**TCS INTERNSHIP TASK 1**

AYUSHI SINGH

CONCERN OF THE CLIENT:

**QUES1: What are the potential top-five sustainability issues for this client?**

ANS: The top five sustainability issues of the client are likely to be:

* Energy and Emissions: Reducing energy consumption and transitioning to renewable energy sources.
* Water Management: Conserving water usage and ensuring sustainable water resources.
* Waste Management: Minimizing waste generation and implementing effective waste recycling and disposal practices.
* Biodiversity: Protecting and restoring biodiversity, both on and off campus.
* Climate Adaptation and Resilience: Preparing for the impacts of climate change and building resilience into operations.

**QUES2: What are the best practices and tools to address these five issues?**

ANS: The best practices and tools to address these issues:

Energy and Emissions

**Best Practices:**

ISO 50001 Energy Management Systems: Implementing energy management systems that help organizations improve energy efficiency, reduce costs, and lower greenhouse gas emissions.

Net Zero Energy Design: Incorporating strategies to design and retrofit buildings to achieve net-zero energy consumption.

Sustainable Design Strategies: Implementing energy-efficient building designs, such as passive solar design, which reduces the need for external energy sources.

**Tools:**

National Greenhouse Gas Emissions Reporting Scheme (NGERS): A tool for monitoring and reporting emissions to comply with national standards.

National Carbon Offset (NCOS) Certification: Helps organizations achieve carbon neutrality through verified offset projects.

Water Management

**Best Practices:**

Sustainable Water Resource Management: Implementing strategies for water conservation, such as rainwater harvesting and the use of water-efficient fixtures.

Sustainable Design Standards: Establishing standards that ensure the efficient use of water in buildings and landscapes.

**Tools:**

ISO 14001 Environmental Management Systems: Helps manage environmental responsibilities, including water use and conservation.

Integrated Design Process: Incorporates water management into overall design, ensuring water efficiency throughout the campus.

Waste Management

**Best Practices:**

Circular Economy and Sustainable Products: Adopting a circular economy approach by minimizing waste generation and promoting the use of sustainable products.

Effective Waste Recycling: Implementing robust waste segregation and recycling programs across the campus.

**Tools:**

Sustainability Metrics and Indicators: Using metrics to measure and track waste generation and recycling efforts.

GRI Reporting: Global Reporting Initiative standards for transparent reporting on waste management and sustainability practices.

Biodiversity

**Best Practices:**

Protecting and Restoring Biodiversity: Implementing strategies to protect natural habitats and restore biodiversity both on and off campus.

Applied Research (Technologies/Products): Using research to develop and implement innovative solutions for biodiversity protection.

**Tools:**

Materiality Assessment: Identifying and prioritizing biodiversity issues that are material to the organization and its stakeholders.

Green Ratings and Certification: Obtaining certifications like those from Green Star, which evaluate the sustainability and biodiversity impact of buildings and operations.

Climate Adaptation and Resilience

**Best Practices:**

Climate Resilience Planning: Preparing for the impacts of climate change by integrating resilience into building design and operations.

Responsible Investment Assessment: Evaluating investments to ensure they contribute to climate adaptation and resilience.

**Tools:**

ESG Maturity Assessment: Evaluating the current state of environmental, social, and governance (ESG) practices and developing a roadmap for improvement.

Life Cycle Assessment: Assessing the environmental impact of products and processes to ensure they are sustainable and resilient to climate change.

**QUES3: What are the business and government sustainability-related regulations for the client's industry (higher education)?**

ANS: The business and government sustainability-related regulations for the client's industry in India:

Environmental Impact Assessment (EIA) Notification: Your institution may need to assess and report the environmental impact of any major construction or expansion projects.

Energy Conservation Building Code (ECBC): Ensure that your campus buildings comply with energy efficiency standards, which are crucial for reducing energy consumption and costs.

National Action Plan on Climate Change (NAPCC): Consider adopting sustainable practices in line with the NAPCC, such as utilizing solar energy under the National Solar Mission.

Corporate Social Responsibility (CSR) under the Companies Act, 2013: If applicable, your institution may be required to allocate funds towards sustainability and social welfare initiatives.

Swachh Bharat Abhiyan: Participation in this national cleanliness drive is not only a regulatory requirement but also enhances your institution's public image and environmental footprint.

National Green Tribunal (NGT) Orders: Compliance with NGT orders on waste management, water conservation, and pollution control is essential for meeting legal obligations and promoting sustainability on campus.