# Model Curriculum

## Solar PV Business Development Executive

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| **SECTOR:** | **GREEN JOBS** |
| **SUB-SECTOR:** | **RENEWABLE ENERGY** |
| **OCCUPATION:** | **Business Development** |
| **REF ID:** | **SGJ/Q0107, V1.0** |
| **NSQF LEVEL:** | **5** |

Skill India | SCGJ SKILL COUNCIL FOR GREEN JOBS | N·S·D·C National Skill Development Corporation Transforming the skill landscape

# Certificate

## CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

**SKILL COUNCIL FOR GREEN JOBS**

for the

## MODEL CURRICULUM

Complying to National Occupational Standards of Job Role/
Qualification Pack: '**Solar PV Business Development Executive**' QP No. '**SGJ/Q 0107 NSQF Level 5**'

Date of Issuance: **October 16th, 2017**

Valid up to: **September 30th, 2018**

** Valid up to the next review date of the Qualification Pack*

Authorised Signatory
(Skill Council for Green Jobs)

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# Solar PV Business Development Executive

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "Solar PV Business Development Executive", in the "Green Jobs" Sector/Industry and aims at building the following key competencies amongst the learner.

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| **Program Name** | **Solar PV Business Development Executive** | | |
| **Qualification Pack Name & Reference ID.** | SGJ/Q0107, v1.0 | | |
| **Version No.** | 1.0 | **Version Update Date** | 04th Aug 2017 |
| **Pre-requisites to Training** | B.B.A./B.Com./B.Tech | | |
| **Training Outcomes** | **After completing this programme, participants will be able to:**<br>• **Develop rooftop solar PV business**<br>• **Develop ground mount solar PV business**<br>• **Develop off grid solar PV business**<br>• **Work effectively with others** | | |

This course encompasses 4 out of 4 National Occupational Standards (NOS) of "Solar PV Business Development Executive" Qualification Pack issued by "Skill Council for Green Jobs".

| S. No | Module | Key Learning Outcomes | Equipment Required |
|---|---|---|---|
| 1. | **Introduction to Solar PV Sector**<br><br>**Theory Duration**<br>(hh:mm)<br>18:00<br>**Practical Duration**<br>(hh:mm)<br>6:00<br><br>**Introduction Module** | • overview of solar PV technology<br>• overview of ground mount solar sector in India<br>• understand the various market research reports and industrial magazines present in the market<br>• type of ground mount PV Power Plants and working principles<br>• overview of Rooftop Solar Sector in India<br>• type of Rooftop Solar PV Power Plants and working principles<br>• overview of off grid Solar Sector in India<br>• type of off grid Solar PV Power devices and their working principles<br>• system components and operating principles<br>• basics of electrical concepts like voltage, current, power, energy, etc.<br>• solar energy and power sector landscape in the country<br>• benefits of solar energy over conventional sources of energy<br>• typical specifications, functioning, operating principle, maintenance requirements, handling procedures and warranties of different types of solar PV plant components like PV modules, inverters, cables, junction boxes, monitoring system and other components<br>• understand various financial institutions and banks involved in solar power projects as well as their terms & conditions associated with loans | |
| 2. | **Development of rooftop solar PV business**<br><br>**Theory Duration**<br>(hh:mm)<br>14:00<br>**Practical Duration**<br>(hh:mm)<br>20:00<br><br>**Corresponding NOS Code**<br>SGJ/N0122 | • assess the market and evaluate the market trends to decide the strategy for sale<br>• Identify market opportunities and potential customers<br>• Understand technical requirements of the potential clients<br>• identify the customer requirements<br>• clarify the customer queries with respect to rooftop solar PV power plant<br>• assess the area of installation, power output expectation, budget, etc. during discussion with the customer<br>• create relevant solutions to meet customer requirements | Licensed solar PV simulation software; Site visit for practical learning |

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| | | • Understand broad design of the solar power plant<br>• Understand cost of solar power plant<br>• Understand estimated generation and payback period of the solar power plant<br>• develop the working calculation sheet outlining the broad estimate for the rooftop solar PV power plant<br>• prepare the cost benefit analysis for setting up of rooftop solar PV power plant<br>• prepare a proposal for setting up of rooftop solar PV power plant<br>• Understand government/corporate policies and guidelines on: workplace safety, identification and mitigation of safety hazards, work procedures and guidelines for working at height<br>• prepare a pitch for the customer and close the sale<br>• create and manage a pipeline of potential customers | |
| 3. | **Development of ground mount solar PV business**<br><br>**Theory Duration**<br>(hh:mm)<br>12:00<br>**Practical Duration**<br>(hh:mm)<br>20:00<br><br>**Corresponding NOS Code**<br>SGJ/N0123 | • assess the market and evaluate the market trends to decide the strategy for sale<br>• identify market opportunities and potential customers<br>• identify tenders issued by central/ state governments and/ or their agencies for procurement under government scheme<br>• assist in completing the tender and bidding documents identify the customer requirements for ground mount solar PV<br>• clarify the customer queries with respect to ground mount solar PV power plant<br>• create interest among the customer to invest in ground mount solar PV<br>• asses the area of installation, power output expectation, budget, etc. during discussion with the customer<br>• create relevant solutions to meet customer requirements, if required<br>• develop the working calculation sheet outlining the broad estimate for the ground mount solar PV power plant<br>• prepare the cost benefit analysis for setting up of ground mount solar PV power plant<br>• prepare O&M solutions for ground mount solar PV power plants for relevant customers, if required | Licensed solar PV simulation software; Site visit for practical learning |

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| | | • create and manage a pipeline of potential customers and relevant tenders | |
| 4. | **Development of off grid solar PV business**<br><br>**Theory Duration**<br>(hh:mm)<br>12:00<br>**Practical Duration**<br>(hh:mm)<br>20:00<br><br>**Corresponding NOS Code**<br>SGJ/N0124 | • assess the market and evaluate the market trends to decide the strategy for sale of off grid products<br>• identify the un-electrified areas and areas with limited grid availability<br>• identify market opportunities and potential customers<br>• identify the customer requirements<br>• clarify the customer queries with respect to off grid solar PV systems<br>• demonstrate LED based solar lighting systems to the relevant customers<br>• Will be able to demonstrate solar home lighting systems/small capacity solar power plant which can meet the requirement of running couple of lights, fans, TV and charging of mobile phones etc. to identified communities<br>• demonstrate solar pumps in areas with high water tables and no or erratic grid power<br>• create relevant solutions to meet requirements of the local households/ community requirements<br>• Do the cost benefit analysis for creating relevant solutions and sell to the customer<br>• create and manage a pipeline of potential customers | Site visit for practical learning |
| 5 | **Work effectively with others**<br><br>**Theory Duration**<br>(hh:mm)<br>6:00<br>**Practical Duration**<br>(hh:mm)<br>12:00<br><br>**Corresponding NOS Code**<br>SGJ/N0120 | • accurately pass on information to the authorized persons who require it and within agreed timescale and confirm its receipt<br>• assist others in performing tasks in a positive manner where required and possible<br>• consult and assist others to maximize effectiveness and efficiency in carrying out tasks<br>• display appropriate communication etiquette while working<br>• display active listening skills while interacting with others at work<br>• demonstrate responsible and disciplined behaviours at the workplace<br>• escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict<br>• identify the need for common grounds with clients, team members, etc. and negotiate in an effective manner to achieve the same | |

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| | | • consider and respect the opinions, creativity, values, beliefs and perspectives of others<br>• ensure collaboration and group participation to achieve common goals<br>• promote a friendly, co-operative environment that is conducive to employee's sense of belonging<br>• facilitate an understanding and appreciation of the differences among team members | |
| | **Theory Duration**<br>(hh:mm)<br>62:00<br>**Practical Duration**<br>(hh:mm)<br>78:00 | Licensed solar PV simulation software; Site visit for practical learning | |

Grand Total Course Duration: 140 **Hours, 0 Minutes**

*(This syllabus/ curriculum has been approved by **Skill Council for Green Jobs)***

## Trainer Prerequisites for Job role: "Solar PV Business Development Executive mapped to Qualification Pack: "SGJ/Q0107, v1.0".

| Sr. No. | Area | Details |
|---|---|---|
| 1 | **Description** | To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack "SGJ/Q0107, Version 1.0". |
| 2 | **Personal Attributes** | Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field. |
| 3 | **Minimum Educational Qualifications** | Any Graduate. |
| 4a | **Domain Certification** | Certified for Job Role: "Solar PV Business Development Executive" mapped to QP: "SGJ/Q0107, Version 1.0". Minimum accepted score as per respective as per SCGJ guidelines is 80%. |
| 4b | **Platform Certification** | Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q0102" or equivalent. Minimum accepted score as per SSC is 80%. |
| 5 | **Experience** | Two years of Business Development experience in solar PV sector. |

# CRITERIA FOR ASSESSMENT OF TRAINEES

**Job Role** Solar PV Business Development Executive

**Qualification Pack** SGJ/Q0107

**Sector Skill Council** Green Jobs

## Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criterion.
6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
7. In case of *unsuccessful completion*, the trainee may seek reassessment on the Qualification Pack.

| **Compulsory NOS**<br>**Total Marks: 250** | | | **Marks allocation** | | |
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| **Assessment Outcomes** | **Assessment Criteria for outcomes** | **Assessment Outcomes** | **Assessment Criteria for outcomes** | **Assessment Outcomes** | **Assessment Criteria for outcomes** |
| **SGJ/N0122 Development of rooftop solar PV business** | PC1. assess the market and evaluate the market trends to decide the strategy for sale | **100** | 5 | 2 | 3 |
| | PC2. identify market opportunities and potential customers | | 10 | 4 | 6 |
| | PC3. identify the customer requirements | | 10 | 3 | 7 |
| | PC4. clarify the customer queries with respect to rooftop solar PV power plant | | 10 | 3 | 7 |
| | PC5. assess the area of installation, power output expectation, budget, etc. during discussion with the customer | | 5 | 2 | 3 |
| | PC6. create relevant solutions to meet customer requirements | | 10 | 3 | 7 |
| | PC7. develop the working | | 10 | 3 | 7 |

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| | calculation sheet outlining the broad estimate for the rooftop solar PV power plant | | | | |
| | PC8. prepare the cost benefit analysis for setting up of rooftop solar PV power plant | | 10 | 3 | 7 |
| | PC9. prepare a proposal for setting up of rooftop solar PV power plant | | 10 | 4 | 6 |
| | PC10. prepare a pitch for the customer and close the sale | | 10 | 4 | 6 |
| | PC11. create and manage a pipeline of potential customers | | 10 | 4 | 6 |
| | | **TOTAL** | **100** | **35** | **65** |
| **SGJ/N0123 Development of ground mount solar PV business** | PC1. assess the market and evaluate the market trends to decide the strategy for sale | **100** | 5 | 2 | 3 |
| | PC2. identify market opportunities and potential customers | | 10 | 3 | 7 |
| | PC3. identify tenders issued by central/ state governments and/ or their agencies for procurement under government scheme | | 2 | 2 | 0 |
| | PC4. assist in completing the tender and bidding documents | | 7 | 3 | 4 |
| | PC5. identify the customer requirements for ground mount solar PV | | 10 | 5 | 5 |
| | PC6. clarify the customer queries with respect to ground mount solar PV power plant | | 8 | 4 | 4 |
| | PC7. create interest among the customer to invest in ground mount solar PV | | 13 | 3 | 10 |
| | PC8. asses the area of installation, power output expectation, budget, etc. during discussion with the customer | | 5 | 2 | 3 |
| | PC9. create relevant solutions to meet customer requirements, if required | | 5 | 2 | 3 |

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| | PC10. develop the working calculation sheet outlining the broad estimate for the ground mount solar PV power plant | | 8 | 3 | 5 |
| | PC11. prepare the cost benefit analysis for setting up of ground mount solar PV power plant | | 10 | 4 | 6 |
| | PC12. prepare O&M solutions for ground mount solar PV power plants for relevant customers, if required | | 10 | 4 | 6 |
| | PC13. create and manage a pipeline of potential customers and relevant tenders | | 7 | 3 | 4 |
| | | **TOTAL** | **100** | **40** | **60** |
| **SGJ/N0124 Development of off grid solar PV business** | PC1. assess the market and evaluate the market trends to decide the strategy for sale of products | **100** | 10 | 5 | 5 |
| | PC2. identify the un-electrified areas and areas with limited grid availability | | 10 | 4 | 6 |
| | PC3. identify market opportunities and potential customers | | 11 | 4 | 7 |
| | PC4. identify the customer requirements | | 10 | 3 | 7 |
| | PC5. clarify the customer queries with respect to off grid solar PV systems | | 10 | 3 | 7 |
| | PC6. demonstrate LED based solar lighting systems to the relevant customers | | 12 | 4 | 8 |
| | PC7. demonstrate solar home lighting systems/small capacity solar power plant which can meet the requirement of running couple of lights, fans, TV and charging of mobile phones etc. to identified communities | | 12 | 4 | 8 |
| | PC8. demonstrate solar pumps in areas with high water tables and no or erratic grid power | | 15 | 5 | 10 |
| | PC9. create relevant | | 10 | 3 | 7 |

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| | solutions to meet requirements of the local households/ community requirements | | | | |
| | | **TOTAL** | **100** | **35** | **65** |
| **SGJ/N0120 Work effectively with others** | PC1. accurately pass on information to the authorized persons who require it and within agreed timescale and confirm its receipt | **50** | 4 | 2 | 2 |
| | PC2. assist others in performing tasks in a positive manner where required and possible | | 4 | 2 | 2 |
| | PC3. consult and assist others to maximize effectiveness and efficiency in carrying out tasks | | 4 | 2 | 2 |
| | PC4. display appropriate communication etiquette while working | | 6 | 3 | 3 |
| | PC5. display active listening skills while interacting with others at work | | 4 | 2 | 2 |
| | PC6. demonstrate responsible and disciplined behaviours at the workplace | | 4 | 2 | 2 |
| | PC7. escalate grievances and problems to appropriate authority as per procedure to resolve them and avoid conflict | | 3 | 1 | 2 |
| | PC8. identify the need for common grounds with clients, team members, etc. and negotiate in an effective manner to achieve the same | | 3 | 1 | 2 |
| | PC9. consider and respect the opinions, creativity, values, beliefs and perspectives of others | | 4 | 2 | 2 |
| | PC10. ensure collaboration and group participation to achieve common goals | | 6 | 3 | 3 |
| | PC11. promote a friendly, co-operative environment that is conducive to employee's sense of belonging | | 4 | 2 | 2 |

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| | PC12. facilitate an understanding and appreciation of the differences among team members | | 4 | 2 | 2 |
| | | **TOTAL** | **50** | **24** | **26** |