

Installation of a 5 kW On-Grid Residential System with Custom High-Structure



Location: Vazhakkala, Ernakulam, Kerala, India

CUSTOMER TESTIMONY

“We installed solar roof top with Stergy. From planning to installation to after sales support we had a great experience with this team. Excellent and professional team work! We are extremely happy choosing them. We recommend Stergy to anyone who's looking for solar roof top installation”

AT A GLANCE

Challenges and Solutions

- **Structural Stability:** Reinforced connections
- **Material Handling:** Specialized equipment and skilled workers
- **Weather Conditions:** Weather-resistant materials and contingency plans
- **Client Coordination:** Regular updates and post-installation support

IMPLEMENTATION DETAILS

- **Framework Construction:** GI pipe structure
- **Panel Installation:** Two rows setup
- **Electrical Setup:** Grid connection
- **Permits & Approvals:** Complied with state regulations
- **Net Metering:** Connected to local grid

OUTCOME

- **Accessibility:** Elevated structure for easy access
- **Durability:** Robust GI pipes
- **Value:** Enhanced property value
- **CO2 Reduction:** 2.5 tonnes annually (equivalent to planting 114 trees)

CONCLUSION

This project highlights Stergy Cleantech’s commitment to high-quality, customer-focused solar solutions, combining accessibility, durability, and efficiency.

INTRODUCTION

Stergy Cleantech Pvt. Ltd. successfully implemented a 5 kW grid-tied solar PV system in Kerala. This high-structure installation allows for easy access underneath the panels, meeting both functional and aesthetic needs. The project exemplifies the company's expertise in delivering high-quality, customized solar solutions.

COMPANY OVERVIEW

Company Name: Stergy Cleantech Pvt. Ltd
Established: 2017
Location: Kochi, Kerala
Services: Solar EPC

PROJECT INITIATION

Year: 2024
Type of System: Grid-tied residential solar PV system
Capacity: 5 kW

OBJECTIVE

- Reduce electricity costs
- Promote sustainable energy use
- Increase property value
- Provide walk-through access under panels without a dedicated walkway

TECHNICAL SPECIFICATION

- **System Capacity:** 5 KW
- **Technology Used:** Growatt String Inverters, Top con Panels (9 nos)

FINANCIAL MODEL

- **Subsidies:** 26% cost reduction due to government subsidies
- **Investment:** Personal investment by the customer