

reduction strategies, extended producer responsibility, economic incentives for sustainable practices, and the importance of coordinated multi-stakeholder approaches. The session will highlight successful policy models that could be adapted to Nepal's context.

These focus areas are essential for fostering environmental resilience, promoting sustainable practices, and addressing the interconnected challenges posed by climate change and plastic pollution. The workshop will provide a platform to discuss innovative solutions, policy implications, and collaborative efforts to drive positive change in these key areas.

8. Major stakeholders

Environment Experts/professionals, Academician, public health Experts/ Professionals, Government officials, non-government officials, Policy makers, Policy influencers, Researchers, Academicians, Students, scholars, private sector and all those who have concerns/interest to attend the workshop.

9 Workshop Schedule

S.N	Title	Organization	Paper Presenter
1.	Understanding Plastics and use	The Centre for Energy and Environment Nepal	Dr. Ramesh Man Singh Vice-Chairman
2.	Plastics Waste Pollution and It's Health Impact	Madhesh Institute of Health Science (MIHS)	Dr. Amit Kumar Singh Consultant Interventional Cardiologist
3.	Plastics Waste Management in Local Government and Communities	blue Waste to Value (BW2V)	Mr. Nabin Bikash Maharjan CEO
4.	Climate Change and Water Supply Management in Nepal	Cofinancing Water Supply and Sanitation Project, Panipokhari, Kathmandu	Er. Narayan Prasad Acharya Project Director (Joint Secretary)
5.	Waste Plastic Management in Road Construction	Nagdhunga Tunnel construction project	Er. Saujanya Nepal Project Director (Joint Secretary)

10. Conference Secretariat

Diploma Engineers' Association, Nepal (DEAN)
Affiliated to SAARC Diploma Engineers Forum (SDEF)
Add: Patandhoka, Lalitpur, PO Box: 4937
Phone: 01-5440359
Email: deannepal2037@gmail.com,
kpsingh5150071@gmail.com

11. Date : 6th June 2025

(23rd Jestha 2082) Friday

12. Registration Upto: 3rd June 2025

(20th of Jestha 2081)

13. Venue: Yak Palace, Pulchowk, Lalitpur

14. Contact Information:

Er. Kameshwar Prasad Singh

President,
Diploma Engineers Association,
Nepal (DEAN)
Chakupat, Patandhoka, lalitpur,
Nepal
Email: deannepal2037@gmail.com
Mobile No: 9852027226,
Office No: 01-15440359
www.deannepal.org.np

Er. Khadga K.C.

Convener,
Technical Committee,
Diploma Engineers
Association, Nepal (DEAN)
Email: kkbhojpur@gmail.com
Mobile No: 9841438953

Er. Bindiya Karki

General Secretary,
Diploma Engineers Association, Nepal (DEAN)
Chakupat, Patandhoka, lalitpur, Nepal
Email: ratnabindiya@gmail.com
Mobile No: 9851237372

Diploma Engineers Association, Nepal (DEAN)

Patandhoka, Lalitpur, Nepal

Phone: 977-1-5440359

Mail: deannepal2037@gmail.com

Website: deannepal.org.np

Celebration of 45th Anniversary of Diploma Engineers Association, Nepal (DEAN)

&

World Environment Day-2025 UN Theme : "Ending Plastic Pollution" National Workshop

on

"Climate Change, Plastics and Global Environment"

5th June 2025



ORGANIZER

DIPLOMA ENGINEERS ASSOCIATION, NEPAL (DEAN)

1. World Environment Day-2025

World Environment Day (WED) is an annual event widely celebrated on 5th June. It was established by the United Nations General Assembly in 1972 and has grown to become one of the main vehicles through which the UN stimulates worldwide awareness of the environment and encourages political attention and action. Each World Environment Day is organized around a theme that focuses attention on a particularly pressing environmental concern. The UN theme for 2025 is "Ending Plastic Pollution" In this connection, DEAN is organizing a national workshop on "Climate Change, Plastics and Global Environment" to address these critical issues affecting our planet.

2. WED Celebration Program

The tradition of celebrating "World Environment Day" in Nepal has gathered pace over the past decade. DEAN has consistently organized events each year on DEAN's anniversary. This year, we are planning to organize a one-day national workshop to celebrate this day of great significance. Through this workshop, we aim to bring together specialists from different sectors to deliberate on the pressing issues of climate change and plastic pollution, which have become major hurdles to creating healthy urban environments in Nepal and globally.

3. About the Organizers

Diploma Engineers' Association, Nepal (DEAN) is formed as a common technology-oriented and non-profitable organization. It was established in 1980 to make Diploma Engineers capable and active in nation-building and to supplement Diploma Engineers with high moral values and protect their professional rights. DEAN represents about fifty thousand Diploma Engineers. It has already completed its 14th National Convention. DEAN is a leading Engineering professional organization in Nepal. DEAN is also one of the active founder members of SAARC Diploma Engineers' Forum (SDEF) and Mid-Level Engineers Forum of Asia and the Pacific countries (MEFAP).

4. Workshop Objectives

The major objectives of the workshop are as follows

- a. To share knowledge and best practices on climate change, plastic pollution and global environmental degradation, bringing together professionals, academicians, researchers, entrepreneurs, GOs, NGOs, and community voices in the Nepalese context for solutions and way forward.
- b. To enhance public awareness and promote research into climate change mitigation and adaptation strategies, with a focus on reducing plastic pollution for sustainable development and environmental preservation.

- c. To provide a platform for renowned personalities in the Environmental sector to discuss evidence-based approaches to addressing the interconnected challenges of climate change and plastic pollution.
- d. To recommend solutions for policy reforms mainly based on sound professional knowledge and experience to reform the policies from Governments (Federal, Provincial, and local government) focusing on climate action and plastic waste management.

5. Plastic Pollution Management

Plastic pollution poses a serious and visible threat to communities across the globe. Each year, over 400 million tons of plastic are produced worldwide, with half of it intended for single use. Shockingly, less than 10% of this plastic is recycled, and an estimated 19 to 23 million tons make their way into our lakes, rivers, and oceans annually. Microplastics—tiny fragments less than 5mm in size are now present in the food we eat, the water we drink, and the air we breathe. It's believed that the average person ingests more than 50,000 plastic particles each year, not even accounting for what is inhaled. Improper disposal or burning of single-use plastics poses serious risks to human health, harms wildlife, and contaminates ecosystems from the highest mountains to the deepest ocean trenches. Given the scientific knowledge and available solutions, it is crucial for governments, businesses, and communities to intensify and accelerate their efforts to combat this crisis. This highlights the critical role of World Environment Day in driving global action for meaningful change.

6. The Interrelationship Between Plastics Pollution, Climate Change and The Global Environment

Plastic pollution and climate change are closely linked environmental challenges with far-reaching global effects. Since plastics are mostly made from fossil fuels, their production, use, and disposal release significant amounts of greenhouse gases. These emissions contribute directly to global warming. At the same time, the effects of climate change—such as more frequent extreme weather events and rising sea levels—can worsen plastic pollution by spreading waste more widely. Furthermore, plastic waste damages ecosystems and endangers wildlife, weakening the Earth's natural systems that help absorb carbon and regulate the climate. Together, these issues create a harmful cycle that threatens the planet's overall health.

7. Workshop Focus Areas

Climate Change and Plastic's Interconnected Crisis

Plastic production is tightly linked to fossil fuel industries, with petrochemicals becoming the largest driver of global oil demand growth through 2030. Greenhouse gases (GHG) are emitted throughout the plastic lifecycle, threatening global efforts to

limit temperature rise below 1.5°C. Recent research indicates that GHG emissions from plastics could contribute up to 13% of the entire remaining carbon budget by 2050. This focus area will explore the connections between plastic production, fossil fuel consumption, and climate change, along with strategies to address this interconnected crisis.

Innovative Technologies for Plastic Waste Management and Reduction

Nepal and many developing countries face significant challenges in managing plastic waste effectively. This focus area will highlight innovative technologies and approaches for reducing, recycling, and repurposing plastic waste. Discussions will include biodegradable alternatives to conventional plastics, efficient waste collection systems, and waste-to-energy conversion technologies that can be implemented at various scales. The session will emphasize practical, cost-effective solutions applicable to Nepal's context.

Climate-Resilient Infrastructure and Plastic-Free Development

Climate change affects infrastructure through extreme weather events, while plastic pollution degrades environmental quality. This focus area aims to explore approaches for creating infrastructure that is both climate-resilient and reduces reliance on plastics. Key topics will include sustainable building techniques, the use of eco-friendly, plastic-free construction materials, designing structures to endure severe weather conditions, and incorporating nature-based solutions into development projects. The session will highlight successful examples from Nepal and around the world where environmentally conscious and climate-resilient infrastructure has been effectively implemented.

Health Impacts of Climate Change and Plastic Pollution

Both climate change and plastic pollution pose significant threats to human health. An average person could be ingesting approximately 5 grams of plastic every week. Microplastics and toxic chemicals from plastics can cause cancer and endocrine disruption, leading to reproductive, growth, and cognitive impairment. Additionally, climate change exacerbates health issues through increased disease vectors, heat stress, and compromised water quality. This focus area will examine these health impacts, with particular attention to vulnerable populations, and discuss policies and practices that can protect public health.

Policy Frameworks for Addressing Dual Crises: Climate Change and Plastic Pollution

Effective policy frameworks are essential for addressing the dual crises of climate change and plastic pollution. This focus area will analyze existing policies at local, national, and international levels, evaluate their effectiveness, and propose improvements. Discussions will include Nepal's climate commitments, plastic