

Sustainability Fair 2.0

4th INTERNATIONAL SUSTAINABILITY
CONFERENCE ON HEALTH, SAFETY, FIRE AND
ENVIRONMENTAL ADVANCES
(HSFEA 2023)

OCTOBER 30-31, 2023

“Promoting Global Well-Being”



 Sustainability Cluster, School of Advanced Engineering, UPES
Bidholi, Dehradun, Uttarakhand - 248007

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Technical Report

SUSTAINABILITY FAIR 2.0
(HSFEA – 2023)

Organized by
Sustainability Cluster
School of Advanced Engineering (SoAE)
UPES Dehradun

October 30-31, 2023

Theme: Promoting Global Well-Being

Chair

Prof. Manish Kumar

Convenor

Prof. Bikrama Prasad
Yadav

Organizing Secretary

Dr. Abhishek Nandan

Organizing Secretary

Dr. Mahesh Kumar Tiwari

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Executive Summary

Sustainability Cluster, School of Advanced Engineering (SoAE), UPES Dehradun hosted the 4th International Sustainability Conference on Health, Safety, Fire, and Environmental Advances (HSFEA-2023) under the umbrella of Sustainability Fair 2.0 during October 30-31, 2023, under the theme "Promoting Global Well-being". The aim of Sustainability Fair 2.0: HSFEA-2023 was to provide a dynamic interdisciplinary platform for researchers, professionals, policymakers, and industry experts to collaborate, share insights, and explore advancements fostering global well-being. A series of activities were planned for this event such as mega alumni connect, industry conclave, oral and poster paper presentations, panel discussions, plenary talks, exhibitions, model display, as well as award ceremony. The conference was sponsored by Makeen Energy, EID Parry's, Core EHS Solutions, AAAG India, Encore Insoltech, Springer Nature Group, American Chemical Society International, and Atomic Energy Regulatory Board (AERB). The Sustainability Fair 2.0 encouraged the participants to take a sustainability pledge to make eco-friendly choices and live a more sustainable life.

Objective of the event

1. Providing a platform for experts, researchers, and practitioners to share their knowledge, research findings, and innovative ideas, products & services with a wider audience.
2. Bring together, professionals, industry leaders, and like-minded individuals from various sectors & backgrounds to foster collaboration, partnership, joint projects and business opportunities.
3. Providing a platform for discussing and addressing specific challenges or issues within a particular industry or field.
4. Facilitate engagement with regulatory bodies and policymakers to address industry-specific regulatory challenges and explore opportunities for improvement.
5. Sharing of case studies and success stories that highlight effective strategies and lessons learned in the field of Health, Safety, Fire, Environment, and Sustainability.

Highlights of Sustainability Fair 2.0

The key highlights of Sustainability Fair 2.0: HSFEA-2023 are as follows:

1. **Mega Alumni Connect** – A pre-conference cluster alumni connect was scheduled on Oct 29, 2023, in coordination with the **Team Alumni Relation** with the theme of Reunite, Reconnect, Retreat & Rejuvenate (4R). About 42 alumni from 22 different premiere industries participated in the pre-conference mega alumni meet.
2. **Academia and Industry Conclave:** Over 600 delegates from diverse stakeholders and representatives from reputed industries attended the conference to provide industry insights, foster networking and exchange thoughts and ideas with the participants within the field of HSFEA.
3. **Panel Discussions:** Four-panel sessions were conducted during the conference with a focus on fostering collaborative solutions and addressing key issues related to health, safety, fire, environment, and sustainability at the workplace. The panellists included renowned personalities such as Devendra Gill (Executive Director Safety, Delhi Metro), J. K. Anand (Chairman and Director, ASK-EHS Engineering Consultant Pvt. Ltd.), Manoj Baratwal (Former Executive Director and Head Academy ONGC, Dehradun), Sreedhar Ramamurthi (Managing Trustee Environics Trust), Somnath Fulari (Director, Makeen Energy Pvt. Ltd.), Suresh Raju Penmatsa (Vice President – Corporate EHS, Mankind Pharma Ltd.), Col. Anand Kumar Singh (Chief Executive Officer Safety Skill Development Foundation), Pankaj Singh (Business Leader-Safety, Adani group), Manish Kumar (Vice President and Corporate Head HSE, DLF Ltd.), Jayasanckar Rajamanickam (VP and Head EHS, EID Parry India Ltd.), Dr. Sanjay Gandhi (Assistant VP and Head, EHSF Gujarat Fluorochemicals Ltd.), Dr. R.K. Sharma (Head – Sustainability, India Glycols Ltd.), Prof. Sudalai Subramani (Asst. Prof. at Pondicherry University), Raji Ahmed Farooqi (HoD HSE, RPG Group), Dr. Har Amrit Singh Sandhu (ASCE President, North Region), Himanshu Dubey (Deputy Manager, Coal India Limited), Dr. Ashok More (Head of Department, DY Patil College of Engineering), Dr. Alka Pisal (Director at Dynamic Structural Solutions LLP), Dr. Amit Srivastava (Professor, Graphic Era University), and Simran Mohanani (Software Quality Analyst, Bentley Systems).

4. **Individual & Organizational Award:** Over **45 awards** were given to industry professionals and organizations in recognition of their significant contributions in the field of HSFEA. The awardees (Individual & organization) were from various organizations such as Adani, Reliance, Delhi Metro Rail Corporation, Steel Authority of India Limited, Mitsubishi Elevator India Private Limited, Vedanta, Deloitte, L&T, EIL, Sparrow Risk Management, Mankind Pharma, Maruti Suzuki India Ltd, ERM, Gujrat Fluoro Chemicals Ltd, Eureka Forbes Limited, GlaxoSmithKline, Jubilant Generics Limited, Nayara Energy Limited, Makeen Energy, ASK EHS Engineering & Consultants Pvt. Ltd, DLF Limited, EID Parry (India) Ltd, Encore Insoltech, Prowaste Concepts, Trident Group, Neanic Solutions Pvt Ltd etc.
5. **Keynote and Plenary Talks:** The conference delegates were enriched with the plenary talks of Prof. Ashok Pandey (Distinguished Scientist at the Centre for Innovation and Translational Research, CSIR-Indian Institute of Toxicology Research, Lucknow, India), Dr. Kalay Vairavamoorthy (Executive Director, International Water Association).
6. **Oral and Poster Paper Presentations:** We received over 283 research articles for oral and poster presentations from prestigious institutions including IISc, IITs, NITs and central universities. A total of **16 best oral presentations** and **13 best poster presentation** awards were given to the participants.
7. **Exhibitions and Model Display:** **33 exhibitors** from NGOs, start-ups, and industries showcased their best practices and innovations during HSFEA 2023. In addition, over 70 models developed by students from various nearby schools and colleges were put on display during the conference. The best **9 models** (from the various schools/colleges) were awarded during this event.
8. **Pre-conference Activities:** As a part of pre-conference activities, the conference committee has visited various nearby schools conducting student activities for over 1500 students, and orphanages where they met 150 orphans. Additionally, social awareness campaigns were organized by the students of UPES to promote health and hygiene among 500 students. A prelude to Sustainability Fair 2.0, ATMOSFAIR 2023 was successfully conducted as a celebration of environmental awareness and sustainability in the month of September.



Pre-conference activities in campus



Pre-conference activities of orphanage visit

Minute-to-minute program of Sustainability Fair 2.0

Sustainability Fair 2.0 (HSFEA 2023)																			
Organized by Sustainability Cluster, School of Advanced Engineering, UPES, Dehradun Minute to Minute Program 29 th to 31 st October 2023																			
4R Night (29 th Oct 2023)																			
Time	Agenda	Venue																	
07:30 PM - 10:30 PM	Reunite, Reconnect, Retreat, Rejuvenate																		
Day 1 (30 th Oct 2023)																			
Time	Agenda	Venue																	
08:30 AM onwards	Registration	AB-01																	
09:30AM - 10:30 AM	Inauguration of the Sustainability Fair 2.0	MAC																	
10:30 AM - 11:00 AM	High Tea																		
11:00 AM - 12:00 PM	Panel Discussion 1: India's Potential Leadership in Health, Safety, Environment and Sustainability: Exploring Opportunities and Overcoming Challenges	MAC																	
12:00 PM - 01:00 PM	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> Panel Discussion 2: Fostering a Safety Culture at the Core and Pioneering a Net-Zero, Venue: MAC </div> <div style="width: 60%; text-align: center;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #90EE90;"> <th colspan="3" style="text-align: center; padding: 2px;">Paper presentation</th> </tr> </thead> <tbody> <tr style="background-color: #FFD700;"> <td style="padding: 2px;">OS 1: Occupational and Environ. Health Safety</td> <td style="padding: 2px;">Poster presentation,</td> <td style="padding: 2px;">Block 1 board room</td> </tr> <tr style="background-color: #FFD700;"> <td style="padding: 2px;">OS 2: Safety</td> <td style="padding: 2px; color: green;">Venue: MAC</td> <td style="padding: 2px;">Vivekanand auditorium</td> </tr> <tr style="background-color: #FFD700;"> <td style="padding: 2px;">OS 3: Risk</td> <td style="padding: 2px;"></td> <td style="padding: 2px;">Trust board room</td> </tr> </tbody> </table> </div> </div>	Paper presentation			OS 1: Occupational and Environ. Health Safety	Poster presentation,	Block 1 board room	OS 2: Safety	Venue: MAC	Vivekanand auditorium	OS 3: Risk		Trust board room						
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OS 2: Safety	Venue: MAC	Vivekanand auditorium																	
OS 3: Risk		Trust board room																	
01:00 PM - 02:00 PM	Lunch																		
02:00 PM - 03:00 PM	<div style="display: flex; justify-content: space-between;"> <div style="width: 25%; font-size: 0.8em;"> Panel Discussion 3: Industry 4.0 and the Transforming Landscape of Health, Safety, Fire, Environment and Sustainability Venue: MAC </div> <div style="width: 50%; text-align: center;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #90EE90;"> <th colspan="3" style="text-align: center; padding: 2px;">Parallel Paper & Poster Presentation</th> </tr> </thead> <tbody> <tr style="background-color: #FFD700;"> <td style="padding: 2px;">OS 4: Fire</td> <td style="padding: 2px;"></td> <td style="padding: 2px;">Block 1 board room</td> </tr> <tr style="background-color: #FFD700;"> <td style="padding: 2px;">OS 5: Waste management</td> <td style="padding: 2px;"></td> <td style="padding: 2px;">Vivekanand auditorium</td> </tr> <tr style="background-color: #FFD700;"> <td style="padding: 2px;">OS 6: Biosecurity</td> <td style="padding: 2px;"></td> <td style="padding: 2px;">Trust board room</td> </tr> <tr style="background-color: #FFD700;"> <td style="padding: 2px;">SS 1: Quantum Technology and sustainability</td> <td style="padding: 2px;">Poster presentation, Venue: MAC</td> <td style="padding: 2px;">Room 1204</td> </tr> <tr style="background-color: #FFD700;"> <td style="padding: 2px;">SS 5: Environmental Sustainability and Legal Framework</td> <td style="padding: 2px;"></td> <td style="padding: 2px;">K2305</td> </tr> </tbody> </table> </div> </div>	Parallel Paper & Poster Presentation			OS 4: Fire		Block 1 board room	OS 5: Waste management		Vivekanand auditorium	OS 6: Biosecurity		Trust board room	SS 1: Quantum Technology and sustainability	Poster presentation, Venue: MAC	Room 1204	SS 5: Environmental Sustainability and Legal Framework		K2305
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SS 5: Environmental Sustainability and Legal Framework		K2305																	
03:00 PM - 05:00 PM	Award Ceremony	MAC																	
05:00 PM - 05:30 PM	Tea																		
07:30 PM - 10:30 PM	Networking Dinner	-																	

Day 2 (31 st Oct 2023)		
Time	Agenda	Venue
09:30 AM - 11:15 AM	Parallel Paper & Poster Presentation	
	RISE and Model display (MAC)	Poster presentation, Venue: MAC
	SS 3: Transportation safety	
	SS 2: Food security	
OS 7: Waste and Energy		
11:15 AM - 11:30 AM	SS 4: Energy and Environment	Block 1 board room
11:15 AM - 11:30 AM	High Tea	Vivekanand auditorium
11:30 AM - 12:15 PM	OS 7: Waste and Energy	Trust board room
11:30 AM - 12:15 PM	SS 4: Energy and Environment	Room 1204
12:15-01:30 PM	High Tea	
01:00 PM - 02:30 PM	Plenary Session	
01:00 PM - 02:30 PM	Panel discussion 4: Sustainable and Climate Resilient Infrastructure Development	MAC
	Plenary Talk 1: Prof. Ashok Pandey	
	Plenary Talk 2: Prof. Jürgen Mahlknecht	
Plenary Talk 3: Prof. Kala Vairavamoorthy		
01:00 PM - 02:30 PM	Lunch	
02:30 PM - 04:30 PM	Paper & Poster Presentation	
	OS 8: Environment (Environ: sub theme Environmental management and monitoring)	Poster presentation, Venue: MAC
	OS 9: Environment (Environ: Sub theme Wastewater Treatment)	
	OS 10: Biotechnology	
OS 11: ESG and legal		
02:30 PM - 04:30 PM	OS 8: Environment (Environ: sub theme Environmental management and monitoring)	Block 1 board room
02:30 PM - 04:30 PM	OS 9: Environment (Environ: Sub theme Wastewater Treatment)	Trust board room
02:30 PM - 04:30 PM	OS 10: Biotechnology	Vivekanand auditorium
02:30 PM - 04:30 PM	OS 11: ESG and legal	Room 1204
04:30 PM - 05:30 PM	Valedictory	Vivekananda Auditorium
05:00 PM - 05:30 PM	Tea	

Day-wise Conference Activities

Mega Alumni Meet - 29th October 2023

The conference kickstarted with a special event – **MEGA ALUMNI CONNECT** with a theme of **Reunite, Reconnect, Retreat, Rejuvenate**. Forty-two alumni of the sustainability cluster from all over the country gathered to make this event memorable. The gathering witnessed a night of nostalgia, reconnections, and celebrations of the old, cherished memories and re-ignite the precious connections.

The evening concluded with the felicitation of the alumni by the career services and the Sustainability Fair Committee. It was decided to continue this event as the annual meet under the umbrella of the Sustainability Fair.



Mega Alumni Connect

DAY 1- Sustainability Fair 2.0: 30th October 2023

The second edition of the Sustainability Fair is based on the theme 'Promoting Global Well-Being'. Last year, we had the first edition inaugurated by the governor Uttarakhand on the theme of Sustainable Urban Environment (ISSUE).

This year, we have received 283 abstracts from over 92 institutions, including IITs, NITs and 5 countries: **Mexico, Saudi Arabia, Bangladesh, the UK & the USA**. This year, we have partnered with Q-1 journals to publish selected papers. Selected articles will be published in a special issue of **Environmental Science and Pollution Research (ESPR)** and **Biomass Conversion and Biorefinery** journals, as well as in Springer proceedings. The parallel oral and poster presentations were conducted for several themes including risk, safety, biosecurity, environment, waste management, biotechnology, green building, waste and energy, along with special sessions on food security, energy and environment, transportation safety, sustainability and legal framework.

The session began with the inaugural talks by **Padma Bhushan**, Dr. Anil Joshi ji & Prof. Shane Allen Snyder, **CEO of IWA & ED, NTU Singapore**.

"It is not enough to have theoretical or abstract notions of sustainability; rather, one should focus on how sustainability is defined and applied in real-world contexts" – **Padma Bhushan Dr. Anil Joshi**.

Prof. Shane Allen Snyder focussed on the waste plastic upcycling of high-value materials. Prof. Ram Sharma, **VC, UPES**, emphasised on the critical challenges in the field of health safety, fire, environment, and sustainability.

Prof. Manish Kumar, **Head of the Sustainability Cluster**, conveyed that the University plans to make it an annual event; thus, participants should stay tuned for its third edition in 2024. The panel discussion on "**India's Potential Leadership in Health, Safety, Environment, and Sustainability: Exploring Opportunities and Overcoming Challenges**" followed the inaugural session with the esteemed panellists: Devendra Gill (Executive Director Safety, Delhi Metro), J. K. Anand (Chairman and Director, ASK-EHS Engineering Consultant Pvt. Ltd.), Manoj Baratwal (Former Executive Director and Head Academy ONGC, Dehradun), Sreedhar Ramamurthi (Managing Trustee Environics Trust), and Somnath Fulari (Director, Makeen Energy Pvt. Ltd.), where Prof. Manish Kumar moderated the panel discussion.

The second panel discussion on “**Fostering a Safety Culture at the Core and Pioneering a Net-Zero Accident Vision**” was moderated by Devendra Gill (Executive Director Safety, Delhi Metro) and the panellists included Suresh Raju Penmatsa (Vice President – Corporate EHS, Mankind Pharma Ltd.), Col. Anand Kumar Singh (Chief Executive Officer Safety Skill Development Foundation), Pankaj Singh (Business Leader-Safety, Adani group), Manish Kumar (Vice President and Corporate Head HSE, DLF Ltd.), and Jayasanckar Rajamanickam (VP and Head EHS, EID Parry India Ltd.). The third panel discussion on “**Industry 4.0 and the Transforming Landscape of Health, Safety, Fire, Environment and Sustainability**” included the panellists Dr. Sanjay Gandhi (Assistant VP and Head, EHSF Gujarat Fluorochemicals Ltd.), Dr. RK Sharma (Head – Sustainability, India Glycols Ltd.), Prof. Sudalai Subramani (Asst. Prof. at Pondicherry University), Raji Ahmed Farooqi (HoD HSE, RPG Group) and was moderated by Jayasanckar Rajamanickam (VP and Head EHS, EID Parry India Ltd.).

After several parallel oral and poster sessions, and panel discussions, we started distributing the happiness of acknowledgment and hard-earned recognitions in an event packed award ceremony for both individual efforts and institutional achievements. We received several nominations based on which individual and organizational awards were given. Among them, a few of the award recipient organizations were Adani groups, Reliance Retails, Makeen Energy, Prowaste Concepts, Mitsubishi, Mankind Pharma, Eureka Forbes, HESCO, UPCB among the others. The night concluded with the networking dinner, but not before witnessing fine dining, entertainment, and meaningful conversations. The lifetime achievement award was given to Dr. R. K. Sharma, who heads the sustainability division of India Glycols Ltd. for his immense contribution to the field of environment, occupational health, and safety.

List of individuals and organizations selected for various award categories

Individual awards				
S.No.	Name	Name of the Organisation	Award Name	Sector
1	Mr. Sushant Gill	Deloitte	Young Safety Professional of the Year Award	Consultancy Services
2	Mr. Karthikeyan S	Engineer India Limited - EIL	Young Safety Professional of the Year Award	Engineering, Procurement and Construction
3	Ms. Anjali Parashar	Sparrow Risk Management Pvt. Ltd.	Young Safety Professional of the Year Award-Female	Consultancy Services

4	Mr. Mandeep Walia	Larsen & Toubro - Water & Effluent Treatment IC	Young Safety Professional of the Year Award	Construction
5	Mr. Parth Mehta	Adani Enterprises Ltd	Young Sustainability Professional Award- Male	Infrastructure Conglomerate
6	Ms. Droni Pancholi	Mankind Pharma	Young Sustainability Professional Award- Female	Pharmaceutical
7	Mr. Rahul Kumar Meena	Women's Engineering College	Youngest Innovator Award	Construction
8	Mr. Jaskaran Singh	Maruti Suzuki India Limited	Best Young Innovative Practitioner Award	Manufacturing
9	Ms. Srishty Thareja	ERM	Best Young Innovative Practitioner Award	Consultancy Services
10	Dr. Sanjay P Gandhi	Gujarat Fluorochemical Limited	Environmental Excellence Award	Chemical
11	Mr. Anurag Pathak	Eureka Forbes Limited	Environmental Excellence Award	Manufacturing
12	Mr. Ashutosh Mishra	GlaxoSmithKline	Safety Leadership Award	Health Care
13	Mr. Yogesh Kumar	Jubilant Generics Limited	Safety Leadership Award	Pharmaceutical
14	Mr. Manish Kumar	DLF Limited	Safety Leadership Award	Real Estate
15	Mr. Jitendra Kumar Anand	ASK EHS Engineering & Consultants Pvt. Ltd.	Safety Leadership Award	Consultancy Services
16	Mr. Apoorv Agarwal	Nayara Energy Limited	Safety Leadership Award	Energy
17	Mr. Navneet Singh Chauhan	Makeen Energy	Safety Leadership Award	Oil and Gas (LPG)
18	Chandranshu Sharma	Reliance Retail Ltd	Safety Leadership Award	Retail
19	Mr. Amit Kumar	Mitsubishi Elevator India Private Limited	Safety Excellence Award	Industrial Machinery
20	Mr. Pankaj Singh	Adani Cements	Safety Professional of the Year Award	Cement
21	Mr. Kumar Gaurav	Reliance Retail Ltd	Safety Professional of the Year Award	Retail
22	Mr. Jayasanckar Rajamanickam	EID Parry (India) Ltd	Safety Professional of the Year Award	Process

Organizational awards			
S.No.	Name of the organisation	Name of Award	Sector
1	Mitsubishi Elevator India Private Limited	Best Innovative Practices Award	Industrial Machinery
2	Steel Authority of India Limited (SAIL) -Bokora Plant	Best Innovative Practices Award	Metal Processing
3	Prowaste Concepts	Best Innovative Practices Award	Environmental Consultancy services
4	Jubilant Generics Limited	Safety Excellence Award	Pharmaceutical
5	Makeen Energy India Pvt Ltd	Safety Excellence Award	Oil & Gas (LPG)
6	Trident Group	Safety Excellence Award	Textile and Paper
7	Steel Authority of India Limited (SAIL)-Burnpur Plant	Safety Excellence Award	Metal Processing
8	Adani Cements	Safety Excellence Award	Cement Business
9	Reliance Retail Limited	Sustainability Excellence Award	Retail
10	Himalayan Environmental Studies and Conservation Organisation (HESCO)	Sustainability Excellence Award	Public
11	Eureka Forbes Limited	Environmental Excellence Award	Manufacturing
12	Gujarat Fluorochemical Limited	Environmental Excellence Award	Chemical
13	Uttarakhand Pollution Control Board	Environmental Excellence Award	Public
14	Vikaki Enterprises	Promising Startup of the Year Award	Training & Development
15	Neanic Solutions Pvt Ltd	Promising Startup of the Year Award	Technology Advancement
16	Encore Insoltech	Promising Startup of the Year Award	Environmental Consultancy services
17	Fire & Security Association of India	Best Safety Communicator Award	Training & Education
18	ASK EHS Engineering & Consultants Pvt. Ltd.	Best Safety Communicator Award	Consultancy services
19	Uttarakhand State Council for Science & Technology	Excellence Award in Science & Technology	Public
20	Delhi Metro Rail Corporation (DMRC)	Safety Culture Transformation Award	Urban Transportation
21	Mankind Pharma	Sustainability Excellence Award	Pharmaceutical
22	Adani Enterprises Limited	Sustainability Excellence Award	Business
23	Reliance Retail	Sustainability Excellence Award	Business
Lifetime Achievement Award			
Name		Organization	
Dr. R.K. Sharma		India Glycols Ltd.	

UPES
UNIVERSITY OF TOMORROW

Sustainability Fair 2.0
4th INTERNATIONAL SUSTAINABILITY CONFERENCE
ON HEALTH, SAFETY, FIRE AND ENVIRONMENTAL ADVANCES (HSFEA 2023)
OCTOBER 30-31, 2023
"Promoting Global Well-Being"
INAUGURAL SPEAKERS

Mr. Sharad Mehra
CEO, Asia Pacific - Gas Global Services
India Pvt. Ltd.

Dr. Anil Prakash Joshi
Padma Bhushan, Padma Shri, Jammalal Bajaj Award
Ashoka Fellowship

Prof Shane Allen Snyder
Executive Director, Nanyang
Technological University

Dr Ram K Sharma
Vice Chancellor, UPES

Sustainability Cluster, School of Advanced Engineering, Bidholi Campus, UPES

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Inaugural Speakers



Glimpses of Inaugural Session



Glimpses of Panel Discussions



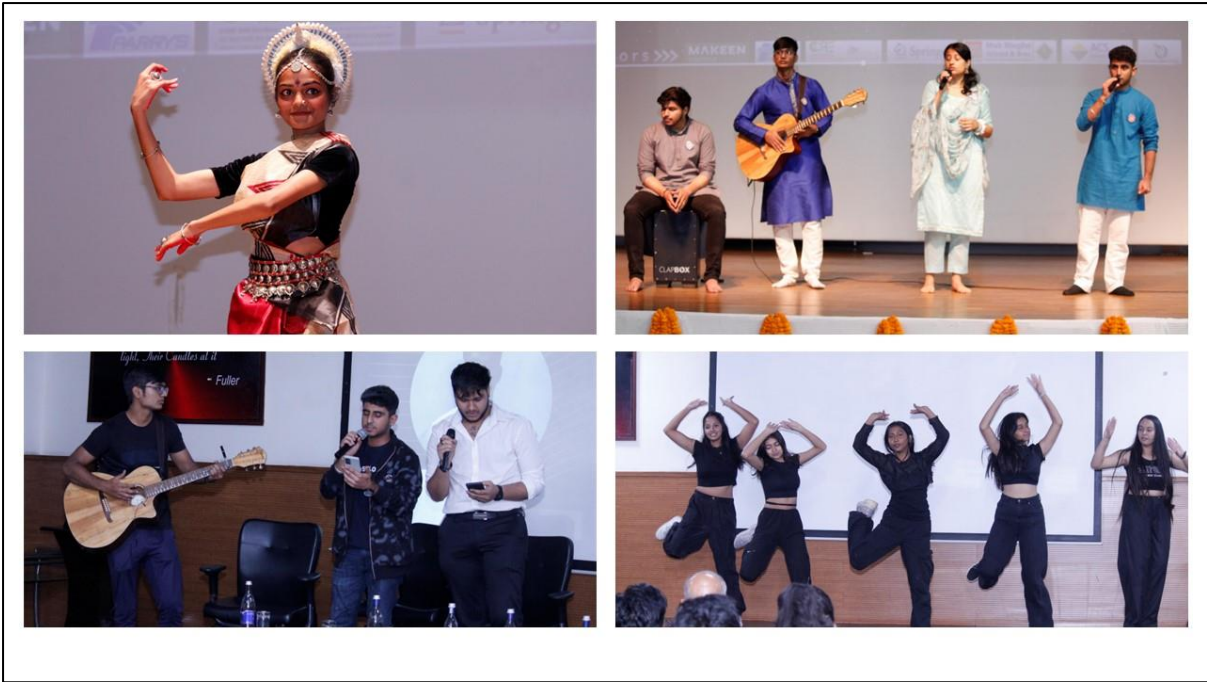
Award Ceremony

Exhibits by Industries, NGOs, and Academia

A total of around 33 exhibitors participated in the Sustainability Fair 2.0 – 4th International Sustainability Conference on Health, Safety, Fire & Environmental Advances on both the days (30th October and on 31st October 2023). The exhibitors were from industries, academia and NGOs and Cooperative societies. They all showcased and sold their product to participants, students and faculties of different schools, and delegates from all over the country. The exhibition space offered the exhibitors an opportunity to showcase their products, services, and innovations to a global audience of industry professionals, experts, and decision-makers. The list of exhibitors includes Indian Hemp Store, Eco Karma, Himalayan Women Self Reliant Cooperative Society, Fire Safety Consulting, Makeen Energy, Fyoli Haat, Uttarakhand Gram Vikas Samiti, among the others.



Exhibitors and Poster Presentations



Cultural activities during Sustainability Fair 2.0

DAY 2- Sustainability Fair 2.0: 31st October 2023

Day 2 started with the panel discussion on "**Sustainable and Climate Resilient Infrastructure Development**" by the panellists involving both academia and industry fostering a dialogue for a safer and greener future. The panel of experts, including Dr. Saswati Datta as the moderator and esteemed panel members, Dr. Har Amrit Singh Sandhu (ASCE President, North Region), Himanshu Dubey (Deputy Manager, Coal India Limited), Dr. Ashok More (Head of Department, DY Patil College of Engineering), Dr. Alka Pisal (Director at Dynamic Structural Solutions LLP), Dr. Amit Srivastava (Professor, Graphic Era University), and Simran Mohanani (Software Quality Analyst, Bentley Systems) shared invaluable insights on the critical topic of sustainable and climate-resilient infrastructure development. The panel emphasized the paramount importance of sustainable and climate-resilient infrastructure. They discussed how these developments are not only essential for mitigating climate change impacts but also for ensuring long-term infrastructure viability and the well-being of our communities. The experts candidly discussed the myriad challenges faced by professionals, researchers, and policymakers in the field. These challenges encompassed the integration of sustainability into traditional construction methods, funding issues, regulatory hurdles, and more. Acknowledging these challenges is the first step towards finding solutions.

ASCE UPES was formally launched after the panel discussion. Paper and poster presentation continued on the last day in coherence with the keynote session for each theme. The plenary talk from Dr. Ashok Pandey followed this. He provided in-depth insights into waste remediation. Dr. Kalanithy Vairavamoorthy from International Water Association (IWA) delivered a talk on nature-based solutions which can help in providing resilient water-based sustainable solutions. These strategies included the adoption of innovative technologies, the formulation of effective policies, and fostering multi-stakeholder collaboration.

Valedictory function:

Dr S. S. Sandhu, Chief Secretary, Uttarakhand Govt, graced the valedictory session and shared the government's view on sustainable practices. In his talk, he highlighted the importance of not linking the disasters with development every time because disasters even take place in pristine environment where they are no development. He took questions from the audience including school students as well. One of the students asked about the development of metro rail in Dehradun and the Chief Secretary replied that the local geology is not conducive. The

excitement galore ended with the certificates and awards distribution to the winners of model competitions along with best oral and poster presentations in various themes of the event.

List of best oral presentation awards in various session themes

Theme	Name	Affiliation
Risk	Ishan Singh, Asirvatham Ramesh Kumar	CSIR-National Environmental Engineering Research Institute, Nehru Marg, Nagpur
Safety	Dr. Rajiv Chauhan, Shubham Kumar, Lakshay Chhapola, Hargunbir Singh	Punjab Technical University, Jalandhar
Green Building	Swarn Veer Singh Jaral and Manpreet Singh	Lovely Professional University, Punjab
Fire	Charu Mehta, A. Aravind Kumar, Mahesh Kumar Tiwari, Rakesh Kumar, Mohammad Ahmad Shoeb	Fire Research Division, CSIR–Central Building Research Institute, Roorkee, India.
Occupational Health and Environmental Safety	Durga Prasad Panday, Vivek Agarwal, Manish Kumar	UPES
Biosecurity	Vivek Kumar Jaiswala, Ram Sharan Singha	Indian Institute of Technology (BHU), Varanasi
Waste Management	Atul Srivastava Pawan Kumar Jha	Centre of Environmental Science, University of Allahabad, Uttar Pradesh
Waste and Energy	Riya Aneja, Anuj Chauhan, Tanya Chauhan	Doon University
Special Session on Food Security	Shivani Rauthan, Ajay Singh	Uttaranchal University
Special Session on Transportation Safety	Jayati Singh	UPES Dehradun
Special Session on Sustainability and Legal Framework	Anushika Singh Sengar	UPES School of Law
Special Session on Energy and Environment	Noubi Junior Hyacinth	UPES
Biotechnology	Nishant Kumar Singh	Amity University
Environmental management and monitoring	Yogesh Kumar Vishwakarma	IIT (BHU), Varanasi
Wastewater Treatment	Ramesh Kumar	Indira Gandhi National Tribal University, Amarkantak

ESG and Legal Framework	Arpita Ghosh	Indian Institute of Management Sirmaur
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List of best poster presentation awards in various session themes

Theme	Name	Affiliation
Risk	S. J. Mane	D Y Patil College of Engineering
Safety	Aditya Acharya, Simar Katyal	UPES
Bio-Civil	Shilpi Gupta	UPES
Fire	Parth Saole, Amulya Jeevanasai	UPES
Occupational Health and Environmental Safety	Srajal Tiwari	Chandigarh University
Biosecurity	Smriti Bhardwaj	UPES
Biotechnology	Manoj Kumar and Anjali Panwar	UPES
Waste Management and Energy	Shiwangi Kesarwani	IIT-BHU
Special Session on Food Security	Pooja Chand	UPES-SOHST
Special Session on Transportation Safety	Nishant Mukund Pawar	NIT Calicut
Special Session on Energy and Environment	Pugazh Venthan	UPES
Environment	Ashok B More	D Y Patil College of Engineering, Pune
ESG and Legal Framework	Nandini Maheswari	UPES



Glimpses of Valedictory Session

Rise Event Model Display (Schools and Colleges)

The RISE (Research Innovation and Sustainability Exhibition) event held on 31 st October 2023 under Sustainability Fair 2.0 brought together students from various schools and Colleges, showcasing their exceptional models, prototype and working model around the theme of environment, sustainability, and climate change. With the total of around 120 participants from school and 300 participants from different colleges, institutions, and universities, the event was a resounding success, demonstrating the enthusiasm and dedication of young mind towards addressing crucial global changes. The events witness’s participation from schools like St. Josephs Academy, Doon International School River Side Campus, Doon Laureals School, Pine View School, Vaidh Tod Bright and Chaitya Techno Crates.

In the **school category**, a total of **25 models** were displayed by **120 students**. These young talents exhibited their creative and innovative solutions to address environmental and sustainability issues. The first prize among senior category was given to St. Joseph Academy for their model title “Sustainable Thermal Power Plant”. This model showcases the groundbreaking approach to sustainable energy generation, emphasizing the need for clean and renewable power.

Details of Students who won Awards/ Prizes:

School Junior Category

1. Clean Water Sanitation (1st Prize)

Advika Sharma, Anjali Upadhya, Dolly, Daksh, Pragun (Sri Chaitanya International Techno School, Dehradun)

2. Ecocity (2nd Prize)

Akriti, Om, Himani, Manvi (Pine View School)

3. Sustainable Development Goals for Ecotown (3rd Prize)

Paridhi Nautiyal, Aryan Negi, Vyomna Pandey, Aayush Negi, Manvi Sharma (Vaid Bright Tots School)

School Senior Category

1. Sustainable Thermal Power Plant (1st Prize)

Devansh Tripathi, Arnav Pandey (St. Joseph Academy)

2. Smart Bridge (2nd Prize)

Lakshya Avi Singh, Paritosh Dev Dang, Amogh Bahukhandi, Bhawna Bhall (Doon International School River Side Campus)

3. Sustainability Poster (3rd Prize)

Avishi Bhalothia, Vijay Jaiswal, Meher Pandher, Arun (Doon International School Riverside Campus)

College Model Presentations

1. Floating ball green hydrogen generator using saline water electrolyzer and powered by solar-piezoelectric panel (1st Prize)

Swagata Sarma, Disha Gosh, Aryan Jamwal, Devang Saini, Gourav Choudhary (UPES SOE)

2. Biomass Briquette-The Future Fuel (2nd Prize)

Deepanshi Yadav, Shantanu Upadhaya (Graphic Era Deemed To be University)

3. Sustainable Waste Management Approach (3rd Prize)

Manoj Kumar, Sudip Kumar, Sandesh Shah, Sarika Jha (Shree Dev Bhoomi Institute of Education and Science Technology (SDBIT))



Model Presentations

Conclusion

Sustainability Fair 2.0 ended with the concluding speech of Dr. B. P. Yadav, convenor of the event. Dr. Yadav offered sincere gratitude to Prof. Ram Sharma (VC, UPES), Mr. Manish Madaan (Registrar, UPES), Prof. D.K. Avasthi (Dean R&D, UPES) and Prof. Manish Kumar (Chair, Sustainability Fair 2.0) for their gracious presence during the fair and for their constant guidance and support during the organization of the conference. He extended his vote of thanks to all the participants and delegates who were a part of the event. In the end, he thanked the organizing committee and the volunteers without whom the event would not have reached significant heights.

Event	Academia and Industry Conclave	Exhibitors	Mega Alumni Connect	Model presenters	Total participation
Footfall	600	33	42	School: 120 College: 300	1,095

Media coverage

Garhwal Post

UPES Sustainability Fair 2.0 advocates Global Well-Being

By OUR STAFF REPORTER

DEHRADUN, 1 Nov: The 4th International Sustainability Conference on Health, Safety, Fire, and Environmental Advances (HSFEA-2023) concluded at UPES School of Advanced Engineering.

Centred around the theme "Promoting Global Well-being", the two-day event served as a dynamic interdisciplinary platform that brought together researchers, professionals, policymakers, and industry experts to collaborate and share insights. Dr Sukhbir Singh Sandhu, Chief Secretary, Uttarakhand, was the Chief Guest.

The summit kicked off with a Mega Alumni Connect, a pre-conference where UPES alumni from 22 different industries gathered to reconnect. Further, Sustainability Fair 2.0 hosted plenary talks and panel discussions with industry stalwarts to enrich the audience with valuable insights. The plenary talks were graced by the presence of Ashok Pandey, a distinguished scientist at the Centre for



Innovation and Translational Research, CSIR-Indian Institute of Toxicology Research, Lucknow and Prof Jürgen Mahlknecht, Professor and Chair for Water Science and Technology, Tecnológico de Monterrey, Mexico. The panel discussion focused on fostering collaborative solutions and addressing key issues related to the space of HSFEA at the workplace and included renowned

personalities such as Somnath Fulari, Director, Maken Energy Pvt. Ltd, Devendra Gill, Executive Director Safety, Delhi Metro, and SP Garg, Former Executive Director, GAIL India Pvt Ltd. Apart from this, the event featured an array of activities, including an industry conclave, oral and poster paper presentations, exhibitions, model display and an award ceremony,

which was dedicated to recognising significant contributions of industry, industrialists, alumni, and academia in the field of HSFEA. With over 1000 delegates in attendance from reputed corporates like Reliance, Adani, Tata Steel etc., Sustainability Fair 2.0: HSFEA-2023 was a remarkable success, uniting experts and enthusiasts in the pursuit of global well-being.

As a prelude to the event, UPES students also organised social awareness campaigns to promote health and hygiene. The conference committee also conducted student activities for over 1,500 students at nearby schools. Additionally, UPES recently concluded ATMOSPHERE 2023, an event to celebrate environmental awareness and sustainability.

The Pioneer

International sustainability conference concludes at UPES

PNS ■ DEHRADUN

The two-day 4th International Sustainability Conference on Health, Safety, Fire and Environmental Advances (HSFEA-2023) concluded at UPES School of Advanced Engineering. Office bearers of UPES said that the event focused on promoting global well-being became an interdisciplinary platform bringing together researchers, professionals, policymakers and industry experts to collaborate and share insights. Notably, the State's chief secretary SS Sandhu attended the event as the chief guest. Besides, scientist at the Centre for Innovation and Translational Research, CSIR-Indian Institute of Toxicology Research, Lucknow Ashok Pandey and professor for Water Science and Technology, Tecnológico de Monterrey, Mexico Jürgen Mahlknecht attended the



panel discussion organised as part of Sustainability Fair 2.0. Over 1,000 delegates, including representatives of the corporate giants like Reliance, Adani Group and Tata Steel among others, participated in the fair. The UPES office bearers further informed that

as a prelude to the event, the institute's students organised social awareness campaigns to promote health and hygiene while the conference committee conducted student activities for over 1,500 students studying in nearby schools.

यूपीईएस में सस्टेनेबिलिटी फेयर 2.0 काॅन्फ्रेंस आयोजित



यूपीईएस के पूर्व छात्रों ने हिस्सा लिया, जो कि 22 अलग-अलग उद्योग क्षेत्रों से जुड़े हैं। सस्टेनेबिलिटी फेयर 2.0 में कई पैनल चर्चाओं का आयोजन किया गया था जिसमें विभिन्न उद्योग क्षेत्रों से जुड़े दिग्गजों ने उपस्थित लोगों के साथ अपने विचारों को साझा किया। इस मौके पर सेंटर फॉर इनोवेशन एंड ट्रांसलेशनल रिसर्च, सीएसआईआर-इंडियन इंस्टीट्यूट ऑफ टॉक्सिकोलॉजी रिसर्च, लखनऊ के साथ माने वैज्ञानिक अशोक पांडेय, प्रोफेसर एंड चेयर फॉर वाटर साइंस एंड टेक्नोलॉजी, टेक्नोलॉजिको डी मोन्टेरेय, मेक्सिको के प्रोफे. जूरगेन माहलक्नेच्ट भी उपस्थित थे। सोमनाथ फुलारी डायरेक्टर, माकोन एनर्जी, रीवांश गिल एग्जीक्यूटिव डायरेक्टर सेपटी दिल्ली मेट्रो व एसबी गंगू चर्च एजीक्यूटिव डायरेक्टर गेल इंडिया भी शामिल रहे।

Shah Times

Dainik Bhaskar

वक्तव्यों की ओर से ग्लोबल वेल बीइंग पर दिया गया जोर

यूपीईएस के सस्टेनेबिलिटी फेयर 2.0 का किया गया आयोजन



देहरादून। यूपीईएस स्कूल ऑफ एडवॉंस्ड इंजीनियरिंग और से स्वास्थ्य, सुरक्षा, आग और पर्यावरण के क्षेत्र में प्रगति पर आधारित चौथी इंटरनेशनल सस्टेनेबिलिटी काॅन्फ्रेंस को गे है। इस दौरान ग्लोबल वेल-बींग पर जोर दिया गया। इस दो दिवसीय सम्मेलन में विभिन्न क्षेत्रों से जुड़े शोधकर्ताओं, पेशेवरों, नीति-निर्माताओं और उद्योग क्षेत्र के विशेषज्ञों ने भाग लिया और आपस में विचारों को साझा किया। इस मौके पर मुख्य सचिव डॉ सुखबीर सिंह ने मुख्य अतिथि के तौर पर

कार्यस्थल पर स्वास्थ्य, सुरक्षा, आग और पर्यावरण के क्षेत्र से संबंधित प्रमुख मुद्दों पर परस्पर सहयोगात्मक सांल्यूसंस के बारे में विचार-विमर्श किया गया। इसमें सोमनाथ फुलारी, डायरेक्टर, माकोन एनर्जी प्रा. लिमि, देवेन्द्र गिल, एजीक्यूटिव डायरेक्टर सेपटी, दिल्ली मेट्रो, तथा एसबी गंगू, पूर्व एजीक्यूटिव डायरेक्टर, गेल इंडिया प्रा. लिमि. भी शामिल थे। सम्मेलन में अन्य कई गतिविधियां जैसे इंडस्ट्री काॅन्क्लेव, ओरल एंड पोस्टर पेपर प्रस्तुतियां, प्रदर्शनियां, मॉडल डिस्प्ले तथा पुस्तकार वितरण समारोह का भी आयोजन किया गया जिसमें स्वास्थ्य, सुरक्षा, आग और पर्यावरण से संबंध उद्योग, उद्योगपतियों, पूर्व छात्रों, और शिक्षक विराटों के योगदान को भी सराहा गया। इसमें रिलायंस, अडानी, टाटा स्टील समेत कई अन्य जानी-मानी कंपनियों के 1000 से अधिक प्रतिनिधियों ने हिस्सा लिया। सस्टेनेबिलिटी फेयर 2.0 इस लिहाज से काफी सफल आयोजन साबित हुआ कि इसमें भाग लेने वाले विशेषज्ञों और अन्य प्रतिभागियों ने ग्लोबल वेल-बींग के बारे में चर्चा की। यूपीईएस के छात्रों ने स्वास्थ्य एवं स्वच्छता को बढ़ावा देने के उद्देश्य से सामाजिक जागरूकता अभियानों का भी आयोजन किया। काॅन्फ्रेंस कमेटी ने आसपास के स्कूलों में 1500 से अधिक छात्रों के लिए कई छात्र गतिविधियों का आयोजन किया। इसके अलावा, यूपीईएस ने हाल में अडिमाफेनर 2023 का भी सफलतापूर्वक आयोजन किया।

Rashtriya Sahara

Punjab Kesari

यूपीईएस : सस्टेनेबिलिटी फेयर 2.0 में ग्लोबल वेलबीइंग पर जोर

विभिन्न उद्योग क्षेत्रों से जुड़े यूपीईएस के पूर्व छात्रों ने भाग लिया



देहरादून (एसएनबी)। यूपीईएस में स्कूल ऑफ एडवॉंस्ड इंजीनियरिंग द्वारा स्वास्थ्य, सुरक्षा, आग और पर्यावरण के क्षेत्र में प्रगति पर आधारित चौथी इंटरनेशनल सस्टेनेबिलिटी काॅन्फ्रेंस सम्पन्न हो गई। काॅन्फ्रेंस में मुख्य रूप से ग्लोबल वेलबीइंग पर जोर दिया गया। इस मौके पर मुख्य सचिव डा. एसएस संघू बाौर मुख्य अतिथि मौजूद थे।

मुख्य सचिव को सम्मानित करते यूपीईएस के पदाधिकारी।

सम्मेलन की शुरुआत मेगा एज्युकेशन कनेक्ट के साथ हुई। इसमें विभिन्न उद्योग क्षेत्रों से जुड़े संचर्चकों (दिल्ली मेट्रो) देवेन्द्र गिल, पूर्व एजीक्यूटिव डायरेक्टर गेल एसबी गंगू ने अनुभवों को साझा किया। इसके अलावा इंडस्ट्री काॅन्क्लेव, ओरल एंड पोस्टर पेपर प्रस्तुतियां, प्रदर्शनियां, मॉडल डिस्प्ले व पुस्तकार वितरण समारोह का भी आयोजन किया गया। इसमें रिलायंस, अडानी, टाटा स्टील समेत कई अन्य कंपनियों के 1000 से अधिक प्रतिनिधियों ने हिस्सा लिया। इससे पूर्व यूपीईएस के छात्रों ने स्वास्थ्य एवं स्वच्छता को बढ़ावा देने के लिए सामाजिक जागरूकता अभियान का आयोजन किया। काॅन्फ्रेंस कमेटी ने आसपास के स्कूलों में 1500 से अधिक छात्रों के लिए कई गतिविधियों का आयोजन किया।

यूपीईएस के सस्टेनेबिलिटी फेयर 2.0 में ग्लोबल वेल बीइंग पर जोर दिया

देहरादून, 2 नवम्बर (स.ह.) : यूपीईएस स्कूल ऑफ एडवॉंस्ड इंजीनियरिंग द्वारा स्वास्थ्य, सुरक्षा, आग और पर्यावरण के क्षेत्र में प्रगति पर आधारित चौथी इंटरनेशनल सस्टेनेबिलिटी काॅन्फ्रेंस संपन्न की गई है। इस दौरान "ग्लोबल वेल-बींग" पर जोर दिया गया। इस दो दिवसीय सम्मेलन में विभिन्न क्षेत्रों से जुड़े शोधकर्ताओं, पेशेवरों, नीति-निर्माताओं और उद्योग क्षेत्र के विशेषज्ञों ने भाग लिया और आपस में विचारों को साझा किया। इस मौके पर, डॉ सुखबीर सिंह संघू, मुख्य सचिव, उत्तराखंड, मुख्य अतिथि के तौर पर उपस्थित थे। सम्मेलन की शुरुआत मेगा एज्युकेशन कनेक्ट के साथ हुई जिसमें यूपीईएस के पूर्व छात्रों ने हिस्सा लिया, जो कि 22 अलग-अलग उद्योग क्षेत्रों से जुड़े हैं। सस्टेनेबिलिटी फेयर 2.0 में कई पैनल चर्चाओं का



आयोजन किया गया था जिसमें विभिन्न उद्योग क्षेत्रों से जुड़े दिग्गजों ने उपस्थित लोगों के साथ अपने विचारों को साझा किया। इस मौके पर, सेंटर फॉर इनोवेशन एंड ट्रांसलेशनल रिसर्च, सीएसआईआर-इंडियन इंस्टीट्यूट ऑफ टॉक्सिकोलॉजी रिसर्च, लखनऊ के जाने माने वैज्ञानिक अशोक पांडेय, प्रोफेसर एंड चेयर फॉर वाटर साइंस एंड टेक्नोलॉजी, टेक्नोलॉजिको डी मोन्टेरेय, मेक्सिको के प्रोफे. जूरगेन माहलक्नेच्ट भी उपस्थित थे। पैनल चर्चा में

कार्यस्थल पर के क्षेत्र से संबंधित प्रमुख मुद्दों पर परस्पर सहयोगात्मक सांल्यूसंस के बारे में विचार-विमर्श किया गया। इसमें सोमनाथ फुलारी, डायरेक्टर, माकोन एनर्जी प्रा. लिमि., देवेन्द्र गिल, एजीक्यूटिव डायरेक्टर सेपटी, दिल्ली मेट्रो, तथा एस.बी. गंगू, पूर्व एजीक्यूटिव डायरेक्टर, गेल इंडिया प्रा. लिमि. भी शामिल थे। सम्मेलन में अन्य कई गतिविधियां जैसे इंडस्ट्री काॅन्क्लेव, ओरल एंड पोस्टर पेपर प्रस्तुतियां, प्रदर्शनियां, मॉडल डिस्प्ले तथा पुस्तकार वितरण समारोह का भी आयोजन किया गया जिसमें स्वास्थ्य, सुरक्षा, आग और पर्यावरण से संबंध उद्योग, उद्योगपतियों, पूर्व छात्रों, और शिक्षक विराटों के योगदान को भी सराहा गया। इसमें रिलायंस, अडानी, टाटा स्टील समेत कई अन्य जानी-मानी कंपनियों के 1000 से अधिक प्रतिनिधियों ने हिस्सा लिया। सस्टेनेबिलिटी फेयर 2.0 इस लिहाज से काफी सफल आयोजन साबित हुआ कि इसमें भाग लेने वाले विशेषज्ञों और अन्य प्रतिभागियों ने ग्लोबल वेल-बींग के बारे में चर्चा की। सम्मेलन से पहले, यूपीईएस के छात्रों ने स्वास्थ्य एवं स्वच्छता को बढ़ावा देने के उद्देश्य से सामाजिक जागरूकता अभियानों का भी आयोजन किया। काॅन्फ्रेंस कमेटी ने आसपास के स्कूलों में 1500 से अधिक छात्रों के लिए कई छात्र गतिविधियों का आयोजन किया। इसके अलावा, यूपीईएस ने हाल में अडिमाफेनर 2023 का भी सफलतापूर्वक आयोजन किया।