

## **Idea Pitch:** Custom Plug and Automated Lighting Solution for College Hostels

### **Introduction:**

We are excited to present an innovative solution tailored for college hostels to address the prevalent issue of power inefficiency and wastage, while also enhancing convenience and energy conservation. Our proposal involves the development and implementation of a custom plug for hostel rooms, along with an automated lighting system, aimed at optimizing energy usage and promoting sustainability.

### **Problem Statement:**

College hostels often face challenges associated with power inefficiency and wastage. This is primarily due to the misuse of electrical appliances, such as hairdryers, which consume a significant amount of energy, leading to power tripping and disruptions, particularly during times of power cuts. Additionally, there is a need for efficient lighting management to conserve energy and reduce unnecessary consumption.

### **Solution Overview:**

**Custom Plug with Limited Output (100 Watts):** We propose the creation of a custom plug specifically designed for hostel rooms, capable of providing a maximum output of 100 watts. By limiting the power output, we can mitigate power tripping issues caused by high-energy appliances like hairdryers, thereby ensuring a stable power supply within the hostel premises.

**Automated Lighting System:** In conjunction with the custom plug, we will install a small mechanical and electronic device in each hostel room. This device will be equipped with sensors to detect the presence of occupants. When a student enters the room, the system will automatically activate the lights, and upon their departure, the lights will be turned off. This automated lighting solution eliminates the need for manual operation, reducing energy wastage caused by lights being left on in unoccupied rooms.

### **Key Benefits:**

**Enhanced Power Efficiency:** By limiting the power output of electrical appliances, our custom plug prevents power tripping and ensures a consistent power supply in hostel environments.

**Energy Conservation:** The automated lighting system promotes energy conservation by efficiently managing lighting usage based on occupancy, reducing unnecessary consumption and lowering electricity bills.

**Convenience and Safety:** Students benefit from the convenience of automatic lighting control, while also improving safety within hostel premises by ensuring well-lit areas when needed.

**Market Opportunity:**

The market potential for our solution is significant, considering the widespread presence of college hostels globally. With increasing emphasis on sustainability and energy efficiency, there is a growing demand for innovative solutions that address these challenges in communal living spaces.

### **Investment Opportunity:**

We are seeking investment to fund the development and deployment of our custom plug and automated lighting system for college hostels. The investment will primarily be allocated towards research and development, manufacturing, marketing, and initial implementation in pilot hostel facilities.

### **Conclusion:**

Our proposed solution offers a comprehensive approach to tackling power inefficiency and promoting energy conservation in college hostel environments. By combining a custom plug with limited output and an automated lighting system, we aim to provide a practical and sustainable solution that benefits both students and hostel administrators. We invite you to join us in revolutionizing energy management in college hostels and contributing to a more sustainable future.

Thank you for considering our proposal. We look forward to the opportunity to discuss this exciting venture further.