution of task assigned.
- Ujjain is nominated for the International **Milan Urban Food Policy Pact** and **Barcelona Food Challenge**.
- **Streets 4 people** among top 10 winners – received Rs. 50 lacs
- **Smart Urbanation Award** Winner for *Improving Water supply through Advance Monitoring system* in Successful & Smart Water Category.



Deepotsav 2022



Smart Urbanation



Video
Link 1

- City Investments to Innovate, Integrate and Sustain (CITIIS) was launched on 9th July 2018 by the Smart Cities Mission, Ministry of Housing and Urban Affairs in partnership with AFD, EU and NIUA.
- During the challenge process of projects under CITIIS, Ujjain Smart City got selected for its cornerstone project MRIDA (Mahakal Rudrasagar Integrated Development Approach) Phase – II.
- USCL will get funding of INR 80 Crore from AFD

	Project Components
1.	Rejuvenation of Rudrasagar Lake and Landscape Development of its Surrounds
2.	Conservation, Adaptive Reuse and Site Development of Maharajwada Complex
3.	Maharajwada II Parking and Vendor Zone
4.	Revitalization of Ramghat Precinct
5.	R-18 (Quick Win 1)
6.	Malakal Dwar (Quick Win 2)
7.	Communication and Outreach Plan
8.	Environment & Social Expenses
9.	HR Expenses
10.	DPR Consultants
11.	Hydrology Study
12.	Mobility Study
13.	2D-3D Wall Painting

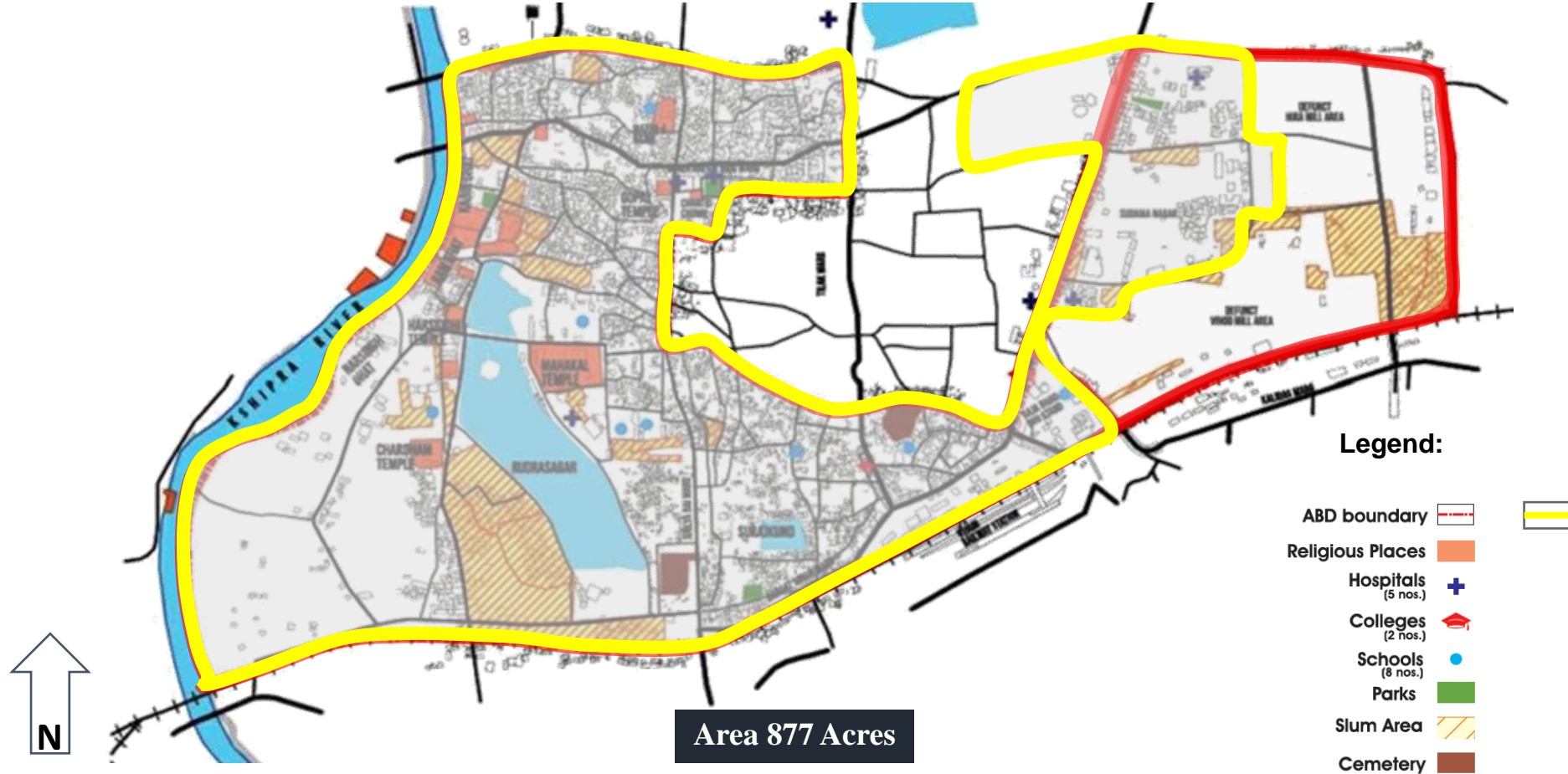
ABD(Area Based Development) Area



Population : 87,766
(17 % of City population)



Area: 3.55 Sq.km
(3.8 % of City area)



2,07,453 people engaged during citizen engagement for selection of ABD area and the projects.
The engagement was done through physical and social media outreach.

Completed Projects



Shri Mahakal Mahalok Phase I



Shri Mahakal Mahalok Phase 1 was inaugurated by Hon. PM of India on 11th October 2022



Shri Mahakal Mahalok Phase 1 Project List

S.No.	Components of the Project	Amount (In Cr)
1.	Shri Mahakaleshwar Vatika	249.14
2.	Mahakal Path	
3.	Swagat Sankul Plaza	
4.	Shiv Avatar Vatika	21.27
5.	Parking & Area Development with solar roof	
6.	Mansarovar Facility Centre 2 (UDA)	21.00
7.	Conservation of Mahakal Dwar & Ancient pathway of Ramghat (CITIIS)	3.19
8.	Lal pul – Narsingh Ghat – Harsiddhi Square Smart Road	17.68
9.	Facade lighting for beautification of historical Temples and heritage structures	4.88
10	Narsingh ghat Pumping Station and Pipeline (Kshipra River to Rudrasagar connection)	3.47
11	Development of Sewerage network in Rudrasagar catchment area (under AMRUT Scheme)	20.00
12	Facade lighting and sound system for Shri Mahakaleshwar temple complex	3.30
13	Electric Vehicles (EVs) for Mahakal Corridor & premise	3.42
14	Audio Guide	4.20
	Total	351.55

Project Salient Features

Shree Mahakaleshwar temple precinct is being developed in which western side of temple is planned to create large public space for a state-of-the-art experience to pilgrims and tourists of the city.

- Plaza area - Ticketing Area, Food kiosks area, Lotus Pond, Shiva Stambha, Open Air Theatre, Dwaar, amenities
- Mahakaal Corridor – 108 Stambha, Mural Wall, e-riackshaw lane, pedestrian lane
- Midway Zone – Shops, restaurants and amenities
- Theme Park – Night garden, Sculptures, Gazebo sitting area



Implementation Model	Sink Investment
Funding Source	SCM Grant
Cost	INR 351.5 Cr (SCM grant)
Current Status	Contractor: M/s M. P. Babariya Project inaugurated by Hon. PM of India on 11 th October 2022
Completion Timeline	Completed

Shri Mahakal Mahalok Phase I



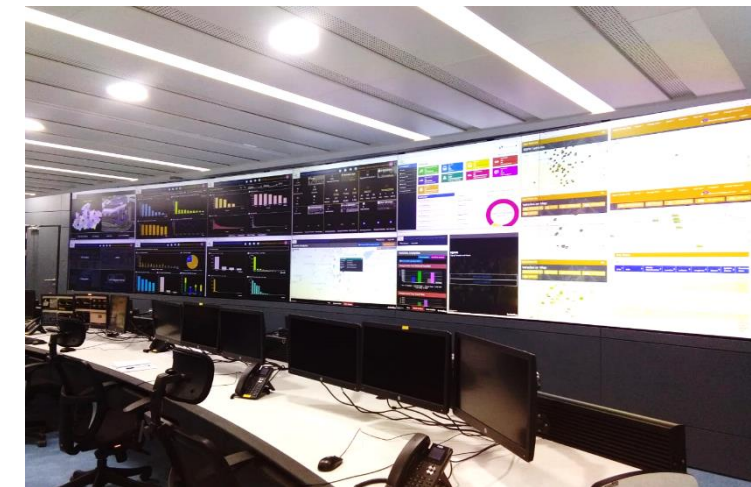
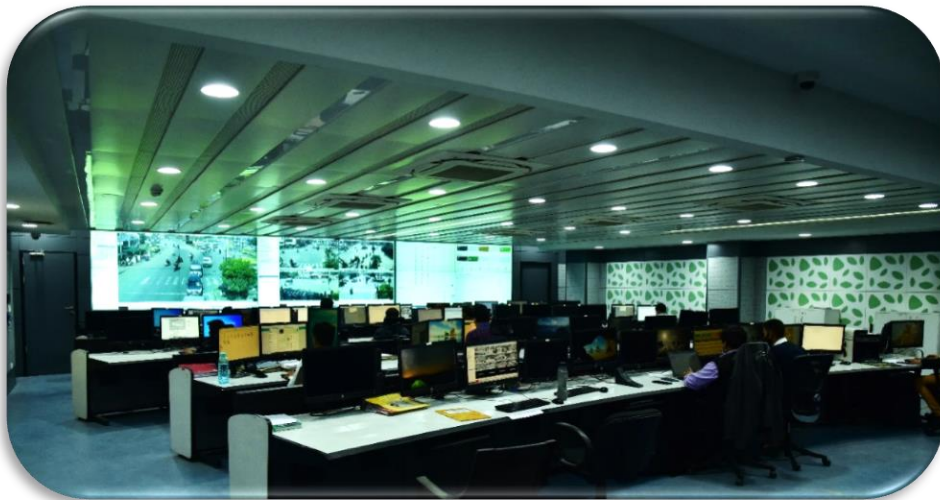
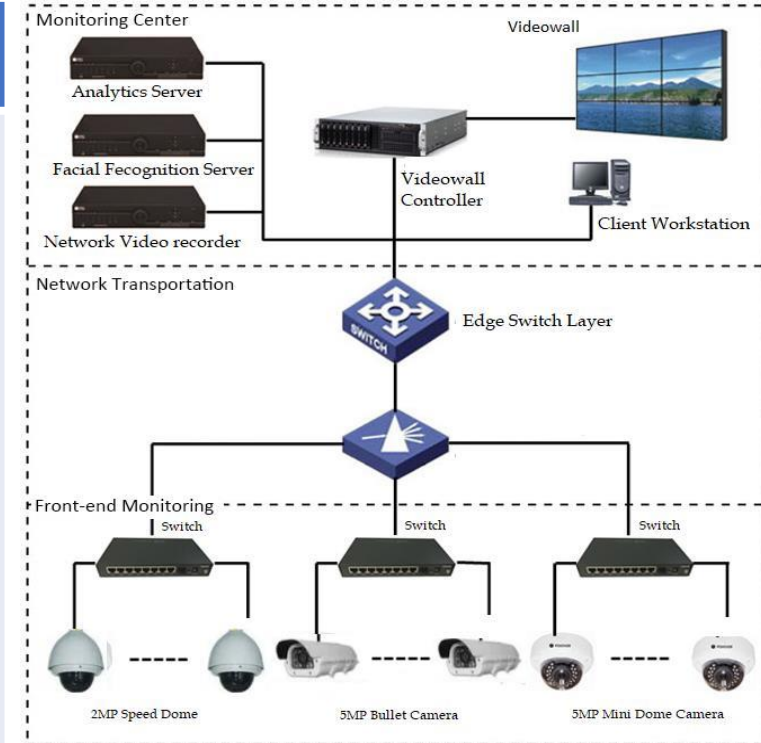
Shri Mahakal Mahalok Phase 1 was inaugurated by Hon. PM of India on 11th October 2022

Issues

- During Simhastha Kumbh 2016, approx. 7.5 Cr pilgrims visited the city. After the inauguration of Shri Mahakal MahaLok Phase 1, This pilgrim influx is projected to increased by 2.5- 3 times.
- There were issues of safety & security in Ujjain. There were issues of Traffic Violation such Red-light violation, over speeding, Triple riding, wrong side entry etc.

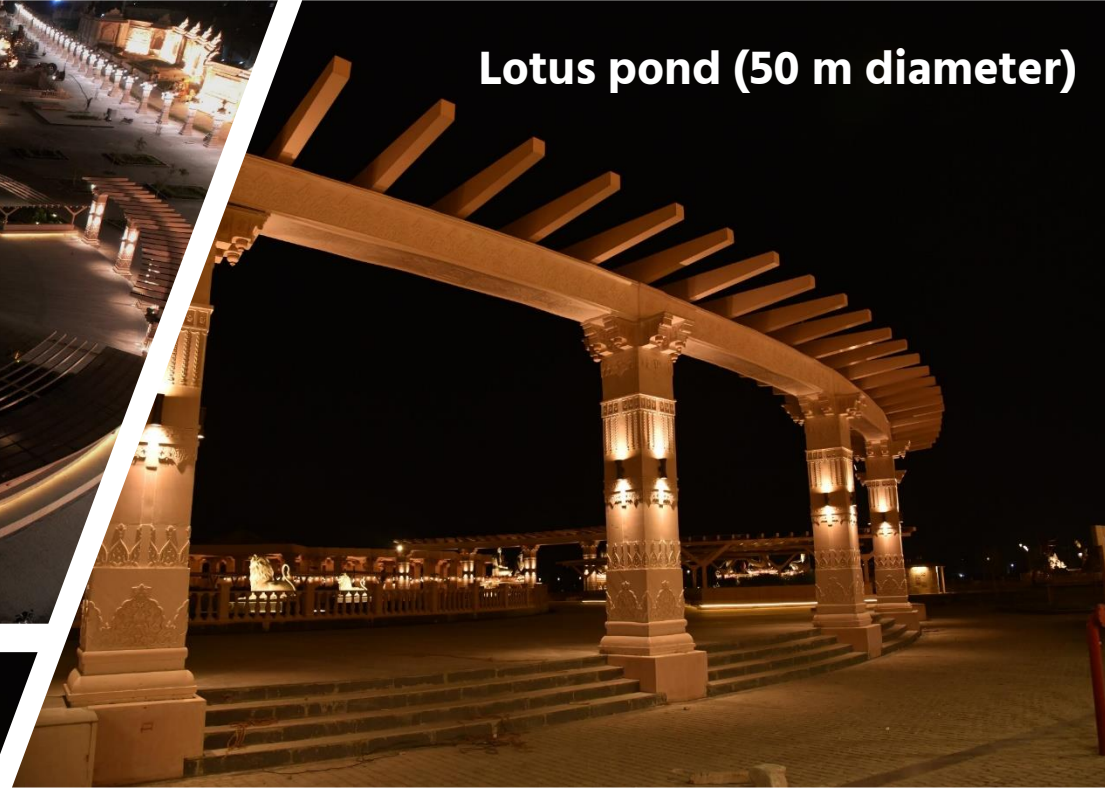
Solution

- To resolve these issues, USCL established ICCC at Shri Mahakal Mahalok for ensuring safety, security & managing crowd during weekends & festivals.
- The IP Based surveillance system & access control system will be used for Facial recognition of Suspects, smart crowd management, head count, scanning of baggage etc.
- USCL has done integration of ITMS with ICCC to manage traffic around Shri Mahakal Mahalok





Lotus pond (50 m diameter)



Shiv Stambh and Saptrishi plaza Panchmukhi Shiv Stambh (54 feet) Saptrishi (20 feet)



Mahakaal Corridor





Navgraha Vatika (6 and 11 feet)



Tripurasur Vadh Statue

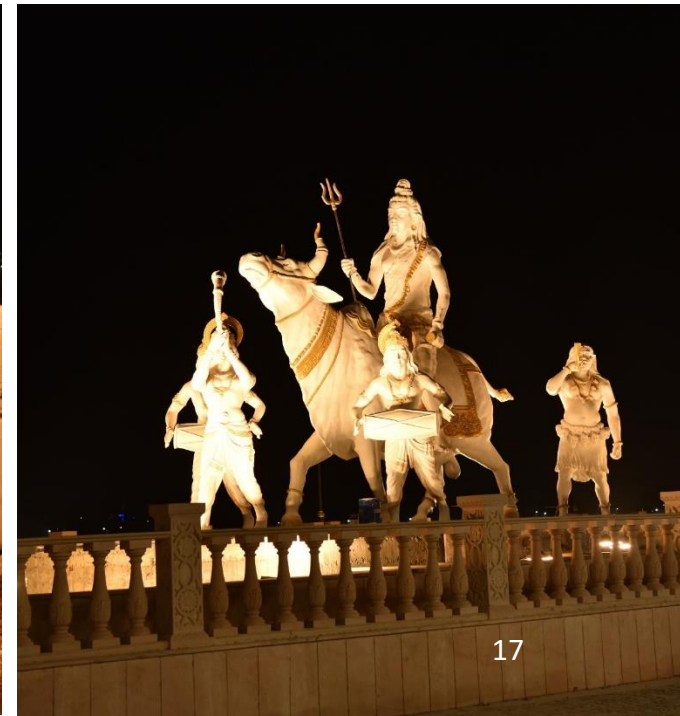
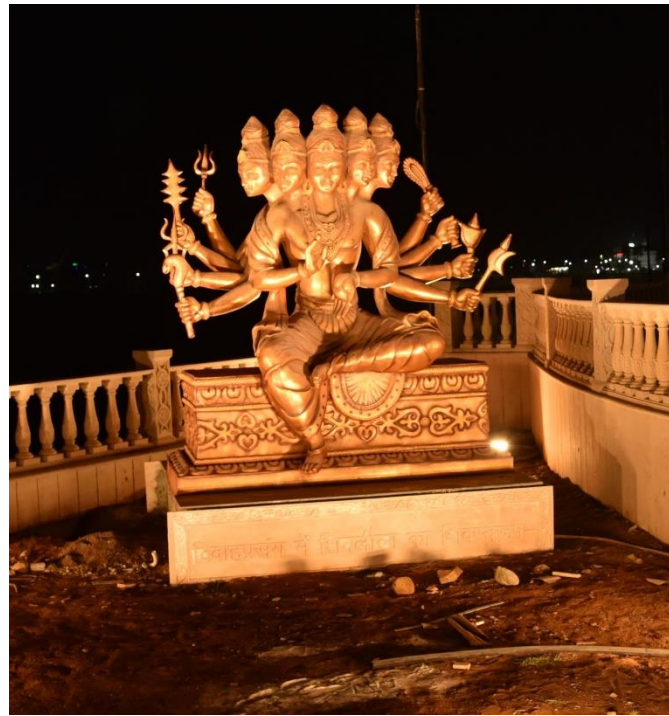
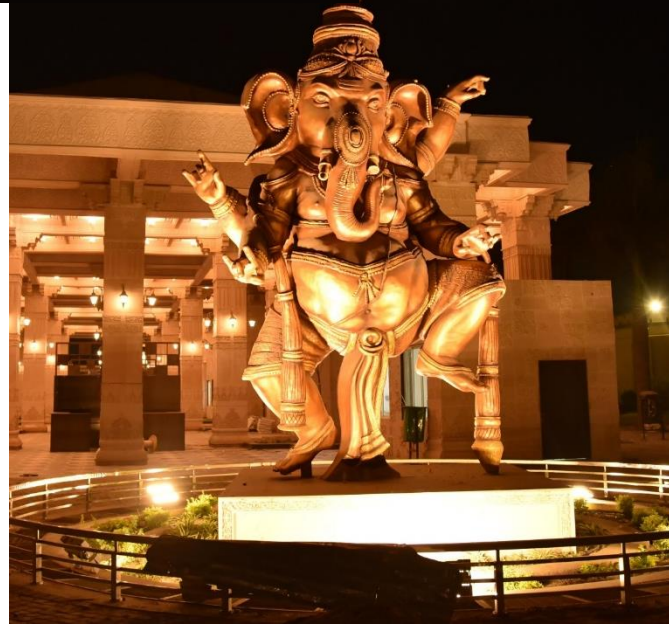


Shops in Plaza area



Open Air Theatre (approx. 500 persons capacity)

Sculptures in Plaza and Corridor area



Rudra Sagar Rejuvenation

Before



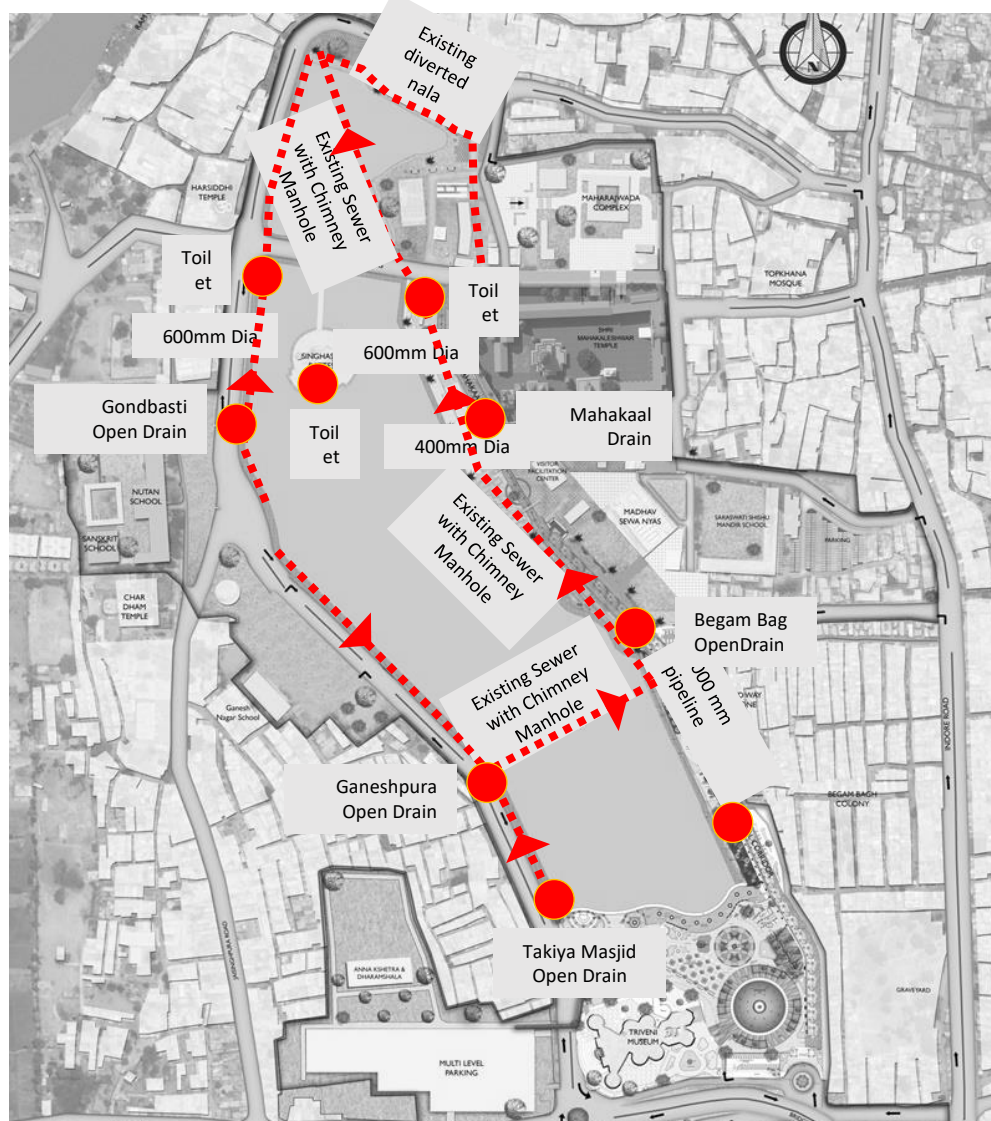
After



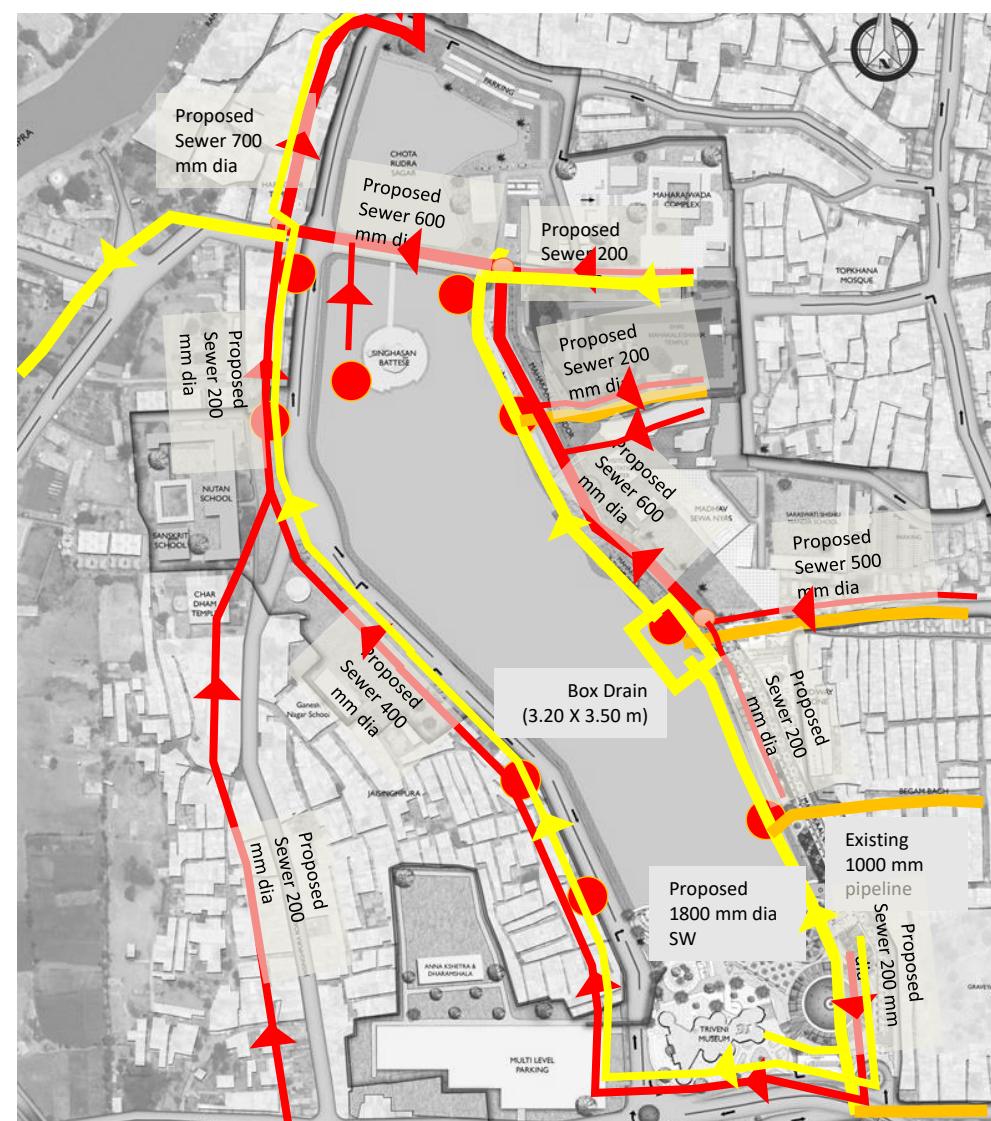
Video
Link 1

Sewer Network in Rudra Sagar Catchment Area

Before



After



----- Old Sewer/Storm water Line

● Sewer Junction Points

— New Sewer Line Network

— New Storm water Line Network



List of Major Completed projects (Including Mahakal Lok)

S No	Project Name	SCM Cost in INR Crore
1	Mahakaal Rudrasagar Integrated Development Approach MRIDA	249.14
2	Smart Road with underground ducting and Integrated Infrastructure Development - Laying of underground power supply cables and allied electrical infrastructure, drainage, water supply pipe lines including smart, meters SCADA	53.00
3	Integrated Traffic Management System	35.28
4	Integrated Command and Control Centre.	32.00
5	CONSTRUCTION OF SCHOOL COMPLEX AT NUTAN SCHOOL SITE UNDER MRIDA PROJECT	29.11
6	24 X 7 Water Supply in ABD Area -Retrofitting of existing water supply pipe lines and allied infrastructure (In convergence with UMC)	20.00
7	LED STREET LIGHT -2	15.76
8	Construction of Olympic Size Swimming Pool and Sports complex	12.00
9	MRIDA - Construction of School at Ganesh Colony	10.00
10	Installation and maintenance of Living Green Walls and Rooftop Lawns in Buildings and Public Spaces in Ujjain and Mayur Van	7.43
11	Incubation Centre	7.31

LIST OF ALL COMPLETED PROJECTS

S No	Project Name	SCM Cost in INR Crore
12	Installation of 1.29 MW Power Solar Photovoltaic Plant at 3 water pumping stations	6.15
13	Construction of Open Surface Parking Shade with Solar PV System	5.51
14	Façade Lighting-Heritage Building	4.88
15	Water Treatment Plant 2 MLD, Pumping Station and Pipeline for Conveying of water from Narsinghghat, Kshipra River to Rudrasagar	3.47
16	Smart Classrooms	3.04
17	Mayur Van - Phase II	3.00
18	Implementation, Management and Maintenance of Smart Classrooms in City of Ujjain.	2.90
19	Supply, Installation and Maintenance of School Furniture including DLP of 3 Year for Nutan School, Sanskrit School, Ganesh Nagar School and Urdu School at Ujjain	2.82
20	Design, Supply, Installation, Integration, Testing , Commissioning and Including Operation and Maintenances of 5 Years of Dynamic RGB LED Façade Illumination of Shri Mahakaleshwar Temple and other structure located in the premises and remote monitor	2.60
21	Designing, Building, Testing, Commissioning, Operation, Maintenance and Management of CNG based Crematorium at Chakrateerth, Ujjain	2.16
22	Installation of 5TPD capacity Waste to Energy Biomethanation Power Plant including Operation and Maintenance	1.96

LIST OF ALL COMPLETED PROJECTS

S No	Project Name	SCM Cost in INR Crore
23	Design, Supply, Installation, Commissioning of Mechanical Screens, Conveyor Belt, Sluice Gates, and other Miscellaneous MEI works for Stormwater Outfall Junction BoxR23,R18 at RudraSagar/Mahakal Corridor	1.77
24	Design, Supply, Installation, Commissioning and Maintenance for a period of 5 years of Rooftop Solar PV Power Plants of Grid Connected Net Metering on Turnkey basis along with associated Electrical Civil works on Roof of Nutan School , Ganesh Nagar	1.70
25	Procure, Supply, Maintenance of the Battery-Operated Vehicles (E Vehicle)	1.66
26	Conservation & Restoration of Mahakal Dwar and Revitalization of Pedestrian link near mahakaleahwar Temple Precint- Quick Win -1 (Part of existing MRIDA Phase II Project)	1.49
27	Conceptualization, Design, Engineering, Supply, Installation, Testing, Commissioning, and Integration of Sound System with Existing FACADE lighting at Shri Mahakal Temple	0.70
28	Smart Solutions for Public Mobility and Municipal Vehicles	0.50
29	Clearing &removal of water hyacinth (Jal Kumbhi)from Rudra Sagar lake	0.50
30	Conducting Maa Kshipra Aarti and Malkhamb in Ujjain	0.46
31	Construction of She-Lounge in PPP (DBFOT)	0.37
32	Design Making Supply , Installation , Testing ,Commissioning and Maintenance of water fountain with all Electrical and Plumbing Works at Lotus Pond -MRIDA at Ujjain	0.35

SCHOOL COMPLEX AT NUTAN SCHOOL SITE

Project Salient Features

Establishment of a single school complex based on Universal design, for housing small schools, which has all the required amenities This complex comprises school premise and Sanskrit School with hostel facility in campus with smart classes, furniture and solar rooftop of 210 Kwh capacity.

- Existing 9 schools and one college in Mahakaal adjoining area are relocated in Nutan school complex
- Requirement - 1907 Students
- Capacity of new School Cluster - 2745 Students
- Site Area: 16906.Sq.mt; Building G + 2 Floors
- Nutan School-61 Classrooms; Sanskrit College-7 Classrooms, Urdu School-23 Classrooms
- Additional facilities - Ramps, wheelchairs, Separate Principal offices, Library, Multi purpose hall, Laboratories, store room, first aid room, Hostel, Play Ground etc.



Implementation Model	Sink Investment
Funding Source	SCM
Cost	29.11 Cr (SCM grant)
Work Order Date	05.10.2018
Current Status	Work completed
Completion Timeline	September 2021 (Completed) Asset handed over to Education department

Project Salient Features

- Establishment of a single school complex based on Universal design, for housing small schools, which has all the required amenities. This school complex at Jaisinghpura area has smart classes, furniture and solar rooftop of 30 Kwh capacity.
- Shifting of 3 existing school in Mahakaal adjacent area to single school at Ganesh colony area
- Existing strength of 3 schools is 622 in 11 classrooms
- Proposed Capacity is 900 students in 18 classrooms
- Additional Facilities – Ramps, wheelchairs, Principle office, Library, Multi purpose hall, Laboratories, store room, first aid room, Play Ground etc.

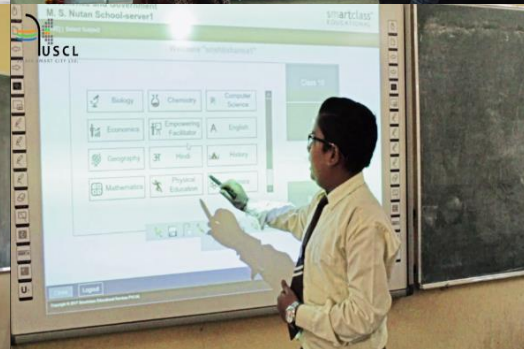
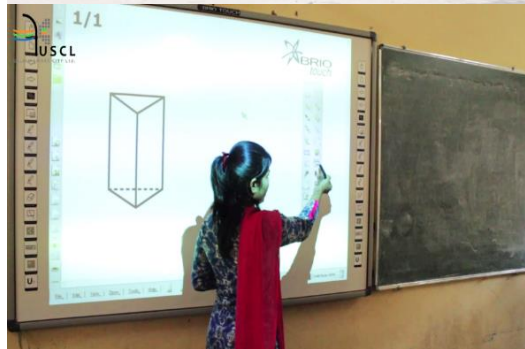


Implementation Model	Sink Investment
Funding Source	SCM Grants
Cost	10 Cr (SCM grant)
Work Order Date	22.12.2018
Current Status	Work completed
Completion Timeline	September 2021 (Completed) Asset handed over to Education department



Project Salient Features

- 5 Schools - 97 Classes
- Smart Board, Projector, Computer and Digital Multimedia content from Class I to XII (MP Board), Language Lab, 2 Additional High-End Computers in each school
- 4 MBPS WiFi in every school
- Training for teachers.
- O & M for 3 years.
- Won Skoch Award 2019
- Won Business World Smart Cities Award

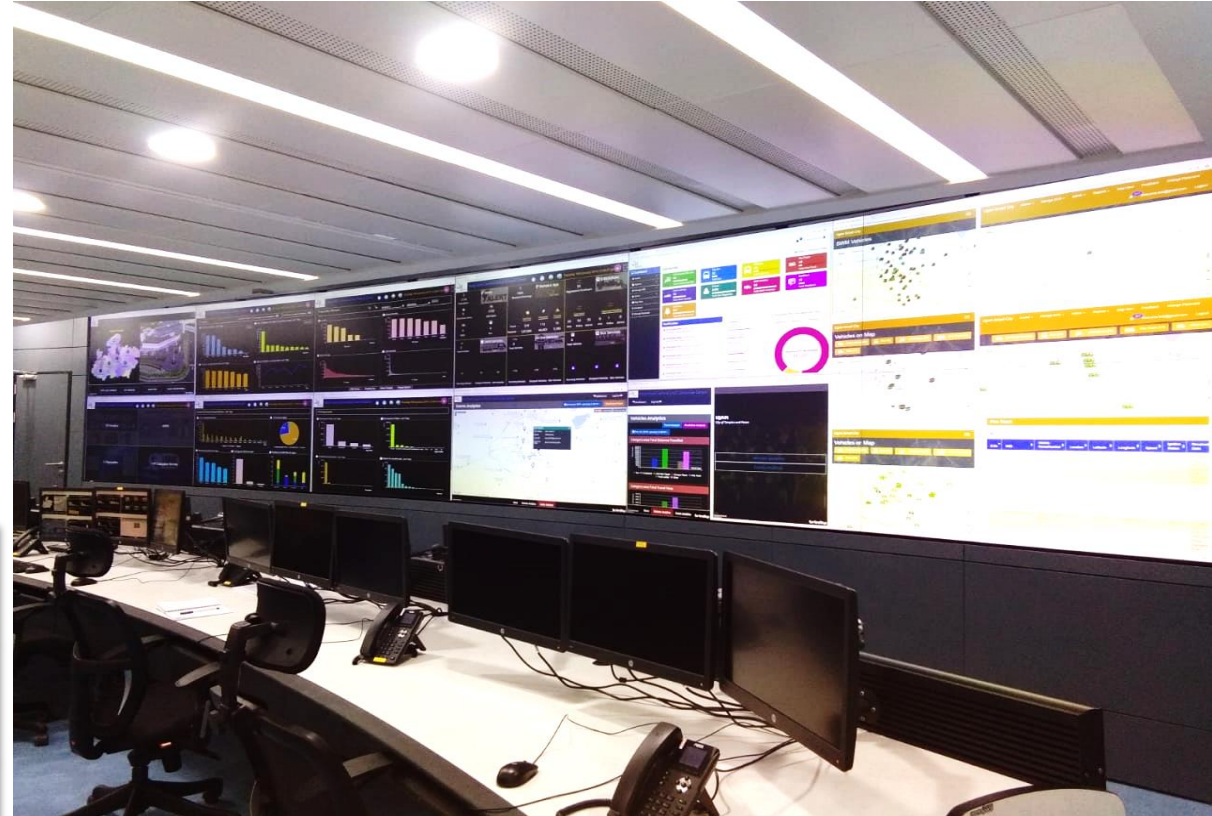


Implementation Model	Sink Investment
Funding Source	SCM Grant
Cost	3.04 Cr (SCM grant)
Current Status	<ul style="list-style-type: none"> • Work Awarded to VSN International • Work completed
Completion Timeline	May 2018 (Completed) Asset handed over to Education department

Project Salient Features

- Integrated Command and Control Centre envisaged as single Control Centre for the city of Ujjain.
- ICCC consists of the main control room with 18 seater capacity, situation room, server room and electrical rooms.
- Part of Ground Floor of Mela Office.
- Services integrated – VTMS, e-nagarpalika, ITMS, iSWM, COVID activities etc.

Implementation Model	Sink Capital
Funding Source	SCM Grant
Cost	Approx. 35 Cr (SCM grant)
Current Status	Work Awarded to M/s HP Enterprise Work completed
Completion Timeline	Work Completed on October 2018



Impact: Used for monitoring of various COVID related situations
ITMS monitoring of various intersections, SWM vehicles monitoring, Citizen app – UMC Sewa is being monitored.

Project Salient Features.

- Traffic Control System, Surveillance Camera, Automatic Number Plate Recognition System, Red Light Violation Detection System, Speed Violation Detection System, Variable Message Sign Boards, Public Address System, Emergency Call Box System
- **16 Traffic Junctions and 7 Entry-Exit points, 12 Locations for Speed Detection, 40 Variable Message Signboards**
- Go Live in 6 months and O&M for 3 years.



INTEGRATED TRAFFIC MANAGEMENT SYSTEM
UJJAIN, MADHYA PRADESH
उत्कृष्ट उन्नत उज्ज्वल उज्जैन
नोटिस /e-Challan



सर/मैडम,

ITMS द्वारा पहचान की है कि आप/आपके ड्राइवर द्वारा वाहन क्रमांक MP13EV9991 को चलाते हुए, दिनांक 01 Jan 2022/समय 03:57:49 PM स्थान EngineeringT पर यातायात के नियमों का उल्लंघन किया गया है, जो निम्न प्रकार से म.प्र. मोटर वाहन एक्ट/केन्द्रीय मोटरवाहन अधिनियम के अंतर्गत दंडनीय अपराध है। अतः निम्नलिखित समन शुल्क आप पर अधोपित किया जाता है।

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1	119/177 संकेत का उल्लंघन	₹ 500.00	ITMSUJN270122-0048 / 01-Jan-2022-03:57:49 PM	01-Jan-2022-03:57:49 PM



Impact: Total challan generated till present: 1,94,507
Total fine amount received till present: Rs. 1.98 Crore

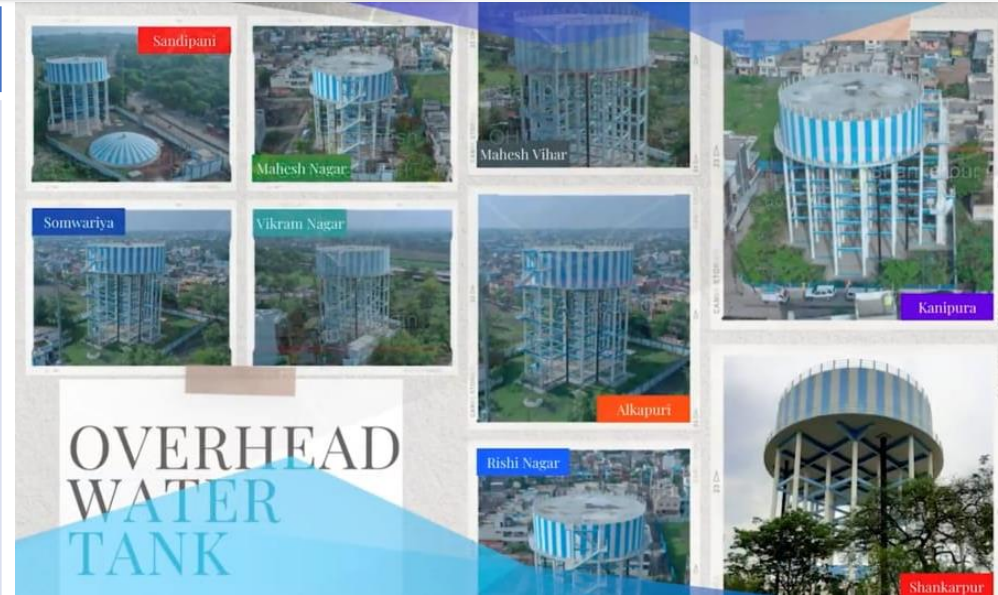
Implementation Model	Sink Capital
Funding Source	SCM Grant
Cost	35.28 Crores (SCM grant)
Current Status	<ul style="list-style-type: none"> • Implementing Agency: M/s Technosys Security Systems • Project completed • O&M in progress
Completion Timeline	Project completed

Construction of 9 Over Head Tanks & allied infrastructure works

Project Salient Features

- Retrofitting of water supply pipeline
- Construction of 9 over head water tanks
- Capacity of each water tank is 22 lac liters. So, Total 198 Lac Liters capacity & 1.5 Lakh persons covered
- Allied infrastructure
- Constructed through UMC
- Funded by UMC and USCL

Implementation Model	SCM and Convergence
Project Cost	34.38 Cr. (SCM Rs. 20 cr.)
Funding Source	SCM and Convergence
Current Status	Work completed
Completion Timeline	September 2021 (Completed) Asset handed over to PHE department



Project Salient Features

- Three WTP with annual consumption of Rs. 8.20 cr. are selected for Solar PV installation project.
- Annual **savings** of PHE/UMC estimated: **3.0 Cr per year.**
- The life of this projects is : 25 years
- MPUVNL is implementing setting up PV solar panels at 3 sites with total capacity of 1.29 MW.
- Capex model awarded for a period of 5 yrs.



Total electricity generated till Present: 28 lac unit
Total rebate received: Rs. 1.53 cr.



Implementation Model	Bankable Capital Investment
Funding Source	SCM and Convergence
Cost	8.82 Cr (5.82 SCM Grant, 3 Convergence)
Current Status	Gaughat, Undasa and Ambodia WTP - Completed and energy generation started
Completion Timeline	March 2019 (Project completed)

Project Salient Features

- All the major mandis & societies of the Ujjain city were geo mapped by ICCC.
- Plant utilizes biodegradable waste, mostly from the nearby vegetable market and the adjacent colonies and converts them into biogas
- The biogas produced would then be run through gas generators to produce electricity.
- Area of Plant = 846 sq. m.
- Estimated waste consumption = 5 TPD
- Estimated electricity generation = 300 units/day
- Estimated Compost Generation = 1.5 TPD.
- GRID connected Bio-Methanation plant



Total wet waste treated till present:

3089.61 tones

Total Electricity generated: 81,181 units

Tipping fee saved: Rs. 55.61 lacs

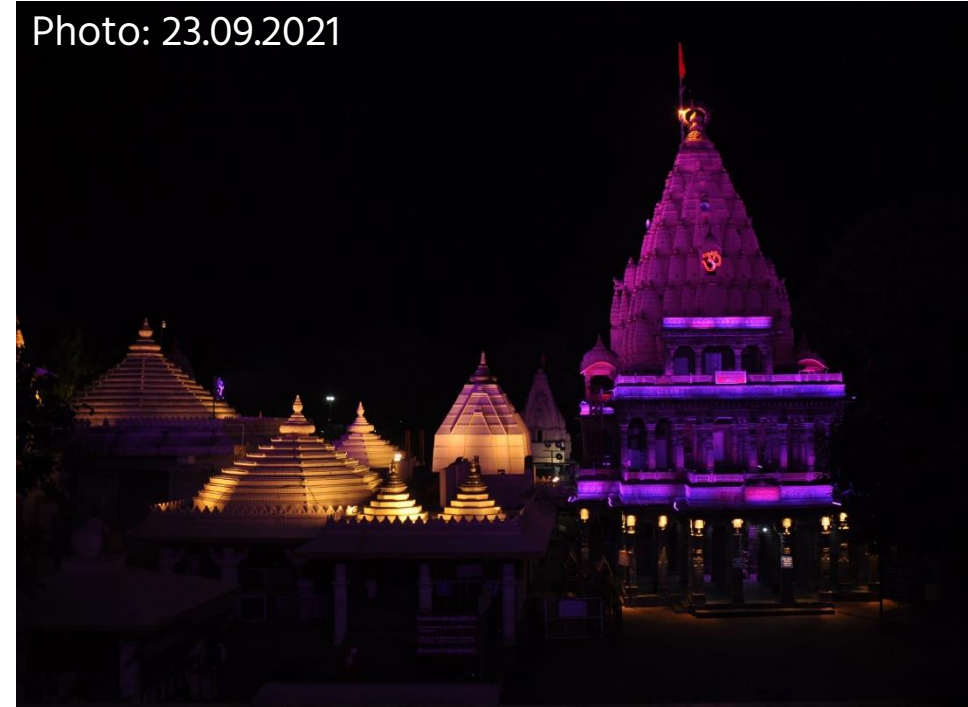
Implementation Model	Bankable Sink Investment (Cost will be recovered in 5 years)
Funding Source	SCM Grant
Cost	1.96 Cr (SCM grant)
Implementing agency	M/s Aryan Associates, Gujarat.
Completion Timeline	Project Completed on 31.08.2018 Electricity generation from waste started

Project Salient Features

- LED façade lights along with sound system is installed on Shree Mahakaleshwar temple and other importance temples of the premise.
- O&M period 5 years
- 619 LED lights synchronized with sound are installed
- Millions of colors can be chosen



Photo: 23.09.2021



Implementation Model	Sink Capital
Funding Source	SCM Grant
Cost	2.60 Crores (SCM grant)
Current Status	Project completed
Completion Timeline	September 2021 (Project completed)

Video
Link 1

Project Salient Features

- Entrance Plaza
- Interpretation Center
- Labyrinth Maze
- Children Play Area
- Exhibition space for sculptures and information
- Cafeteria and Sitting spaces
- Deck in Woods
- Landscaping areas and tree plantation to attract Peacock and other birds
- Paved Parking



Implementation Model	Sink Capital
Funding Source	SCM Grant
Cost	9.83 Cr (Phase I & II)
Current Status	Completed
Completion Timeline	February 2022 (Project completed)



Entrance Gate

Project Salient Features

- Lounge especially for Ladies operated by Lady staff (carpet area approx. 2,900 sq. ft.)
- DBFOT with Concession period of 15 years
- Revenue Rs. 500 per month per She lounge is being shared by concessionaire with USCL
- Viability Gap Funding done by USCL
- Commercial space given to concessionaire to run the facility free of cost
- Well maintained toilets, baby care and lounge



2nd She Lounge at Freeganj



1st She Lounge at Nanakheda

Implementation Model	Bankable PPP
Funding Source	SCM Grant + PPP
Cost	0.60 (0.30 SCM Grant, 0.30 PPP)
Current Status	<ul style="list-style-type: none"> • Work Awarded to M/s Patel brothers • Work completed
Completion Timeline	<ul style="list-style-type: none"> • 1st unit completed in July 2018 • 2nd unit completed in December 2019

Thank You!!