NEW HORIZON
COLLEGE OF ENGINEERING
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade, Accredited by NBA

Department of Mechanical Engineering

TOWARDS A GREENER FUTURE:
CELEBRATING
WORLD'S ENVIRONMENTAL DAY 2024.

14.06.2024

World Environmental Day serves as a platform for various activities, including environmental campaigns, community clean-ups, educational events, and policy advocacy, all aimed at promoting sustainable development and environmental stewardship. On this occasion an awareness session was conducted at New Horizon College of Engineering from NHCE –IIC in association with the Department of Mechanical Engineering.The session encompassed key areas of renewable energy, bio-healthcare, environment and sustainability. Dr K Gopal IIC Innovation Ambassador and IIC Coordinator Welcomed Prof. Rakesh C, HOD Department of Mechanical Engineering. Prof. Rakesh C outlined about the requirement of environmentas well as sustainable development with the renewable energy. Later DrBopanna K D, educated the audience about the renewable energy, bio healthcare,environment and sustainability as our global community faces unprecedented challenges, the need for sustainable solutions has never been more critical. He described how to explore renewable energy that could revolutionize the healthcare sector and contribute to a healthier planet.

1. **The Urgency of Renewable Energy**

The reliance on fossil fuels has led to significant environmental degradation, climate change, and health issues. Renewable energy sources, such as solar, wind, hydro, and bioenergy, offer a viable solution to these problems. By harnessing the power of nature, we can reduce greenhouse gas emissions, mitigate climate change, and create a cleaner, more sustainable future.

2. **Renewable Energy in Healthcare**

The healthcare sector is a significant energy consumer, with hospitals and medical facilities operating 24/7. Integrating renewable energy into healthcare can reduce operational costs, ensure energy security, and improve patient care. Solar panels on hospital roofs, wind turbines on medical campuses, and bioenergy plants can power these facilities sustainably.

3. **Bioenergy and Healthcare Waste Management**

Bioenergy, derived from organic materials, presents a unique opportunity for healthcare waste management. Hospitals generate considerable biomedical waste, which can be converted into energy through anaerobic digestion or incineration. This process not only provides a renewable energy source but also addresses the critical issue of medical waste disposal, reducing environmental pollution and health risks.

4. **Environmental and Health Benefits**

Transitioning to renewable energy in healthcare has profound environmental and health benefits. Reduced air and water pollution from cleaner energy sources lead to lower respiratory and cardiovascular diseases. Additionally, a sustainable energy system enhances the resilience of healthcare facilities, ensuring uninterrupted services during natural disasters or power

outages.

5. **Sustainability and Future Innovations**

Sustainability in healthcare extends beyond energy use. Green building designs, energy-efficient technologies, and sustainable practices in medical supply chains are essential. Innovations such as solar-powered medical devices, energy-efficient cooling systems, and telemedicine canfurther reduce the environmental footprint of healthcare.

Conclusion

In conclusion, the integration of renewable energy into the healthcare sector is not just a necessity but an opportunity to foster a healthier and more sustainable world. By embracing renewable energy, we can reduce environmental impact, improve public health, and ensure the resilience of healthcare services. Let us commit to this vision and work together towards a greener, healthier future.

we would like to thank our NHCE management, Principal – NHCE, Dean - R&D, President – IIC, Convener-IIC and special thanks to Head of Department – Mechanical Engineering for his guidance, motivation and wonderful support.