

### **Government Polytechnic- Valsad** Electrical Engineering Department

Visit at Goldi Solar Pvt Ltd

### **Introduction:**

The Electrical Engineering Department has organized an industrial visit at **Goldi Solar Pvt Ltd** for the 6<sup>th</sup> semester students on **29 & 30 April 2024**. The Visit coordinated by **Ms.P.D.Vachhani and Ms.N.M.Patel.** The visit aimed to provide students with practical insights into the processes involved in solar panel manufacturing and to understand the advancements in renewable energy technologies.

### **Company Overview:**

Goldi Solar is India's most quality-conscious solar brand. The company manufactures high-end photovoltaic modules at a competitive price, provides EPC services, and is an independent power producer (IPP). Founded in 2011, headquartered in Surat, Gujarat, catering to several international brands in 20+ countries. The company specializes in the design, development, and manufacturing of photovoltaic (PV) modules, catering to both residential and industrial markets globally. It emphasizes innovation and sustainability in its production processes.

### Visit Highlights:

**Introduction to Manufacturing Process:** We were first introduced to the various stages of manufacturing solar panels. The process starts from sourcing raw materials such as silicon wafers and continues through cutting, cleaning, and assembling these materials into solar cells. The cells are then interconnected and encapsulated within protective layers to form the final solar panel.

**Technological Insights:** The visit provided us with a glimpse into the advanced technologies employed by the company. We learned about the use of automated machinery for precise cutting and assembly, as well as quality control measures to ensure the efficiency and durability of the panels.

**Environmental Considerations:** Goldi Solar Pvt Ltd emphasized its commitment to sustainability throughout the manufacturing process. We were briefed on their initiatives to reduce carbon footprint, minimize waste generation, and recycle materials, thereby contributing positively to the environment.

**Testing and Quality Assurance:** A significant part of the visit included understanding the rigorous testing procedures conducted on the solar panels. We observed various tests for performance under different light conditions, durability against weather elements, and adherence to industry standards.

Future Directions and Innovation: The company representatives also discussed ongoing research and

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# **Industrial Visit**

development efforts aimed at enhancing panel efficiency, reducing costs, and exploring new applications for solar technology in diverse fields.

### Learning Outcomes:

**Practical Application:** Witnessing the manufacturing process firsthand provided a practical understanding of concepts learned in the classroom.

**Technological Advancements:** Insight into advanced technologies underscored the rapid evolution of solar energy solutions.

**Environmental Awareness**: Understanding the company's sustainable practices highlighted the importance of environmental stewardship in industry.

### **Conclusion:**

The industry visit to **Goldi Solar Pvt Ltd** was highly informative and enriching. It not only deepened our understanding of solar panel manufacturing but also underscored the critical role of renewable energy in addressing global energy challenges. We extend our sincere gratitude to **Goldi Solar Pvt Ltd** for their hospitality and valuable insights shared during the visit.

Industrial visit can cover a wide range of course outcomes depending on their focus and depth. Here are some common outcomes that might be covered as per their course.

Name of Course	Green Technology	
Course Code	4360904	
CO Covered	Partially CO1,CO2 & CO4	
PO Covered	All POs	

## **<u>Pictorial Glimpses of the Workshop:</u>**



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