



power Lab

Ideas for a Viksit Bharat

TECHNOLOGICAL INNOVATION

Next-Gen solutions for energy efficiency



Technological Innovation - Next-Gen Solutions for Energy Efficiency

Problem Statement:

How can emerging technologies like AI, machine learning, automation, and data analytics be integrated to enhance operational efficiency in HPCL's refining, processing, and distribution systems? Proposals should focus on improving energy usage, minimizing downtime, and optimizing the logistics of fuel distribution, with the aim of driving innovation to make oil and gas operations smarter, safer, and more cost-efficient.

Subsections to explore:

- Predictive maintenance in refineries using AI
- Automation of fuel logistics for faster distribution
- Advanced analytics for monitoring and improving fuel quality
- Improvement in R&D processes by redesigning equipment

Deliverable:

Participants are required to submit a **2-slider PowerPoint presentation**, formatted as follows:

Slide 1: A clear overview of the proposed solution, emphasizing the specific technological innovations and how they will enhance HPCL's operations in terms of energy efficiency, downtime reduction, and fuel distribution optimization.

Slide 2: The implementation strategy, showcasing practical steps for integrating the proposed technology into HPCL's existing systems, along with expected outcomes in terms of cost savings, safety, and operational improvements.

Optional: A **2-minute pitch video** to succinctly present the idea, highlighting its value proposition and potential for transforming HPCL's energy efficiency and operational safety.