SDG 11

SUSTAINABLE CITIES AND COMMUNITIES

INTRODUCTION

SDG 11 calls for cities and human settlements that are inclusive, safe, resilient and sustainable, extending equally to campuses that function as living, working communities. At SRM University-AP, this commitment takes shape through responsible campus development, systematic waste management, resource efficiency, accessible infrastructure, green practices and sustained community engagement. The university approaches its campus not only as an academic environment but as a community whose everyday operations - from waste segregation and composting to hazardous-material handling - are designed to minimise environmental impact while supporting the wellbeing of students, faculty and staff. Beyond the campus boundary, SRM University-AP extends this ethos through outreach programmes, cultural events and research that engage neighbouring communities on themes of cleanliness, sustainable living and civic responsibility. The sections that follow present the University's verified quantitative performance, its core sustainability initiatives, its outreach activities, the events and programmes conducted through the year, and the research contribution that together tell SRM University-AP's SDG 11 story for 2025-26.

SUSTAINABLE CAMPUS & QUANTITATIVE HIGHLIGHTS

SRM University-AP tracks its solid- and hazardous-waste performance closely, and the figures below reflect the University's measured contribution to sustainable, resource-efficient campus operations during the reporting period.

23,972 kg *Solid waste generated / year (wet + dry)*	**7,537 kg** *Compost produced / year*	**25 kg/day** *Composting facility capacity*	**860** *Waste bins across campus (160 twin-bins + 700 general)*
2,830 kg *Hazardous waste generated / year*	**2,830 kg** *Hazardous waste disposed / year*	**1** *Dedicated hazardous-waste storage facility*	**8** *Staff trained in hazardous-waste handling*

Roughly three-tonnes of the University's annual solid waste is diverted into on-campus composting, supported by a dedicated processing capacity of 25 kg per day. A twin-bin system - 160 dedicated wet/dry bins supplemented by 700 general-waste bins - anchors source segregation across the campus. On the hazardous-waste side, the University disposes of 100% of the hazardous waste it generates through a dedicated storage facility and a team of eight trained staff, evidencing a closed, accountable handling process rather than accumulation on site.

CAMPUS SUSTAINABILITY & INITIATIVES

Solid Waste Management

The University's solid-waste programme is built around source segregation and on-site composting. Twin bins placed across academic and residential zones separate wet and dry waste at the point of generation, while a further 700 general-waste bins ensure coverage across the wider campus. Organic waste is processed at an on-campus composting facility with a daily capacity of 25 kg, converting a meaningful share of the University's waste stream into usable compost rather than sending it to landfill.

Hazardous Waste Management

Hazardous waste generated from laboratories and technical facilities is channelled through a single dedicated storage facility pending safe disposal. All 2,830 kg generated annually is fully disposed of through this facility, and eight staff members have been specifically trained in hazardous-waste handling procedures, ensuring the process is carried out safely and in compliance with institutional protocol.

OUTREACH

SRM University-AP extends its SDG 11 commitment into neighbouring communities through student-led outreach projects focused on cleanliness, waste management and sustainable living. Two verified outreach initiatives from the Paari School of Business are presented below.

- **VAC-507 Samaj Seva - Cleanliness & Waste Management Awareness**

S. Mangalagiri High School, Mangalagiri | 43 Class-5 students reached | MBA student volunteers

MBA students visited S. Mangalagiri High School and ran an interactive awareness session for Class 5 students on personal and environmental hygiene and effective waste-management practices, including proper segregation and disposal. The session combined explanation with simple, age-appropriate examples so students could connect cleanliness to their own environment and daily lives. Beyond the immediate awareness gains for schoolchildren, the activity gave the MBA volunteers hands-on experience in community engagement, communication and leadership - reinforcing SDG 11's community dimension from both sides of the exchange.






- **Project GROW - Plastic-Free Awareness Drive**

Sri Rama High School ZPHS, Mothadaka village, Tadikonda Mandal, Guntur | 56 students, Classes 6-8

Project GROW conducted a plastic-awareness session for middle-school students at a semi-rural government school, using a structured presentation on plastic types, their health and environmental effects, and the 3R principle of Reduce, Reuse and Recycle. Students completed a pre-awareness questionnaire and were assigned a creative poster-making task on 'Plastic-Free Awareness' to reinforce the session through practical expression. The initiative combined awareness, assessment and participation, aiming to instil eco-friendly habits early and encourage students to carry the message of responsible consumption back into their households.





EVENTS AND INITIATIVES

SRM University-AP mapped 40 events to SDG 11 during 2025-26 - 18 through academic departments and schools, and a further 22 through university-wide cultural, civic and student-affairs programmes. Together they span technical workshops,

community immersion, industry visits and inclusive cultural celebrations, all contributing to a safer, more resilient and more connected campus community. The strongest and best-documented of these are presented below.

● Anubhava - Summer Immersion 2026

Barefoot College, Tilonia, Rajasthan | 38 participants, 10 days

Anubhava took students to Barefoot College, Tilonia, for an immersive exposure to rural development and sustainable-living practices, including a visit to the Solar Women's Training Centre and neighbouring villages. The programme introduced participants to the social and developmental challenges rural communities face and the sustainable approaches used to address them, giving students direct insight into grassroots resilience and community-driven solutions.







● Integrating Traditions: A Symposium on Indian Knowledge Systems (IKS)

SRM University-AP | Interdisciplinary academic symposium

This symposium introduced participants to Indian Knowledge Systems and their relevance to contemporary research, fostering interdisciplinary dialogue between the humanities, sciences and technology. By highlighting traditional ecological and epistemological frameworks, the symposium strengthened academic engagement with indigenous knowledge traditions and laid groundwork for future collaborative research.





● Industrial Visit to Jindal Urban Waste Management, Guntur

Jindal Urban Waste Management Guntur Ltd. | Department of Commerce

Commerce students visited an operating urban-waste-management facility to see waste segregation, recycling processes and industrial environmental-management systems in practice. The visit strengthened students' understanding of sustainable waste practices, safety standards and industry workflows, bridging classroom learning on sustainability with real-world operational exposure.



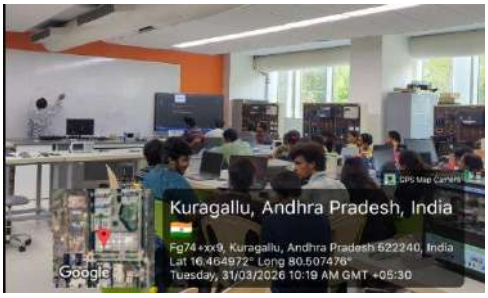


● Workshop on DSP Controllers for Electric Vehicle Applications

Department of Electrical and Electronics Engineering | Industry partner: Solidpro Engineering Support

This hands-on workshop built participants' technical skills in DSP controllers, real-time control systems and motor-drive applications for electric vehicles, equipping students with practical exposure to the systems underpinning sustainable urban mobility and encouraging further project and research work in electric-mobility technologies.





● Digital Infrastructure Workflows: Integrating BIM and GIS for Civil Engineering Construction

Online Seminar | Department of Civil Engineering

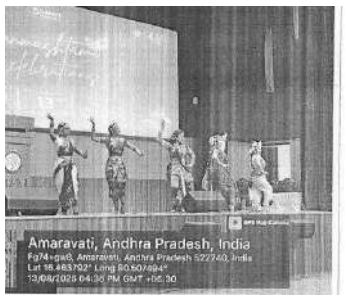
This seminar walked students through the evolution of Building Information Modelling (BIM) and its integration with GIS in planning, construction and infrastructure lifecycle management, sharpening students' understanding of data-driven, spatially-aware approaches to resilient urban infrastructure.



● Krishnastami 2025

Directorate of Student Affairs | Cultural celebration

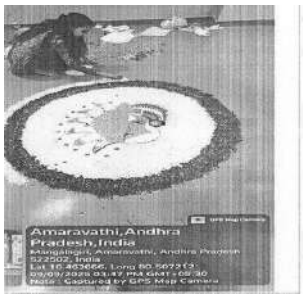
Krishna Janmashtami combined traditional puja with student-led performances - devotional music, classical dance and a theatre skit on the life of Lord Krishna - strengthening community bonding and enriching the cultural vibrancy of campus life.

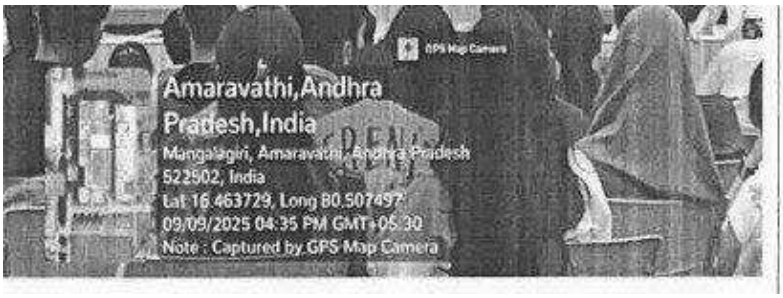


● Onam - Aaravam 2025

Directorate of Student Affairs | Cultural celebration

Aaravam 2025 celebrated Onam through a Pookalam competition, traditional games and stage performances showcasing Kerala's artistic heritage, bringing students together in a festive setting that encouraged teamwork and appreciation of cultural diversity.





● Diwali Celebrations

Directorate of Student Affairs | Cultural celebration

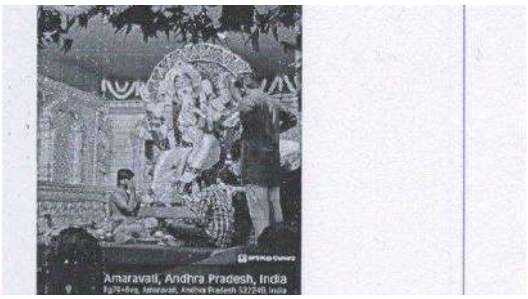
The Diwali celebration brought students together for a festive gathering with a fireworks show and collective participation, providing a shared platform for cultural expression and strengthening social connections across the campus community.



● Ganesh Chaturthi

Directorate of Student Affairs | Religious and cultural celebration

Ganesh Chaturthi combined traditional rituals with cultural performances and a clay idol-making activity that carried an explicit eco-friendly message, pairing cultural inclusivity with environmental awareness.



● Venkatapalem Temple Seva by NSS

APJ Abdul Kalam Auditorium | National Service Scheme

NSS volunteers organised a temple-seva activity at Venkatapalem, combining community service with cultural and religious participation and reinforcing student engagement with the neighbouring community.





● Manipur and Meghalaya State Formation Day

Raj Bhavan, Vijayawada | Directorate of Student Affairs

This State Formation Day programme, held at the Governor's Office, commemorated the formation of Manipur and Meghalaya and highlighted their historical and cultural significance, reinforcing appreciation of India's cultural diversity, inclusivity and national integration.



● Uttar Pradesh State Formation Day

Vijayawada | Directorate of Student Affairs

The University marked Uttar Pradesh's State Formation Day with a commemorative campus programme celebrating the state's heritage and contribution to the nation, extending the University's series of inclusive cultural observances through the year.



RESEARCH & PUBLICATIONS

Scopus/SciVal data for SRM University-AP shows sustained research activity aligned with SDG 11 over 2025-26.

105	1.52	35%	261
SDG 11-aligned scholarly publications	*Field-Weighted Citation Impact*	*International collaboration*	*Citations received*

The University's SDG 11 research portfolio is concentrated around intelligent transportation systems, vehicular ad-hoc and edge-computing networks, smart cities, and municipal solid-waste and landfill research - the leading keyphrases across the University's 105 tracked publications. Representative contributions include studies on landfill-leachate contamination and incinerated municipal-solid-waste ash for liner applications; biowaste-derived biochar for wastewater treatment; e-waste management frameworks; low-carbon and aerial-ropeway transit solutions for urban mobility; smart-city IoT dashboards and air-quality monitoring networks; and a 15-minute-city accessibility index for South Asian cities. Together, this body of work connects the University's engineering, environmental-science and management research directly to the technical and planning challenges of sustainable, resilient urban communities.

CONCLUSION

Across 2025-26, SRM University-AP's contribution to SDG 11 has been built from the ground up: a measured, closed-loop approach to solid and hazardous waste on campus; outreach that carries cleanliness and sustainable-living awareness into neighbouring schools and communities; forty events spanning technical training, industry exposure and inclusive cultural celebration; and a growing body of research addressing the real technical challenges of sustainable urban infrastructure, mobility and waste management. Taken together, these strands describe a campus that treats sustainability not as a single initiative but as an everyday, community-wide practice. Looking ahead, the University aims to build on this foundation - deepening its outreach partnerships, expanding composting and resource-recovery capacity, and continuing to translate its research strengths into practical solutions for safer, more inclusive and more resilient communities, on campus and beyond.