



International  
Society of Waste  
Management Air  
and Water



**GITAM**  
(Deemed to be University)  
NAAC A++ ACCREDITED

**SCHOOL OF  
BUSINESS**



**G-TEC**  
DST GITAM-Technology Enabling Centre



International  
Partnership for  
Expanding Waste  
Management  
Services of Local  
Authorities  
**IPLA**  
(A SDG partnership)

# 14<sup>th</sup> International Conference on Sustainable Waste Management – Circular Economy and IPLA Global Forum 2024

International Society of Waste Management Air and Water

**14<sup>th</sup>**  
**IconSWM-CE  
& IPLA GF 2024**

Hybrid Mode

November 28<sup>th</sup>  
to  
December 1<sup>st</sup>  
2024

**School Congress**

November 27<sup>th</sup>  
2024



**GITAM (Deemed to be) University**  
Visakhapatnam, Andhra Pradesh, India - 530045

**14<sup>th</sup>**IconSWM-CE  
& IPLA GF 2024

## About Conference

The exploitation of natural resources, generation of waste, and increased emissions significantly impact both nature and life on earth. An increase in global mean temperature creates problems in human civilization. To achieve sustainable development goals and make the world comfortable for the next generations, we must change consumption patterns to reduce waste generation with resource efficiency and convert waste into valuable products, decarbonizing the processes. The overall aim of the 14th IconSWM-CE & IPLA GF 2024 is to facilitate discussions and knowledge sharing with various stakeholders such as the government, academic and research institutes, industries, Urban Local Bodies (ULBs), NGOs, and other interest groups from various countries to address above issues involving 800 delegates from nearly 60 countries. This conference is organized by GITAM (Deemed to be) University in collaboration with the International Society of

Waste Management Air and Water (ISWMAW). This prestigious international organization promotes environmentally solid waste management practices.

### About

## School Children's Congress on Waste Management & Circular Economy

We cordially invite children in grades 6 to 10 from both public and private schools to participate in the School Children's Congress on Waste Management & Circular Economy, on 27th November to be organized as a part of the 14th International Conference on Sustainable Waste Management - Circular Economy and IPLA Global Forum 2024, International Society of Waste Management Air and Water [ISWMAW] and GITAM. This program aims to educate young people while encouraging them to participate actively in creating a sustainable future by implementing the principles of circular economy. This congress is a part of the India wide mission "Catch Them Young: Circular Economy in Campus" of ISWMAW.

### Understanding the Significance - Why should a student attend the congress?

This congress aims to introduce students to the intricacies and challenges of sustainability in the real world by reducing waste and effective utilisation of waste to produce new recycled products through the circulation of waste in manufacturing processes reducing the material extraction for the mother earth. In addition, the students will acquire an essential understanding of product life cycles, the need for circular economy, and 3R concept [Reduce, Reuse, and Recycle]. They will learn to protect the environment and mother earth through their day to day activities in school and at home.



## Impactful Learning and Encouraging the Younger Generation

It aims to educate students about the adverse impacts of waste on the environment and society, emphasizing the importance of finding solutions and the significance of the concern. Through talks and research exposure, students will understand how to accelerate the development of sustainable waste management & address SDGs.

It encourages students to think critically about their role in the environment. In addition to being delegates, students will leave the program as motivated change agents prepared to lead environmental initiatives in their communities.

## A Platform for Growth

It will be a motivating platform for personal development, and it is set to be a catalyst for success in their lives. It provides an opportunity to acquire leadership, public speaking, and critical thinking skills in addition to environmental knowledge. These are the skills that students need to develop to excel in their educational and professional lives.

## Networking and Future Prospects

Participating students and teachers will be able to interact and exchange ideas with students and teachers from different schools in the country. Interactions with academics, industry professionals, and like-minded people provide networking opportunities. This helps the students to form relationships that could impact their future academic and professional paths. The conference will have a rich and exciting mix of ideas and experiences.

## Why Schools Need to Promote Participation?

National Education Policy (NEP) 2020 stresses rightly upon appropriate integration of environmental awareness and sensitivity towards its conservation and sustainable development in school curriculum.

Children are the global citizens of tomorrow. Children influence their families and friends and shape their attitudes. Children, during their formative years, when they are most receptive to messages and information, need





to be educated about the environment and the long-term impact of our present actions. This will have a cascading effect on society. It is essential that the school and college students need to be exposed to the effective waste management, circular economy, and resource efficiency. Educational institutions must facilitate and enable students to engage in the School Congress Program. Such support shows a commitment to holistic education that equally values academic excellence, environmental preservation, and social inclusion.

It encourages the students to take environmental responsibility outside the classroom. Schools will have the invaluable opportunity to assist students' social and intellectual growth, incorporate sustainability into the school's mission, and contribute substantially to the global dialogue on sustainable practices through this program. Students will contribute to the global movement for environmental preservation and balanced economic development by participating in the program.

The School Children's Congress on Waste Management & Circular Economy offers a space where young minds can develop, learn, and stand inspired and prepared to take on one of the most important challenges of our time. We aspire to nurture the next generation of environmental stewards—people who will uphold the traditions of sustainability, creativity, and conscious citizenship—through projects such as this one. Let us motivate, enlighten, and take coordinated action to create a sustainable future together.



## About Circular Economy

A circular economy is a systems-level approach to economic development and a paradigm shift from the traditional concept of the linear economy model of extract-produce-consume-dispose deplete to zero waste by resource conservation, and at the end of the life cycle for the specific use of the product will be still fit to be utilized as the input materials to a new production process in the value chain with a close loop materials cycles that improve resource efficiency, resource productivity, benefit businesses and the society, creates employment opportunities and provides environmental sustainability. Circular Economy (CE) focuses on a regenerative closed-loop system for living within our planetary boundaries. However, transitioning to a CE is both a necessity and an opportunity, with the potential to offer long-lasting economic, environmental, and social benefits.



## About GITAM

GITAM (Deemed to be) University, Visakhapatnam has been committed to enhancing student values through Gandhian philosophies for more than four decades. Visakhapatnam campus is home to GITAM expert faculties, excellent infrastructural facilities, and motivated students pursuing different interests, like Technology, Management, Architecture, and Medicine. ([To Know More](#))

## About GITAM School of Business

Established in 1988, GITAM School of Business (formerly known as GITAM Institute of Management) is a leading institution dedicated to quality management education. With a vision to become a global leader in higher education, GSB offers diverse graduate, post-graduate, and doctoral programs that align with industry requirements. GITAM School of Business teaching approach combines practicality, case studies, and modern technology, fostering a unique learning environment. Situated in a lush green campus in Visakhapatnam, Hyderabad, Bengaluru. ([To Know More](#))

## About ISWMAW & IconSWM – CE

The International Society of Waste Management, Air and Water (ISWMAW) promotes environmentally sound solid waste management practices, Circular Economy, effluent treatment practices, Air and Water pollution control practices, general environment protection awareness, etc. The ISWMAW is involved in educating school children and college students. Establishing solid waste management and monitoring and managing air and water quality has evolved into a recognized profession and organizing the flagship programme International Conference on Sustainable Waste Management & Circular Economy [IconSWM-CE] and to Catch them



Young: Zero Waste and Circular Economy in Campus [CTY: ZW&CEC] in different parts of the country and abroad for generating awareness. ([www.iswmaw.com](http://www.iswmaw.com))

## Events in School Children's Congress on Waste Management & Circular Economy

The Congress provides exciting critical thinking and innovation events in sustainable waste management and the circular economy. Every event intends to benefit children in learning about sustainability and articulating their opinions on it.



**The events are divided into two categories:**

Category 1 (Classes 6–8)

Category 2 (Classes 9–10).

**There are three streams in the congress**

S. No	Event Name	Team/Individual
1	Model Building*	Team (Max 3 Members)
2	Drawing	Individual
3	Essay writing	Individual

\*Event is mandatory

## Model Building\*

**Category 1 (Class 6 to 8):**

**The theme for model building:** Zero waste & Circular economy in the areas of Solid Waste, Water, energy, and emission.

**For example:**

1. Zero Waste & Circular Economy in Campus: Design a school that helps in segregation of wastes, collection, recycling and earn.
2. Eco-friendly School Campus: Design a school that uses green technologies and practices.
3. Solar-Powered Community Center: Model a community gathering place that operates solely on solar power.
4. Rainwater Harvesting System: Showcase how a rainwater harvesting system works at a residential scale.
5. Pollinator Garden: A garden model that attracts and supports local pollinators with native plants.
6. Recycling Center: A small-scale recycling facility focused on sorting and processing recyclables.

7. Vertical Farming: Build a miniature vertical farm that uses less space and water than traditional farming.
8. Bicycle Sharing Station: Model of a community bicycle share program to encourage non-motorized transportation.
9. Waste-Free Marketplace: Design a market area that eliminates packaging waste and maximizes sustainability.
10. Green Playground: A playground model that uses recycled materials and operates on green principles.
11. Energy-Efficient Home: A model home demonstrating energy efficiency and sustainable living features.
12. Any other related to the theme.

**Category 2 (Class 9 to 10):**

**The theme for model building:** Zero waste & Circular economy in the areas of Solid Waste, Water, energy, and emission.

**For example:**

1. Zero Waste & Circular Economy in Campus: Design a school that helps in segregation of wastes, collection, recycling and earn
2. Green Transportation Hub: Model an intermodal transit station that uses clean energy and reduces emissions.



3. Smart Greenhouse: A technologically advanced greenhouse model that monitors and adjusts its climate.
4. Sustainable Factory: Design a factory model that minimizes waste and incorporates renewable energy.
5. E-Waste Management Facility: Show how electronic waste can be properly processed and recycled.
6. Urban Eco-Park: An eco-friendly park design that utilizes green energy and promotes biodiversity.
7. Rain Garden: Model a rain garden that helps manage stormwater runoff.
8. Sustainable Water Filtration Plant: Depict a water filtration system that is both effective and environmentally friendly.
9. Renewable Energy Village: A village model that runs entirely on renewable energy sources.
10. Eco-Friendly Resort: Model a holiday resort that uses sustainable practices such as greywater recycling.
11. Green Roof Systems: A model showcasing different types of green roofs for temperature control and habitat support.
12. Any other related to the theme.

## Drawing

**The theme for Drawing:** Zero waste & Circular economy in the areas of Solid Waste, Water, energy, and emission.

**For example:**

### Category 1 (Class 6 to 8):

1. Zero Waste & Circular Economy in Campus: Design a school that helps in segregation of wastes, collection, recycling and earn.
2. Life Underwater: Depict aquatic life in a clean, vibrant ecosystem.
3. Recycling at Home: Illustrate a family engaging in home-based recycling activities.
4. The Green Classroom: Depict a classroom that uses eco-friendly materials and practices.
5. Wildlife Sanctuary: Draw an area dedicated to protecting local fauna and flora.
6. Eco-Friendly Transportation: Illustrate children using bicycles or walking to school to promote clean transport.
7. Conservation Heroes: Draw individuals or groups taking action to protect the environment, like planting trees.
8. Renewable Energy at Play: Show renewable energy sources like windmills or solar panels in a park or playground setting.
9. Waste-Free Lunches: Illustrate a group of students enjoying a waste-free lunch with reusable containers.
10. Save the Bees: Create a drawing focusing on the importance of bees and pollination.
11. Solar-Powered Homes: Visualize homes equipped with solar panels generating their own electricity.
12. Any other related to the theme.





**Category 2 (Class 9 to 10):**

**The theme for Drawing:** Zero waste & Circular economy in the areas of Solid Waste, Water, energy, and emission.

**For example:**

1. Zero Waste & Circular Economy in Campus: Design a school that helps in segregation of wastes, collection, recycling and earn.
2. Urban Biodiversity: Illustrate a city with green spaces supporting diverse species.
3. Sustainable Food Chain: Show the process from organic farming to eco-friendly packaging and consumption.
4. Conserving Water Resources: Depict innovative ways people in your community can conserve and reuse water.
5. Green Tech Innovations: Draw new technologies that help reduce carbon footprints, like electric cars or composting machines.
6. Eco-Friendly Fashion: Illustrate the life cycle of a garment from sustainable design to recycling or composting.
7. Marine Conservation Efforts: Show actions being taken to protect the marine environment from pollution.
8. The Green Festival: Draw a community event that promotes environmental awareness and sustainable living.
9. Sustainable City Planning: Visualize a future city incorporating green buildings, renewable energy, and food-growing areas.
10. The Energy-Efficient School: Illustrate a school that maximizes energy efficiency through design and renewable technologies.
11. Protecting Endangered Species: Create artwork that raises awareness about endangered species and habitats.
12. Any other related to the theme.

**Essay Writing:**

**The theme for essay writing:** Zero waste & Circular economy in the areas of Solid Waste, Water, energy, and emission.

**For example:****Category 1 (Class 6 to 8):**

1. Zero Waste & Circular Economy in Campus: Design a school that helps in segregation of wastes, collection, recycling and earn.
2. Waste Management as business model
3. The Three Rs: Write about the benefits of Reducing, Reusing, and Recycling at a personal and community level.
4. Local Trees and Their Importance: Discuss the significance of native trees in your area and why they are essential for the local ecosystem.
5. My Green Dream School: Imagine what an environmentally friendly school would look like and describe it.
6. Water Conservation at Home: Propose simple methods for saving water in everyday life.
7. The Importance of Bees: Explore why bees are vital to the environment and what can be done to protect them.
8. Heroes of the Environment: Profile someone you admire who is taking action to protect the environment.

9. **The Role of Renewable Energy:** Discuss how solar and wind power can help us reduce our carbon footprint.
10. **Plastic Pollution and its Impact:** Examine the effects of plastic waste on wildlife and human health.
11. **Green Spaces in our communities:** Explain why parks and natural spaces are important in urban areas.
12. **Saving Energy with Technology:** Describe how modern technology can help save energy at home and school.
13. Any other related to the theme.

### **Category 2 (Class 9 to 10):**

The theme for essay writing: Zero waste & Circular economy in the areas of Solid Waste, Water, energy, and emission.

### **For examples:**

1. **Zero Waste & Circular Economy in Campus:** Design a school that helps in segregation of wastes, collection, recycling and earn.
2. **Climate Change and Future Generations:** Discuss the potential impact of climate change on the next generation and what can be done to mitigate it.
3. **Waste Management as business model**
4. **Sustainable Agriculture vs. Industrial Farming:** Compare and contrast the effects of these two farming methods on the environment.
5. **The Green New Deal:** Explain the Green New Deal and discuss its potential effects on the environment and economy.
6. **Ocean Acidification and Marine Life:** Explore the causes of ocean acidification and its effect on marine ecosystems.
7. **Sustainable Living in Urban Areas:** Discuss challenges and strategies for living sustainably in a city.
8. **The Impact of Fast Fashion on the Environment:** Analyze the fashion industry's environmental footprint and what can be done about it.
9. **Zero Waste Lifestyle:** Explore the feasibility and benefits of a zero waste lifestyle.
10. **Eco-Friendly Technologies and Their Adoption:** Discuss technological innovations that support environmental stewardship

and how they can be widely adopted.

11. **Environmental Policy and Legislation:** Review and assess the impact of specific environmental policies or pieces of legislation.
12. **Wildlife Conservation Strategies:** Discuss effective strategies for protecting and preserving wildlife and natural habitats.
13. Any other related to the theme.



### **Guidelines for**

## **Schools for Conducting the Events**

The following guidelines are recommended for schools conducting preliminary rounds for all categories and events.

Schools should judge preliminary rounds to select participants for the final round. The schools must choose only one (the best) from each category and the event based on the criteria given and should send the selected students list along with the documentation to [iconswm.ce@gmail.com](mailto:iconswm.ce@gmail.com) & [iconswmce@gitam.edu](mailto:iconswmce@gitam.edu), on or before 30th September 2024. The events which are mailed should kept carefully with the school till the announcement of shortlisted students by ISWMAW.

### **Documentation Process of the final event selected by the school**

**Model building:** Make a video of the finalized team from each category of max 2 minutes duration, and write a summary of the model in 300 words in word document and email.

**Drawing:** Scan the copy of the finalized student from each category and write a summary of the drawing in 300 words in Word document and email.



**Essay Writing:** Scan the copy of the finalized student from each category and email.

The ISWMAW jury members will review the models, drawings and essays received from schools all over India, and the emails will sent to the short-listed students in the first week of October, 2024.

The shortlisted students along with the coordinating teacher will come to GITAM, Visakhapatnam, on the day of the School Congress program, 27th November 2024, with the final models, drawings, and essays and display them in the allocated place. Winners will be rewarded in the school Congress valedictory.

#### **Support to the Selected Students and Coordinating Teachers:**

The 14th IconSWM-CE conference committee will reimburse the transport expenses to all the participating students and the accompanying teachers by bus/train fair on the submission of the ticket. The shared accommodation and food for November 26-27, 2024 from at GITAM will be provided to the participating students and accompanying teachers who will travel beyond 100 km one way at free of cost.

**Registration:** All participants must register for their respective events before the deadline. Schools should handle the initial registration process and ensure a minimum of 10 teams, including both the categories for model building, and 10 entries for drawing and essay writing, respectively.

### **For Student Registration:**

Click [here](#) to register /  
visit [www.iconswmce.gitam.edu](http://www.iconswmce.gitam.edu)

**Judges:** A panel of judges should be appointed at each school level, preferably including at least one subject matter expert in sustainability or related fields.

**Documentation:** Photographs and videos should be taken during the event to document the students' work.

**Timeframe:** A timeline should be established with ample time for students to prepare and for the preliminary rounds to be completed before 30<sup>th</sup> September 2024.

**Resources:** Provide students access to materials and information about sustainable waste management and the circular economy to aid their project development.



#### **Guidelines for**

### **Model Building:**

- Ensure your model represents the theme and its relation to sustainability.
- Use recycled or eco-friendly materials where possible to enhance relevance to sustainability.
- Pay attention to detail, proportion, and scale to accurately convey your concept.
- Ensure the model is stable, durable, and finished neatly.
- Include a brief description or presentation that explains your model and how it works.
- Consider the practical aspects of your model – is it realistic? Could it function in the real world?
- The maximum size of the model should be 50cm x 50cm x 50cm. Should Mention the following details on the top left corner of the board:
  - » School Name
  - » Category
  - » Class
  - » Theme Name
  - » Team members' names





## Guidelines for Drawing:

- Your drawing should directly relate to the chosen theme and depict sustainability practices.
- Creativity in your interpretation of the theme is encouraged.
- Use art materials wisely, focus on minimizing waste and opting for environmentally friendly options.
- The drawing should be well-composed, clear, and aesthetically appealing.
- Use colors and textures effectively to enhance the message of the artwork.
- Include a short description to give context to your artwork and explain its significance.
- Artworks can be created on A3 size paper with any medium of choice. Should Mention the following details on the top left corner of the sheet:
  - » School Name
  - » Category
  - » Class
  - » Theme Name
  - » Student Name



## Guidelines for Essay Writing:

- The essay must be well-structured with an introduction, body, and conclusion.
- Display a clear understanding of the topic with good content where you analyze, discuss, and provide insights on the theme.
- Be concise and stay on topic; ensure each paragraph conveys a specific point supporting your theme.
- Use credible sources and reference them accordingly to back up your arguments.
- Grammar, punctuation, and spelling are important – they contribute to clarity and readability.
- Your conclusion should summarize the key points and suggest possible solutions or calls to action.

- Essay should be written in 2000 words on an A4 sheet. Should Mention the following details on the top left corner of the sheet:

- » School Name
- » Category
- » Class
- » Theme Name
- » Student Name

## Evaluation Criteria:

### 1. Creativity & Originality (Marks: 20):

- Innovation in approach or concept.
- Unique perspective or solution offered.

### 2. Technical Execution (Marks: 20):

- For models and drawings: quality of construction, use of materials, and attention to detail.
- For essays: coherence, structure, grammatical accuracy, and use of language.

### 3. Relevance to Sustainability & Current Issues (Marks: 20):

- Demonstrates understanding of sustainability principles.
- Shows how the theme contributes to environmental and social sustainability.

### 4. Practicality & Feasibility (Marks: 20):

- Realistic representation or discussion of implementable solutions.
- Consider potential challenges and how they could be overcome.

### 5. Presentation (Marks: 20):

The overall quality of the presentation, including a visual appeal for models and drawings or flow of ideas in essays.

- Clear communication of ideas and concepts.



14<sup>th</sup>

IconSWM-CE  
& IPLA GF 2024

## Core Committee

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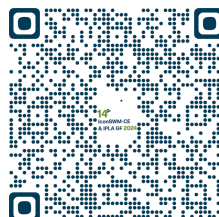
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