

## Training Outcomes

At the end of the program, the trainees will acquire the listed knowledge and skills:

- Different types of solar devices and assessment of power
- Customization of solar devices and its importance.
- They learn step-by-step methodology and designing the On-grid, Off-Grid and Hybrid type of connections of a photovoltaic (PV) system.
- In-depth knowledge of protection methods within PV systems, including fault current protection and sizing.
- Trainees will attain knowledge of book keeping, taxation and systematic approval towards development of energy entrepreneur.
- Basic knowledge of solar PV systems, electrical/electronic skills, and additional competencies in computer, GIS, E-commerce, and soft skills.

## COURSE CONTENT

### Solar Enterprise Assistant Manager (NSQF Level 5)

**Duration:** 510 Hours - Up to 68 days

**Batch Size:** 20 candidates

**No of batches per year (2024-25):** 3 (Three)

**Eligibility:** UG Diploma/ Class 12 + 2 yr diploma with 1 yr experience in relevant field / Class 10 + 3 yr diploma with 1 yr experience in relevant field

**Age Limit:** 18 years and above

### Syllabus Structure

Scope of work includes the Engineering, Procurement and Construction of the works involved in the proposed Solar Energy Systems.

- Basic orientation & Theory- 120 hrs
- Practical session – 180 hrs
- Employability Skills/Sustainable enterprise management and marketing aspects – 60 hrs
- On the Job Training/ Onsite practical/ exposure Visits – 150 Hrs

### For Details Contact:

SIKKIM STATE ENVIS HUB  
*On Status of Environment & Its Related Issues*  
Forest and Environment Department,  
Government of Sikkim  
Forest Secretariat ,B Block, Room No. B101,  
Deorali, Gangtok – 737102

Tel(O) : 03592-280381  
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Websites : www.sikenvis.nic.in

Also visit GSDP portal for details:  
[www.gsdp-envis.gov.in](http://www.gsdp-envis.gov.in)

**ENVIRONMENTAL INFORMATION SYSTEM**  
(ENVIS Publication 2024-25)



सत्यमेव जयते

Ministry of Environment, Forests & Climate Change,  
Government of India



## GREEN SKILL DEVELOPMENT PROGRAMME



GSDP CERTIFICATE COURSE ON  
**SOLAR ENTERPRISE ASSISTANT MANAGER**  
NSQF Level 5 | 510 Hrs | Batch Size: 20



Implementing and Facilitating Agency  
State EIACP Hub, Forest and Environment Department,  
Government of Sikkim

In collaboration with multi-stakeholders, registered bodies of Sikkim

**Green Skill Development Programme** is an initiative of the EIAACP, Economic Division of the Ministry of Environment, Forest & Climate Change, Government of India in line with the Skill India Mission.

Through this programme several other green skilling courses are being imparted by a network of about 70 EIAACP Hubs and Resource Partners across the country. The programme endeavours to develop green skilled workers having technical knowledge and commitment to sustainable development, which will help in the attainment of the Nationally Determined Contributions (NDCs), Sustainable Development Goals (SDGs), National Biodiversity Targets (NBTs), as well as Waste Management Rules

**GREEN SKILL DEVELOPMENT PROGRAMME***Certificate Course on***Solar Enterprise****Assistant Manager***In accordance to National Skills Qualifications Framework (NSQF)– Level 5*

The course meticulously covers solar energy concepts, basic electrical principles and their usage, solar PV modules, practical knowledge of types, sizes and specifications of modules/panels and their handling, functioning of solar power plant (other technologies) and its components.

The training programme aims to bridge the gap between theoretical learning and implementation of knowledge with requisite technical expertise for taking on detailed Solar PV plant design, installation and maintenance. The course promotes entrepreneurship and serves as base for livelihood development on renewal energy sector.

**MODULE OF GSDP COURSE ON SOLAR ENTERPRISE ASSISTANT MANAGER****NSQF- Level 5 | Duration : 510 hours**

(Theory: 120 Hrs; Practical: 180 Hrs; Employability Skills: 60 Hrs; OJT: 150 Hrs)

2 Months 7 days i.e up to 68 working days @8 hrs per day [Time: 9am to 5 pm]

<b>NOS and Module Details</b>	<b>Theory Duration</b>	<b>Practical Duration</b>	<b>OJT (Man)</b>	<b>OJT (Rec)</b>	<b>Total Duration</b>
<b>SGJ/N4066: Introduction to Renewable (solar)energy, climate change, tools used in solar energy, Electromagnetism</b>	<b>30.00</b>	<b>30.00</b>			<b>60.00</b>
Module 1: Introduction to Renewable and Solar Energy fundamentals	07:30	00:00			07:30
Module 2: Solar Energy & Climate Change	15:00	0:00			15:00
Module 3: Tools	00:00	30:00			30:00
Module 4: Electromagnetism (Electricity & Magnetism)	07:30	00:00			07:30
<b>SGJ/N4067: Components of solar Photovoltaic System</b>	<b>22.30</b>	<b>37.30</b>			<b>60.00</b>
Module 5: Wires & Cables	07:30	15:00			22:30
Module 6: Photovoltaic Technology	07:30	15:00			22:30
Module 7: Components of Photovoltaic System	07:30	07:30			15:00
<b>SGJ/N4068: Perform Site Assessment, Design, Sizing &amp; Installation of Solar Home System</b>	<b>30:00</b>	<b>60:00</b>			<b>90:00</b>
Module 8: Types Of PV Systems	07:30	15:00			22:30
Module 9: PV System Design, Sizing & Installation Requirements	22:30	30:00			52:30
Module 10: Site Assessment for Solar Home System Installation	00:00	15:00			15:00
<b>SGJ/N4069: Perform Commissioning, Testing and O&amp;M and Environmental Impacts of Solar PV system</b>	<b>22:30</b>	<b>07:30</b>			<b>30:00</b>
Module 11: Commissioning, Testing and O&M of PV Systems	07:30	07:30			15:00
Module 12: Environmental Impacts of Solar PV system	07:30	00:00			07:30
Module 13: Recycling of WEEE	07:30	00:00			07:30
<b>SGJ/N4070: Understand Basics of Computers and E-Commerce</b>	<b>07:30</b>	<b>22:30</b>			<b>30:00</b>
Module 14: Basics of Computers Understanding E-Commerce	07:30	22:30			30:00
<b>SGJ/N4071: Identify Geographic Information System of Solar PV system</b>	<b>07:30</b>	<b>22:30</b>			<b>30:00</b>
Module 15: Geographic Information System (GIS)	07:30	22:30			30:00
<b>Module 16: DGT/VSQ/N0102: Employability Skills NOS Version No. 1.0   NSQF Level 4</b>					<b>60:00</b>
Employability Skills					60:00
<b>On the Job Training</b>			150.00		<b>150:00</b>
<b>Total Duration</b>	<b>120:00</b>	<b>180:00</b>	<b>150:00</b>		<b>510:00</b>