

ENF Solar Assessed Supplier

Assessment Report Presented to:

Suzhou Luxen Solar Energy Co., Ltd.
苏州市乐能光伏有限公司

Service Commissioned by:



Service Provided by:



August 31, 2021

Report Number: <<C159ENF20210801>>

Report Date: 20/Aug./2021

Expiry Date: 19/Aug./2023

Online Verification: <https://verified.chn.tuv.com>

Introduction

This report has been commissioned by ENF Solar – the world’s most visited solar website. Inspections have been undertaken by TÜV Rheinland – a testing service provider who have been testing solar components since 1985. TÜV Rheinland is part of TÜV Rheinland Group, a technical services company established in 1872 and employing 17,000 staff around the world.

To make these reports, TÜV Rheinland sends inspectors directly to the factories to collect data, take pictures and check documents.

TÜV Rheinland’s Disclaimer:

This report reflects our findings for the particular company in concern on the date of our service only. This report does not discharge or release the factory/sellers/suppliers from their commercial, legal or contractual obligations with buyers in respect of products provided by the factory/sellers/suppliers. Any reader other than the party for which this report has been specifically issued is hereby informed that the General Conditions of Service of TÜV Rheinland contain liability limitation provisions.

The objective of validating supplier information is to provide additional confidence to buyers so that they know the information has been verified by an independent third party.

The TÜV Rheinland “Supplier Capability Assessment” program is not designed to be a performance standard but rather an information validation program against an established criterion providing potential buyers with information on the establishments stated claims and capabilities.

ENF’s Disclaimer:

The information provided in this report is free of charge and for informational purposes only and does not create a business or professional services relationship between you and ENF. No judgment or warranty is made with respect to the products and services offered by the company profiled here and ENF takes no responsibility for such products or services. Any use you make of the information provided in this report is at your own risk.

This report and its contents are provided "as is" and ENF makes no representation or warranty of any kind with respect to this report. ENF expressly disclaims all express and implied warranties including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, title, and non-infringement. In no event will ENF be liable to any party for any direct, indirect, incidental, special, exemplary, consequential, or other damages (including, but not limited to, lost profits, business interruption, loss of programs or data) without regard to the form of action and whether in contract, tort, negligence, strict liability, or otherwise, arising out of or in connection with this report, any content on or accessed through this report or any site service linked to, or any copying, displaying, or use thereof.





Audit Overview

Company Overview	4
Legal Entity	5
Human Resources	6
Export Business Capacity	7
Product Capabilities	9
R & D Capacity.....	13
Management Systems & Quality Control Management.....	15
Corporate Social Responsibility	18
Development / Expansion Plans	20
Certification & Photos.....	21

Company Overview

Identification	Details		
Company Name	Suzhou Luxen Solar Energy Co., Ltd.		
Facility address	No. 1, Haiyue Road, Sutong Science and Technology Industrial Park, Chongchuan District, Nantong City, Jiangsu Province, China. (Remark: The audit site belongs to Luxen Solar Energy Co., Ltd., 100% controlled by Suzhou Luxen Solar Energy Co., Ltd.)		
	Contact Person:	Mr. Luis Liu	
	Tel:	0086-512-67081572	
	Fax:	0086-512-67081570	
	E-mail:	sales@luxensolar.com	
URL/Web Address	http://www.luxensolar.com		
Report Date	20/Aug./2021		
Expiry Date (24 months validity)	20/Aug./2021 -- 19/Aug./2023		
Name of Assessor	Tim Zhang		
Overall Turnover of Last Year	Confidential		
Total Building Size	10,768 m ²		
Number of Buildings	2		
Office Size	500 m ²		
Working Day	Monday to Friday	Working Hours	08:00 -- 11:30 12:30 -- 17:00

Legal Entity

Legal Entity			
Business License Number	91320691MA21BH8E30		
Year Established	24/Apr./2020	Validity Period:	24/Apr./2020 -- 31/Dec./2049
Registered Address	Haiyue Road, Sutong Science and Technology Industrial Park, Chongchuan District, Nantong City, Jiangsu Province, China.		
Company Address	Haiyue Road, Sutong Science and Technology Industrial Park, Chongchuan District, Nantong City, Jiangsu Province, China.		
Registered Capital	RMB 50,000,000		
Corporate Representative	Mr. Qinhui Zhang		
Industry	Solar Energy Products		
Products /Service	Solar Modules		
Business Type	<input type="checkbox"/> Manufacturer	<input type="checkbox"/> Trading Company	<input checked="" type="checkbox"/> Combined
Type of Ownership	<input checked="" type="checkbox"/> Private Owner	<input type="checkbox"/> Public Company	<input type="checkbox"/> Joint Venture
	<input type="checkbox"/> Stated Owned	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other

Human Resources

Company Organization Chart			
<pre> graph TD GM[GM] --- Admin[Admin. Dept.] GM --- Production[Production Dept.] GM --- Technology[Technology Dept.] GM --- Quality[Quality Dept.] GM --- Financial[Financial Dept.] GM --- Sales[Sales Dept.] GM --- Purchasing[Purchasing Dept.] </pre>			
Department Name	Full Time Employee(s)	Part-Time Employee(s)	Total
GM	1	0	1
Admin. Dept.	12	0	12
Production Dept.	68	0	68
Technology Dept.	14	0	14
Quality Dept.	12	0	12
Financial Dept.	4	0	4
Sales Dept.	6	0	6
Purchasing Dept.	2	0	2
Totals	119	0	119

Export Business Capacity

Current Export Situation

There are 2 foreign trading employees in the company.

Working Experience	Headcount
Over 30 Years	0
21-30 Years	0
11-20 Years	0
6-10 Years	2
2-5 Years	0
Less than 2 years	0

Accepted Language	Listening & Speaking	Reading & Writing
English	Yes	Yes
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Does the company have a valid export license?	<input checked="" type="checkbox"/> Yes Export License Registration No.: 04240957			<input type="checkbox"/> No
Trade Agents Employed Overseas	<input type="checkbox"/> Yes			<input checked="" type="checkbox"/> No
Nearest Port	Shanghai Port			
Accepted Payment Terms	<input checked="" type="checkbox"/> FOB	<input checked="" type="checkbox"/> CIF	<input checked="" type="checkbox"/> EXW	<input checked="" type="checkbox"/> CFR
Accepted Payment Types	<input checked="" type="checkbox"/> L/C	<input checked="" type="checkbox"/> T/T	<input type="checkbox"/> Credit Card	<input checked="" type="checkbox"/> Cash
	<input checked="" type="checkbox"/> West Union	<input type="checkbox"/> Money Gram	<input type="checkbox"/> Paypal	<input type="checkbox"/> Money booker
Average lead time from product order confirmation to production delivery (products exiting the company)	7 -- 20 Days			

Market Distribution (Previous 12 Months)		
Market	Main Product(s)	Total Revenue (%)
North America	Solar Modules	19
South America	Solar Modules	4
Eastern Europe	N/A	0
Southeast Asia	Solar Modules	18
Africa	N/A	0
Oceania	N/A	0
Middle East	Solar Modules	12
Eastern Asia	N/A	0
Western Europe	Solar Modules	11
Central America	N/A	0
Northern Europe	Solar Modules	6
Southern Europe	N/A	0
South Asia	N/A	0
Domestic Market	Solar Modules	30

Product Capabilities

Production Capacity		
Product Name	Production Line Capacity (Monthly)	Actual Units Produced (Previous Year)
Solar Modules	25WM / Month	205WM

Production Machinery			
Key Machine Name	Brand & Model No.	Quantity	Condition
Laser Scribing Machine	ATW & HC40A	6	Acceptable
Series Welding Machine	ATW & MS40K	11	Acceptable
Stir Welding Machine	Ningxia XN & DH180-H	2	Acceptable
Automatic Taping Machine	Suzhou DRL & AS72918-A01-ZY01	2	Acceptable
Laminating Machine	Yingkou Jinchen & JCCY2774-T	8	Acceptable
Glue Machine	Shanghai Shenpu & SPZ-AB10	2	Acceptable



Key Testing Machinery			
Machine Name	Brand & Model No.	Quantity	Condition
Separator	KOPAD & KP-X-C	2	Acceptable
EL tester	KOPAD & KP-X-D	2	Acceptable
PV-Module Electric Security Meter	HPOE TECH & CHT9981A	1	Acceptable



Production Flow (Solar Modules)

Battery Separation



Laser Scribing



Feeding



Film Pasting



Series Welding



Plate Rowing



Stir Welding



Article Insulation Pasting



Visual Inspecting 1



Laminating

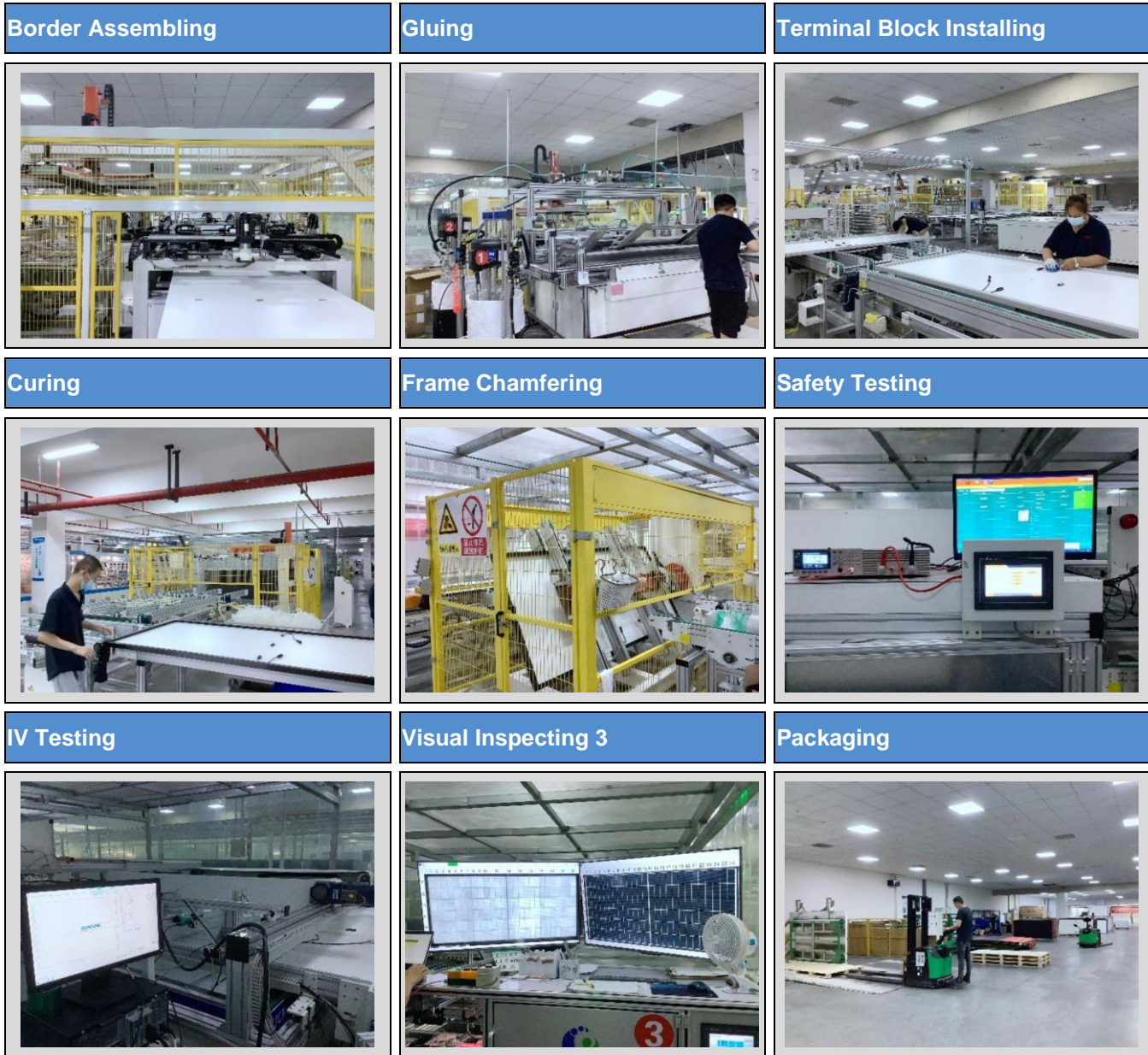


Edge Cutting



Visual Inspecting 2





R & D Capacity

Current Situation			
There are 14 R&D engineers in the company.			
Education Level	Headcount	Work Experience	Headcount
Doctorate	0	Over 30 Years	0
Post-Graduate	0	21-30 Years	0
Graduate	4	11-20 Years	3
Junior College	10	6-10 Years	4
Technical School	0	2-5 Years	7
High School	0	Less than 2 years	0

Brand Situation				
Registration/application No.	Brand Name	For Approval to Use Goods	Validity Date	Ref.
N/A	N/A	N/A	N/A	N/A

Patent Situation				
Patent No.	The Name of the Patent	The Patent Type	Available Date	Ref.
ZL 2019 1 1392961.0	The utility model relates to an installation structure for solar panels	Invention patent	09/Feb./2021 -- 09/Feb./2041	Photo in Certification & Photos (Patent Photos)
Does the company provide OEM/ODM service for others?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are there relevant design input/output, review, and verification documents available for the assessed company?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Based on inspection, are R&D employees equipped with adequate specialized equipment?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Do R&D employees use any specific software for designing new products?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Development Devices

Intelligent Digital Display Electric Heating Sleeve	Electric Constant Temperature Blast Drying Oven	N/A
		<p>N/A</p>

Management Systems & Quality Control Management

Quality Management System Certification				
Certification	Certified By	Certificate No.	Business Scope	Expiry Date
ISO9001:2015	CQC, CNAS	00121Q35846R0M/3200	Solar Photovoltaic Cell Module Production	28/Jun./2021 -- 27/Jun./2024
ISO14001:2015	CQC, CNAS	00121E32516R0M/3200	Solar Photovoltaic Cell Module Production and Related Management Activities	29/Jun./2021 -- 28/Jun./2024
ISO45001:2018	CQC, CNAS	00121S31910R0M/3200	Solar Photovoltaic Cell Module Production and Related Management Activities	29/Jun./2021 -- 28/Jun./2024
GB/T 29490-2013	ZGRZBJ	18121IP0482R0S	Production, sales and intellectual property management of related procurement of solar PV modules.	19/Jul./2021 -- 18/Jul./2024

Product Certification				
Certification	Certified By	Certificate No.	Product Name & Model No.	Expiry Date
CE	ECM	3J210422.LSEUQ06	Crystalline Silicon Photovoltaic Modules & LNVH and LNSE series	22/Apr./2021 -- 21/Apr./2026
TUV Certificate	TUV SUD	Z2 095833 0019 Rev.00	Crystalline Silicon Terrestrial Photovoltaic (PV) Modules Mono-crystalline Silicon Photovoltaic Module	10/May/2021 -- 06/May/2026
Solar Product Certificate	CQC	CQC21024308341	Mono-Crystalline Silicon Photovoltaic Module & LNVH, LNVK, LNSK and LNSU series	11/Aug./2021 -- 20/Apr./2026
Solar Product Certificate	CQC	CQC21024308343	Mono-Crystalline Silicon Photovoltaic Module & LNVH, LNVK, LNSK and LNSE series	11/Aug./2021 -- 20/Apr./2026

Test Report			
Test Report	Certified By	Product Name & Model No.	Expiry Date
N/A	N/A	N/A	N/A

Quality Control Management			
Content	Observations / Comments		
Does the company set up any inspection standards for raw materials?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Has the company set up necessary quality inspection standards in the process of production?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Does the company have any measures to control the management of unqualified materials after sampling, to avoid mixing up or wasting?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Are work instructions available at the location where the processes take place?	<input checked="" type="checkbox"/> Total line	<input type="checkbox"/> Parts of the line	<input type="checkbox"/> No
Is personal protective equipment (PPE) needed in the production line?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Is the management and usage of production materials as well as the production process executed by staff who are appropriately trained and qualified or by senior staff?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	

Supplier Management			
Content	Observations / Comments		
Does the company have a supplier assessment procedure?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Does the company establish and implement a standard procedure for purchasing contract review and approval?	<input checked="" type="checkbox"/> Yes, with written standard procedures	<input type="checkbox"/> Yes, with written procedure but lack of consistent standard	<input type="checkbox"/> No
Does the company keep its supplier assessment reports?	<input checked="" type="checkbox"/> Yes, Keep for <u>1</u> years available	<input type="checkbox"/> No	

<p>Are the company's purchasing documents sufficient to ensure product safety control and their customers' requirements?</p>	<input checked="" type="checkbox"/> Yes, the purchasing document includes all the information required	<input type="checkbox"/> Yes, however the purchasing document includes incomplete information		<input type="checkbox"/> No
<p>Is there a procedure to conduct random product inspections after final packaging?</p>	<input checked="" type="checkbox"/> Yes, with clear standard and written inspection records	<input type="checkbox"/> Yes, with inspection records but no procedures	<input type="checkbox"/> Yes, with procedures but no inspection records	<input type="checkbox"/> No, inspections are not necessary

After Sales Service				
Content	Observations / Comments			
<p>Has the company set up any procedure for customer feedback, including complaints, clearly recorded and maintained?</p>	<input checked="" type="checkbox"/> Yes, with a standard feedback form and records	<input type="checkbox"/> Yes, with a standard feedback form but no records	<input type="checkbox"/> Yes, with records but no standard feedback form	<input type="checkbox"/> No
<p>Are there any clear procedures for handling customer complaints?</p>	<input checked="" type="checkbox"/> Yes, with clear procedures and written records	<input type="checkbox"/> Yes, with clear procedures but no written records	<input type="checkbox"/> Yes, with written records but no clear procedures	<input type="checkbox"/> No
<p>Does the company have the SOP (Standard Operation Procedure) for after-sales service? Does the company provide after-sales consulting services?</p>	<input checked="" type="checkbox"/> Yes			<input type="checkbox"/> No
<p>Does the company implement the provisions of the National Three Warrantees (warranty for repair/replacement /return) for their products?</p>	<input checked="" type="checkbox"/> Yes			<input type="checkbox"/> No

Corporate Social Responsibility

Child Labour & Forced Labor		
Content	Observations / Comments	
Is it clarified that there's no child labor in the company?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company have an explicit job management program, and take corresponding measures to check the age of the employees?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are the staff clearly aware of the terms of labor contract, regulations of the company and the right of free employment?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Have the staff been forced to work overtime? Will they be fined or fired if they refuse to?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Health and Safety		
Content	Observations / Comments	
Has the company set up a safety responsibility system, and distributed to all levels of supervisor and provided them with corresponding training?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company conduct regular inspection of the plant and equipment, to ensure the health and safety of the workshop at least in accordance with the law?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company regularly provide necessary safety and health training, to make the staff understand that there might be occupational hazards in their work, and take appropriate protective measures when necessary? (For example, how to use personal protective equipment safely, etc.)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company hold regular fire drills, including fire drills and evacuation drills? Do the staff clearly know how to raise an alarm, how to evacuate and how to use the fire extinguisher?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No (No regular fire drill was conducted by the factory)
Does the company have the approval report issued by the local Fire Bureau?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company provide sufficient first aid equipment? Are first-aid kits and trained first-aiders available in each workplace?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No (No qualified first aider available in workshop)

Does the company provide clean lavatories, separating men's and ladies'?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the company provide clean drinking water to the staff? Is there unrestricted access to the drinking water?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

Development / Expansion Plans

Company Development / Expansion Plans	
Company Development Action	Timeframe
N/A	N/A

Certificate Photo – Export License



Certificate Photo -- Patent



Certificate Photo – CE Certificate



Certificate Photo – TUV Certificate



Certificate Photo -- Solar Product Certificate 1



Certificate Photo -- Solar Product Certificate 2



Certificate Photo -- ISO9001:2015



Certificate Photo -- ISO14001:2015



Certificate Photo -- ISO45001:2018



Certificate Photo -- GB/T 29490-2013



Company Gate



Office



Workshop



Warehouse



Product Photo



Product Photo



Product Photo



-- The END --