



ENERGY-EFFICIENT SOLAR SOLUTIONS FOR YOUR POWER NEEDS





35 MW+
Solar Projects
within First
3 Years of
Inception



8000+
GENERATORS &
SOLAR SOLUTIONS



500 MW+
POWER SUPPLIED



2000+
MAINTENANCE
CONTRACTS



200+
EMPLOYEES



COUNTRY-
WIDE
PRESENCE



1000+
CORPORATE
CUSTOMERS

INTRODUCTION

Energy Solutions Private Limited is a leading industrial & commercial Power Solution company offering Prime & Back-up Power Generators and state of the art Solar Solutions with total installed capacity of 8000 plus units all over the country. ESL is the sole distributor & service provider of Cummins Gas (UK) and Aksa Diesel Generators (Turkey) in Pakistan, offering products ranging from 10kVA to 3000kVA. With top quality power products & unmatched product support we have developed unparalleled partnership stories in almost every business sector. Our customer list includes Textile, Oil & Gas, Telecom, Food & Beverages, Automotive, Hospital & Health Care, Banking & Leasing Industry, large scale Residential Societies & Construction Companies, etc. ESL has been serving to almost all leading national & international brands like Coca Cola Pakistan, PepsiCo Pakistan, Total Parco, Atlas Honda Group, Agha Khan University Hospital, Telenor Pakistan, Bahria Town, Allied Bank and so on.

Under the umbrella of ESL Renewables, we are engaged in designing and implementing energy efficient Solar EPC solutions. We work on a unique concept of total energy conservation. Our philosophy is to work on modern concept of reducing the Levelized Cost of Energy by offering innovative and dynamic Renewable Solar Solutions. We manage your energy resources so you get the lowest possible energy cost.

Starting from 3KW to MW Plus Turnkey Solar Systems, our solutions are designed with world's most reliable and efficient Tier 1 Grade A Mono Crystalline Solar Panels and world's top rated Energy-Efficient Solar Inverters. We install most efficient energy storage & back up power energy batteries based on Lithium Ion and Tubular technology.

Headquartered in Lahore with regional offices in Karachi and Islamabad and representatives all over Pakistan mainly Faisalabad, Multan, Peshawar and Quetta, WE ARE THERE WHENEVER AND WHEREVER YOU NEED US.

Our trained and qualified Engineers & Technicians are available Round the Clock to provide you required support before and after installation of project.



ESL RENEWABLES PROMINENT PROJECTS

Alkaram Textile Mills - 14000kW

9800kW EPC Solar Power Project, 2200kW EPC Solar Power Plant & Commissioning of 2000kW Solar Power Plant

Alkaram Textile Mills is one of the leading textile manufacturing and exporting companies of Pakistan. With global footprint in the US, UK, France and Portugal, Alkaram is currently the country's largest vertically integrated textile setup.

ESL partnered with Alkaram Textile Mills for a 2200kW solar project in Karachi. Considering Alkaram's European market presence the project design was internationally approved and passed all tests by European consultants. This project was in addition to a 2000kW commissioning project completed earlier at Alkaram Textiles by ESL Renewables. The project has the following key features:

- 1. Solar Panels: Jinko Tiger Neo N-Type 595W Bifacial**
- 2. Inverter: Sungrow SG110CX**
- 3. Structure: Customized structure elevated on Dome Shell especially coated with white paint**

ESL Renewables has also been awarded a project of 9800kW by Alkaram Textile Mills.



Riaz Textile Mills - 8200kW

5000kW Project Awarded Subsequent to a 3200kW Solar Power Plant

Riaz Textile Mills is a well-known exporter in the garment industry, specialized in both spinning and weaving. ESL Renewables team adhered to the client's requirements and successfully installed N Type Topcon modules 610W on an inverted beam structure specifically designed to withstand high wind speeds and hot-dipped for enhanced durability. Despite the inclusion of extra tasks and activities, this 3200kW project was completed within the agreed-upon timeframe, meeting the client's expectations effectively. The key features are:

1. **Solar Panels: Jinko N-Type 610W Mono-PERC Half Cut**
2. **Inverter: Huawei 100kW**
3. **Structure: Hot-Dip Galvanized Inverted Beam Structure, Aluminum L3 High Grade Structure**
4. **Walkways for Inverted Beams**
5. **Drain and Water Channels for Water Resource Efficiency**

In addition to the above, Riaz Textile Mills has also awarded another project of 5000kW to ESL Renewables.



Ghani Group - 2800kW

2500kW Solar Power Plant - PEB Building at Ghani Ceramics & 300kW Power Plant at Ghani Dairies Pvt. Ltd.

Ghani Ceramics is one of the leading names in Ceramics Industry and we feel proud to have worked on their 2500kW solar power plant. This project was installed in a record time of 2 months despite several on-site challenges and hard mobility on roof tops. Some key features of the project are as below:

1. **Solar Panels: LONGI 540W Mono-PERC Half Cut**
2. **Inverter: Huawei 100kW**
3. **Structure: Aluminium Rail Type Structure**

A 300kW EPC plant was also installed at Ghani Dairies Pvt. Limited.



Husnain Textile Group Mills – 3000kW

2000kW Project Awarded Subsequent to a 1000kW Solar Power Plant at H.A. Fibres Private Limited

H.A. Fibres Private Limited, a part of Husnain Textile Group Mills teamed up with ESL Renewables for a 1000 kW solar plant, equipped with Jinko panels, Sungrow inverters, and ESL's P1 structure. The project ensures efficient, durable and weather-resilient performance in textile industry settings. The key features are:

1. Solar Panels: Jinko N-Type 580W
2. Inverter: Sungrow CX125KW
3. Structure: Hot-Dip Galvanized Inverted Beam P1 structure, tailored to the roof dynamics



Zephyr Textile Mills – 850kW

500kW Solar Power Plant & 350kW Solar Power Plant

Zephyr Textile Mills is among the pioneers in the Textile Sector and is located in Bhai Peru, Phool Nagar Pakistan. ESL worked extensively and aggressively on the energy demands of their Mills and installed a 500kW solar power plant. The project is challenging in its own terms as the roof space is Dome Shell. The especially designed Dome Shell structure installed in valley beams is an engineered solution for these roof tops. The key features are:

1. Solar Panels: TRINA 490W and Huawei 60KTL Inverter
2. Structure: Hot Dip Galvanized Structure with Design Life of 25 Years.
3. Synchronization with Generators for Peak Load Demand and Load Management Capability.



Shahtaj Textile Limited – 1000kW

1000kW Solar Power Plant Contract with Shahtaj Textile Limited

Shahtaj Textile Limited, part of the Shahnawaz Group, located near Lahore has chosen ESL Renewables for a 1000kW ground-mounted solar project. This contract further strengthens our existing relationship, as Shahtaj has also partnered with ESL for over 10MW of diesel and gas projects earlier.



PepsiCo International – 200kW **200kW Solar Power Plant at PepsiCo Hattar Plant**

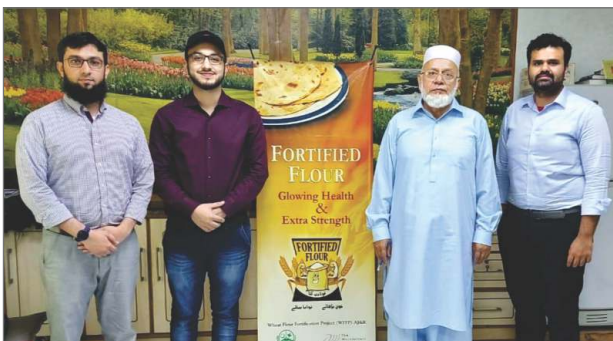
PepsiCo is one of the biggest multi-national beverage brands of the world. ESL solarized their Hattar plant and made it self-sufficient for their energy needs. This Solar Plant is installed on PB Shed with a robust and durable aluminium rail structure. The other part of the plant is installed on Dome shells and RCC rooftop. The plant's key features are:

1. **Net Metering Enabled – PESCO**
2. **Solar Panels: Jinko 545W and Huawei 100KTL Inverter**
3. **Structure: Aluminium Structure with Design Life of 25 Years**
4. **Synchronization with Generators for Peak Load Demand and Load Management Capability**



Siddiqui Group of Industries – 1000kW **1000kW Solar Power Plant at SGI Steel, Pak Kashmir Flour Mills & Siddiqui Flour Mills**


ESL feels proud for contributing to the energy needs of Kashmir Flour Mills- a renowned name in Flour Industry, operational since 1970's. Our team installed 500kW solar project in Azad Kashmir at their two facilities- Pak Kashmir Flour Mills & Siddiqui Flour Mills.






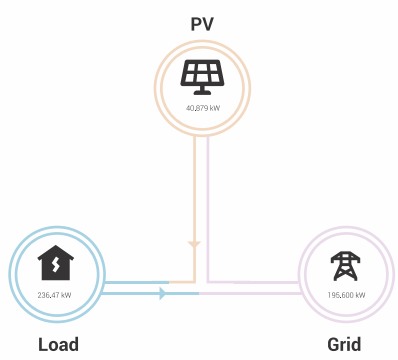
ESL RENEWABLES BUSINESS- REAL TIME MONITORING


ON-GRID PROJECTS:


PepsiCo International-Hattar Plant- 480kW


 **Pepsi-Co Hatter 480kW**

 **600.79 kWh**
Yield today
 **188.85 MWh**
Total yield
 **1.29 MWh**
Consumption today



 **75.54 (tons)**
Standard coal saved

 **89.70 (tons)**
CO₂ avoided

 **123.00**
Equivalent trees planted

0 Alarm

Critical 0

Major 0

Minor 0

Warning 0

Energy Management

Day Month Year Lifetime
2023-07-13

Yield: 2.02 kWh

100.00% 0.00%

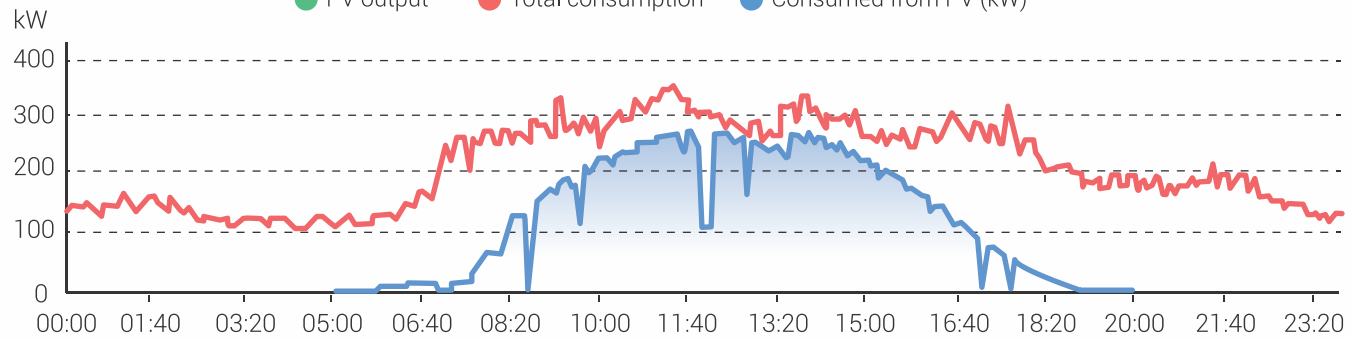
Consumed: 2.02 kWh Fed to grid: 0.00 kWh

Consumption: 5.24 MWh

38.49% 61.61%

From PV: 2.02 MWh From grid: 3.22 MWh


● PV output ● Total consumption ● Consumed from PV (kW)





ESL RENEWABLES BUSINESS- REAL TIME MONITORING


ON-GRID PROJECTS:


Riaz Textile Mills- 3200kW



 Riaz Textile Mills Ltd


 **9.03 MWh**
Yield today


 **140.60 MWh**
Yield this month


 **3.31 GWh**
Yield this Year

PV

2248 MW

Load  **Grid** 

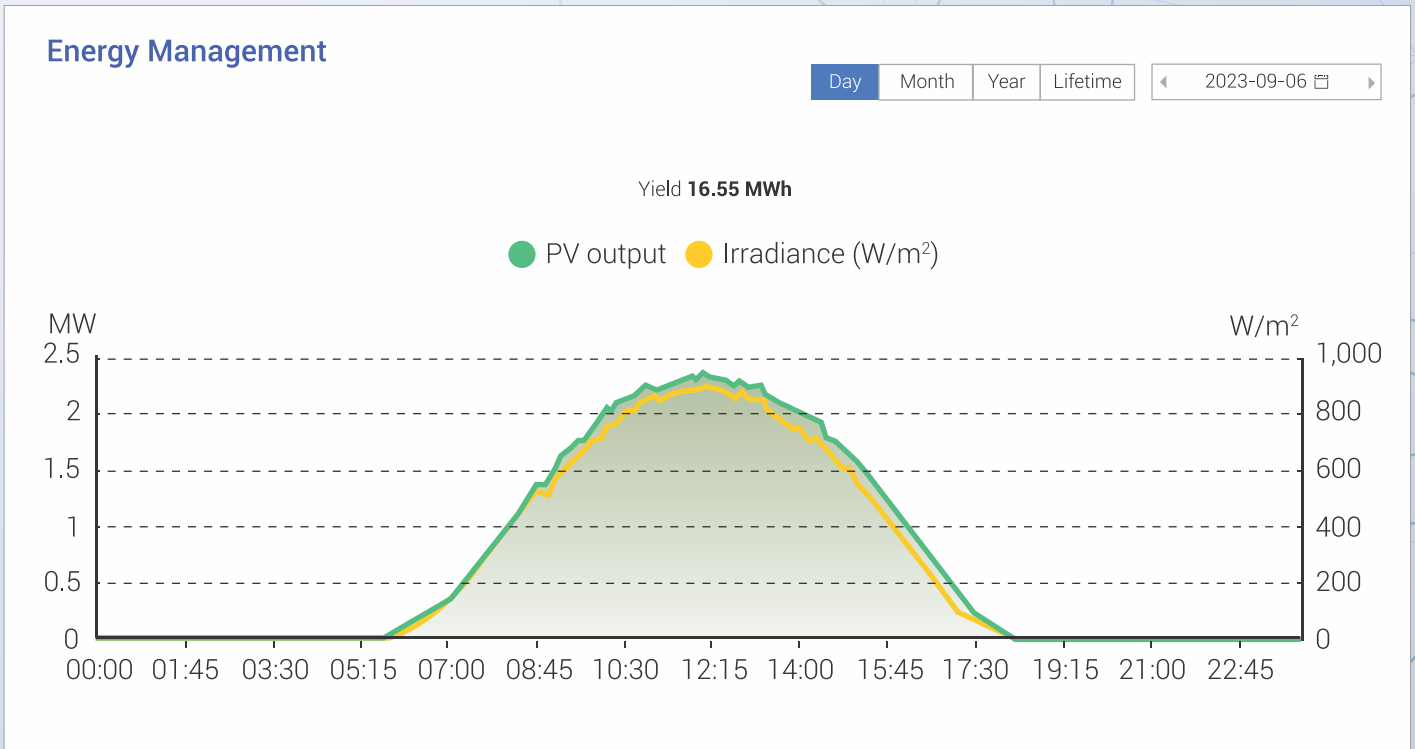
 **1.33K (tons)**
Standard coal saved

 **1.57K (tons)**
CO₂ avoided

 **2.15K**
Equivalent trees planted

0 Alarm

Critical	0
Major	0
Minor	0
Warning	0






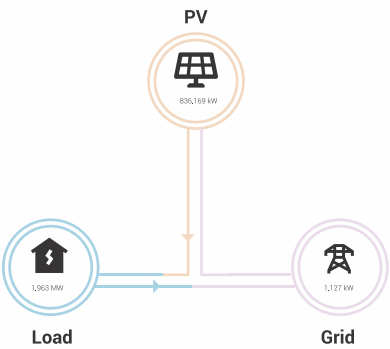
ESL RENEWABLES BUSINESS- REAL TIME MONITORING


ON-GRID PROJECTS:


Ghani Ceramics Limited-2500kW


 Ghani Ceramics LTD - Solar Power Plant 2.5MW

 **5.72 MWh** Yield today
 **5.51 GWh** Total yield
 **23.50 MWh** Consumption today



 **2.20K**(tons)
Standard coal saved

 **2.62K** (tons)
CO₂ avoided

 **3.58K**
Equivalent trees planted

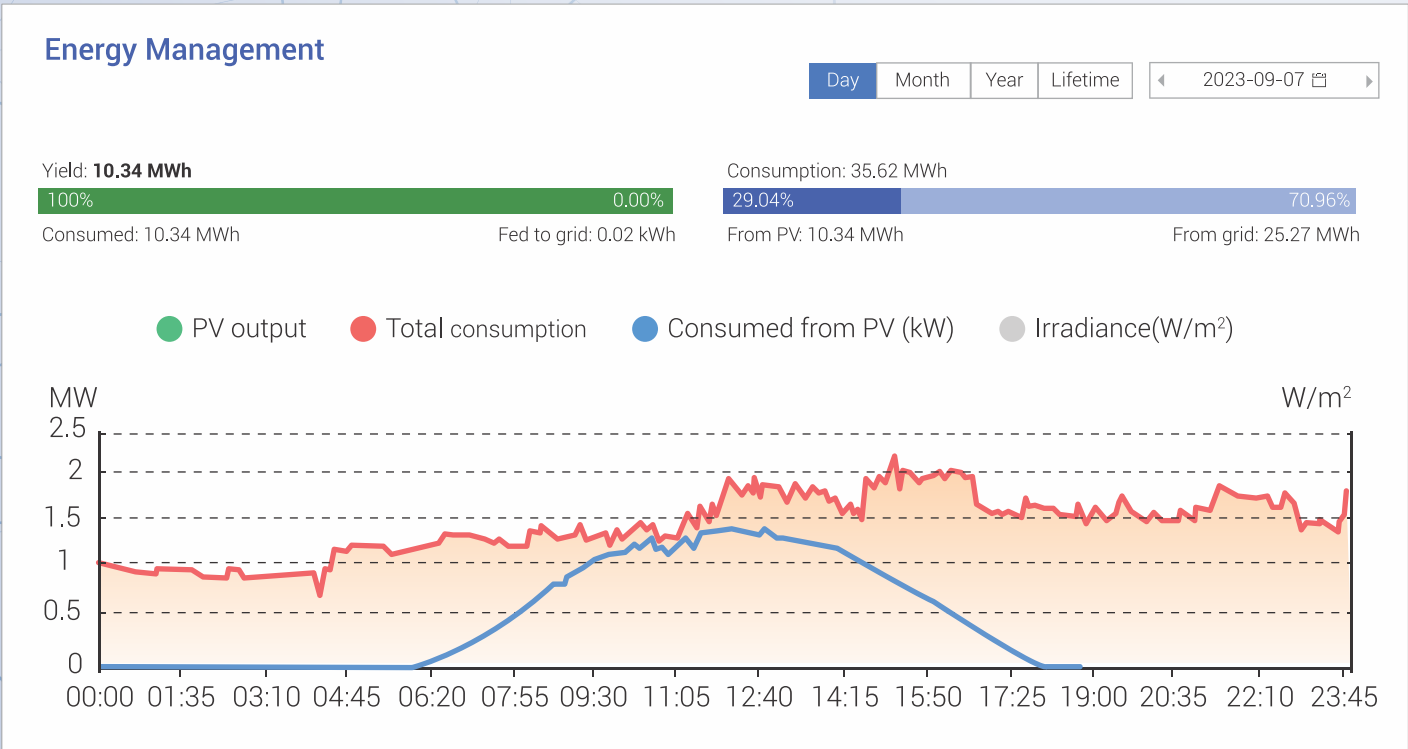
0 Alarm

Critical 0

Major 0

Minor 0

Warning 0



ESL RENEWABLES BUSINESS- REAL TIME MONITORING

HYBRID PROJECTS:

Foodpanda Pakistan- 46kW

Food Panda Model Town

● Online ● No Alerts

Last update 2023/08/30 10:50:17 UTC+05:00

Check the reason why some data update fast and some data update slowly.



Address: Township, College R...
 Plant Type: Commercial
 System Type: PV + Grid + Consum...

Flow Graph Production Consumption Grid Battery

Production 913 W
Capacity 24 kWp

3.8%

100%

Battery
20 W

Grid
15 W



Consumption
763 W

32°C

28 °C/39 °C Sunny

3.4 m/s ☁ 05:37 ☁ 18:30



WED

41°C 41°C 41°C 40°C

27°C 29°C 29°C 28°C

THU FRI SAT SUN

8/31 9/1 9/2 9/3

History

Day

Month

Year

Total

Select Parameters

Export

2023-09-06

System Template: Power & Weather [How to create my template?](#)

Daily Production
27.5 kWh

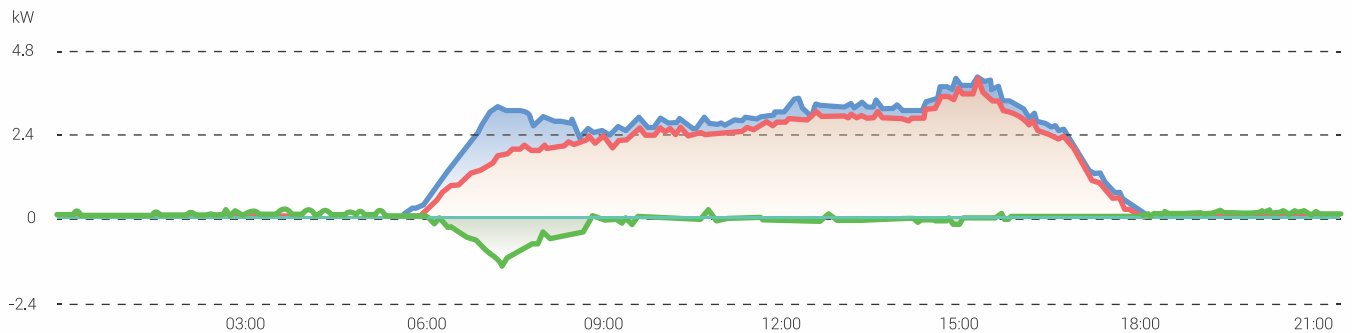
Daily Irradiation
--

Peak Hours Today
1.14 h

Daily Production
(Theoretical)
--

Daily PR
--

Daily CPR
--



● Production ● Consumption ● Grid ● Battery ● Weather



ESL RENEWABLES BUSINESS PRODUCT & SERVICE RANGE

1) Engineering Design & EPC: ESL has in-house Design Expertise- a team of engineers with a profile of 100MW+ design exposure of Solar Power Plants in Pakistan with PEC & International Certifications. ESL design team focuses on over-all plant design, keeping in view the maximum energy yields with optimized LCOE.

2) Product Development: We at ESL exercise due diligence when it comes to product development. The product team performs a set of tests verified by PCSIR and SGS on product workmanship and quality. After assessment on compliances and International Standards the product is ready for market.

3) Structure Design: We deploy specially treated structures for durability and increased life span by means of a 3 staged process:

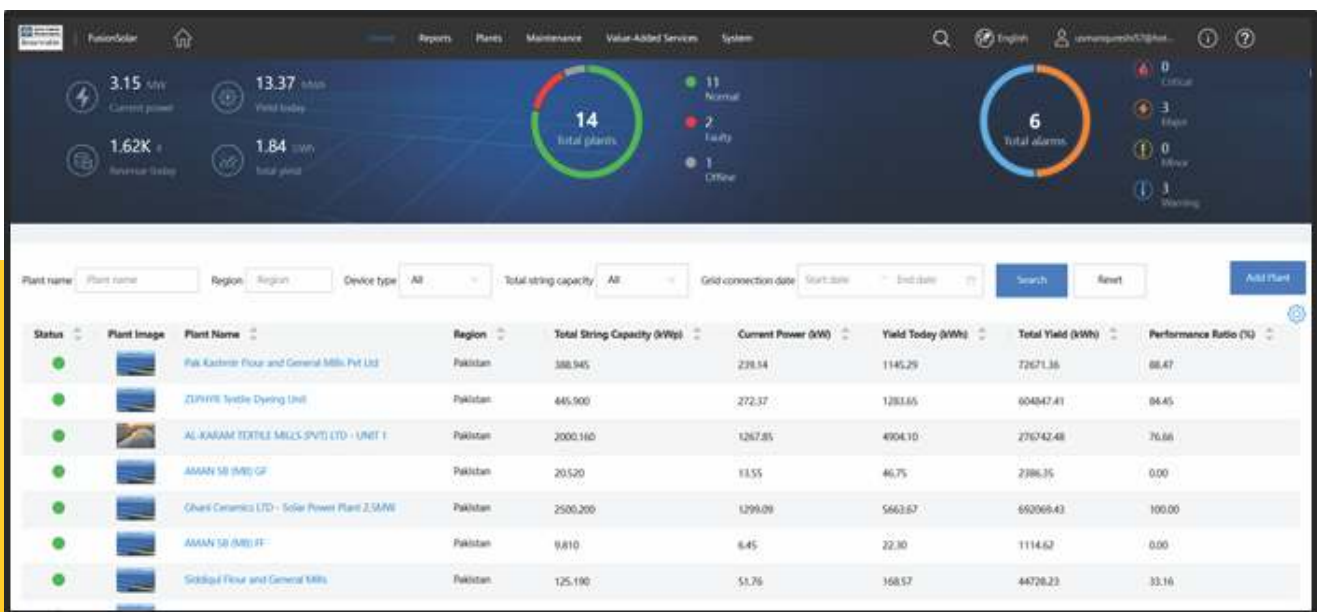
- a. Chemical Painting
- b. Marine Painting
- c. Chemical Anchoring

4) Project Management/Development: This includes planning, coordination and execution of solar energy projects from inception to completion and beyond.

5) 24/7 NOC System/After Sales Service & Support: ESL has a 24/7 NOC center for monitoring & controlling the Solar Power Plants installed all over Pakistan. Our trained & professional staff is available within 24 hours for maintenance services and for emergency situations.

Our 24/7 NOC System includes:

- Periodic Maintenance
- Bi-Annual Inspections
- Monthly Generation Reports
- Root Cause Analysis
- On-Site Troubleshooting & Reporting



ESL RENEWABLES EPC TURNKEY SOLUTION PACKAGE INCLUDES

1. Tier 1 Grade A Solar Panels
2. MPPT Inverters
3. Electrical System Protection
4. Ultra-light and Durable Mounting System
5. Professional Installer Services
6. Wi-Fi Monitoring System



ESL RENEWABLES BRAND PARTNERS



ESL RENEWABLES CERTIFICATIONS



Pakistan Engineering
Council

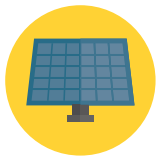


AEDB V1 – Certification for
Net Metering up to 1MW

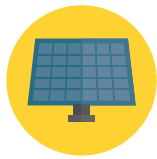


Federal Board of
Revenue

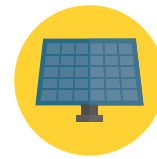
ESL RENEWABLES MAJOR CUSTOMERS



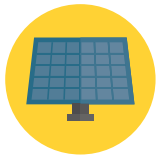
Ghani Ceramics
2500kW



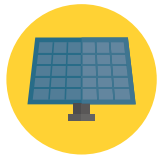
Riaz Textile Mills
8200kW



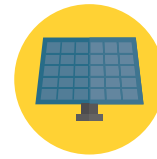
SGI Steel
1000kW



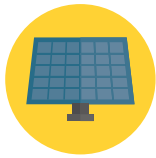
Husnain Group
3000kW



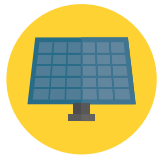
Zephyrs Textile
850kW



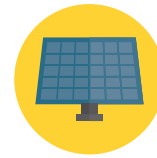
Meezan Bank
445.9kW



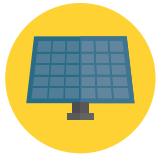
Rajput Dairy
45kW



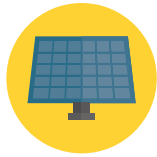
Alkaram Textiles
14000kW



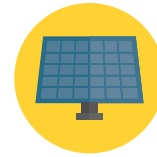
Foodpanda
46kW



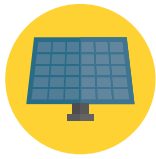
NKR
92.8kW



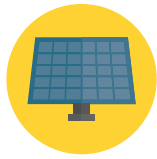
**Sunflower
Industries**
100kW



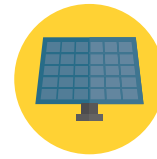
Ghani Dairies
300kW



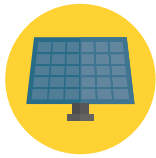
Global Feeds
120kW



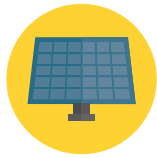
CPLC
40kW



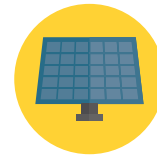
MS DyeTex
240kW



**PepsiCo
International**
200kW



MS DyeTex
119.88kW



**Masood
Hameed Clinic**
30kW



REDUCE YOUR FUEL
EXPENSE



DECREASE CARBON
FOOTPRINT



LOWER TOTAL COST
OF OWNERSHIP



CONTROL LEVELIZED
COST OF ELECTRICITY

ESL Renewables (Pvt.) Limited

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