



Skill India
कौशल भारत - कुशल भारत



GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



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National
Skill Development
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Transforming the skill landscape



SCGGJ

SKILL COUNCIL FOR
GREEN JOBS



Annual Report 2017-18

Governing Council



सत्यमेव जयते

Ministry of Skill Development
and Entrepreneurship

Ministry of New and
Renewable Energy

Ministry of Power

Ministry of Drinking
Water and Sanitation



Confederation of Indian Industry



Transforming the skill landscape

INDUSTRY



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From The CEO's Desk:

India's Approach towards Sustainability - Role of Renewable Energy and Green jobs

India has been keen to attempt to work towards a low carbon emission pathway while simultaneously endeavouring to meet all the developmental challenges. The Nationally Determined Contribution (NDC) takes forward the Prime Minister's vision of a sustainable lifestyle and climate justice to protect the poor and vulnerable from adverse impacts of climate change. For India's INDC, Government zeroed-in on a set of contributions which are comprehensive, balanced, equitable and pragmatic and addresses all the elements including Adaptation, Mitigation, Finance, Technology Transfer, Capacity Building and Transparency in Action and Support.

The India's NDC centre around policies and programmes on promotion of clean energy, especially renewable energy, enhancement of energy efficiency, development of less carbon intensive and resilient urban centres, promotion of waste to wealth, safe, smart and sustainable green transportation network, abatement of pollution and India's efforts to enhance carbon sink through creation of forest and tree cover.

India has adopted several ambitious measures for Sustainability, renewable energy, energy efficiency in various sectors of industries, achieving lower emission intensity in the automobile and transport sector,

non-fossil based electricity generation and building sector based on energy conservation.

Thrust on Renewable Energy, Promotion of Clean Energy, Enhancing Energy Efficiency, Developing Climate resilient Urban Centres promotion of waste to wealth, safe, smart and sustainable green transportation network, abatement of pollution and India's efforts to enhance carbon sink through creation of forest and tree cover.

India has adopted several ambitious measures for Sustainability, renewable energy, energy efficiency in various sectors of industries, achieving lower emission intensity in the automobile and transport sector, non-fossil based electricity generation and building sector based on energy conservation. Thrust on Renewable Energy, Promotion of Clean Energy, Enhancing Energy Efficiency, Developing Climate resilient Urban Centres and Sustainable Green transportation Network are some of the measures for achieving this goal.

It is recognised in the NDC that Renewable energy sources are a strategic national resource. Harnessing these sources will put India on the path to a cleaner environment, energy independence and, a stronger economy and towards sustainability. India's share of non-fossil fuel in the total installed capacity is projected to change from 30% in 2015 to about 40 % by 2030. The renewable power target of 175 GW by 2022 will result in abatement of 326.22 million tons of CO₂ eq. /year. The ambitious solar expansion programme seeks to enhance the capacity to 100 GW by 2022, which is expected to be scaled up further thereafter.

From The CEO's Desk:

India is one of the few countries where forest and tree cover has increased in recent years and the total forest and tree cover amounts to 24% per cent of the geographical area of the country. Over the past two decades progressive national forestry legislations and policies of India have transformed India's forests into a net sink of CO₂. With its focus on sustainable forest management, afforestation and regulating diversion of forest land for non-forest purpose, India plans to increase its carbon stock.

The Indian NDC brings a huge responsibility on the country and equally big opportunity for green business and poses skilled man power requirement. The year 2017 ended with a total Installed Capacity of 335.5 GW which includes 220 GW from Thermal, 0.446 GW from Hydro, 0.06 GW from Nuclear and 64 GW from various Renewable Energy Sources. The 64 GW Installed Capacity from renewable energy includes 33 GW from wind energy, 17 GW from solar energy and 12 GW from biomass, small hydro and waste to energy.

The success of any technology or technological shift is greatly dependent on its proper execution on ground through trained man power. It may not be possible to achieve the desired results of any strategic shift unless our human resource and skill development policies are aligned to address the needs. Skills development is seen as the shared responsibility of the key stakeholders viz. Government, the entire spectrum of corporate sector, community based organizations, those outstanding, highly qualified and dedicated individuals who have been working in the skilling and entrepreneurship space for many years, industry and trade organizations and other stakeholders.

To address the skilled manpower issue associated with sustainable development, the Ministry of Skill development and Entrepreneurship has set up a separate skill council, "Skill Council for Green Jobs", a Sector Skill Council set up for the purpose of developing competencies /skills in the domain of renewable energy, sustainable development, waste management and environmental issues.

A Green job is defined as the one that helps bring about and maintain a transition to environmentally sustainable forms of production and consumption. It cut across all the sectors, be it energy, materials, water conservation, waste management, pollution control etc

Skill council for Green Jobs is working towards introducing environmental friendly and sustainability in existing job roles as well. This translates into a huge opportunity for additional job creation and impetus for Skilling & Entrepreneurs Development. Currently, Green Business sector generates about 20 lakh Jobs, excluding "Waste Management" which is largely unorganized, with large deployment of human resource. It is estimated that about 2 crore additional jobs, apart from "Waste Management" will be created by 2030 due to strategic shift of India towards sustainable development and climate justice.



Dr. Praveen Saxena
CEO, Skill Council for Green Jobs

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1. INTRODUCTION

The Skill Council for Green Jobs is the Sector Skill Council set up as part of Skill India Mission for the purpose of developing competencies /skills in the domain of renewable energy, sustainable development and waste management. It is responsible for quality assurance through accreditation of the skills acquired by trainees, curriculum development for the skills training, qualification framework and setting of standards and benchmarks, recruitment and placement of trained and skilled workforce, as well as a data collection, management and provider to the industry.

It is a national level organization with a government-industry interface and partnership with stakeholders from industry, labor as well as the academia. Its activities are linked to Skill India Mission, National Solar Mission, Swachh Bharat Mission and Make in India initiative of Government of India. SCGJ is closely interacting with Ministry of New and Renewable Energy, Ministry of Environment, Forest & Climate Change, Ministry of Urban Development, Ministry of Drinking Water and Sanitation.

The focus of SCGJ has been to establish a strong industry connect in all its areas of work, talk to large industry to understand the manpower requirement and establish long term contacts to improve employability of trained and skilled manpower. It has already established strategic alliances with about 400 Industries, organizations and State skill missions. Skill council for Green Jobs has affiliated over 450 training institutions, PAN India, to deliver training in the renewable energy domain. These institutions have imparted training to over 44,451 candidates and developed 44 National Standards (QPs).

Renewable Energy and Sustainable Development are the most upcoming fields for meeting future energy requirements and mitigation of climate change. The Skill Council for Green Jobs, established in 2015-16, has been constituted to address manpower requirements in these areas as this would require suitable modification in the existing industrial activities and open new avenues for power generation through new and renewable energy sources. Skill Council for Green Jobs (SCGJ) is a Not-for-Profit Organization created under the aegis of NSDC and Ministry of Skill Development & Entrepreneurship. The creation of the SCGJ was approved in the 10th meeting of National Skills Qualifications Committee held on 28th September 2015. The SCGJ has been formally registered under the Societies Registration Act XXI, 1860 on 1st October 2015.

SCGJ is acting as a bridge between the Government of India, State Governments and industry for developing strategy & implementing programmes for Skills Development, correlated to Industry needs but also aligned to best International practices.

The Skill council for Green Jobs is linked to National Solar Energy Mission, Swachh Bharat Mission, Green India Mission, Smart City and Skill India Mission and potentially impacts every urban/ rural household in India, serviced by wide spectrum of Industry (largely MSME's) as well as rural entrepreneurs and "start up's". It is mandated to cater to the skilled manpower and entrepreneurs requires for the National target of adding 175 GW from renewable energy. This activity of SCGJ will directly contribute to India's Intended National Determined Contribution (INDC) to achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030.



1. INTRODUCTION

1.1 Sectors under Skill Council for Green Jobs

All jobs which are contributing towards sustainable development and for mitigation of climate change are categories as Green Jobs. Accordingly, the Skill Council for Green Jobs has been mandated to address following sectors:



Our Mission Is...

“...To identify skilling needs of service users as well as manufacturers/ service providers, within Green Businesses sector, and implement nation-wide, Industry led, collaborative skills development & entrepreneur development initiatives that will enable us to meet India’s potential for ‘Green Businesses’.”



1. INTRODUCTION

1.2 Formation of SCGJ

In tune with its mission to further skill related and entrepreneurship initiatives, the Skill Council for Green Jobs (SCGJ) was launched by the Ministry of Skill Development and Entrepreneurship (MSDE) on 28th May, 2015. The Sector Skill Council was incorporated on 1st October, 2015 following approval of by the National Skills Qualification Committee on 28th September, 2015. Promoted by the Ministry of New and Renewable Energy and Confederation of Indian Industry, SCGJ is conceived as a not-for-profit, autonomous organization to supplement the skill ecosystem as a Sector Skill Council affiliate of the National Skill Development Corporation.

The activities of SCGJ started from mid-October 2015. It has been closely interacting with Ministry of New and Renewable Energy, Ministry of Environment, Forest & Climate Change, Ministry of Urban Development, Ministry of Drinking Water and Sanitation.

The focus of SCGJ has been to establish a strong industry connect in all its areas of work, talk to large industry to understand the manpower requirement and establish long term contacts to improve employability of trained and skilled manpower.





2.0 Activities of SCGJ during 2017-18

The sectors which are covered under the entire gamut of “Green Businesses”, are Renewable Energy (including Solar, Wind, Small-hydro, Biomass / Biogas and Clean Cook Stoves), Green Construction, Green Transport, Carbon Sinks – Including Afforestation and Sustainable Forestry Management, Solid Waste Management, Water Management & e-Waste Management.

The scope of Green Jobs cuts horizontally across other industrial sectors. These include adoption of green technology or environment friendly practices for existing industrial processes. This can be characterized either by an environment friendly finished product of that business, or the use of environment friendly processes to develop and deliver the final product or service.

The activities of the Skill Council have been broadly categorized under following heads:



SCGJ has identified the skill gaps in the Solar PV, Solar Thermal, Wind, Small Hydro , Sectors sector in manufacturing, business development and installation & maintenance. The purpose is to identify manpower requirement for the industry and the type of skill and training they require.



2.1 Major Activities of SCGJ

1. National Institute of Solar Energy: Training Modules for NE Region: SCGJ secured a project from the National Institute of Solar Energy (NISE) to develop Modules for four Training Programs to be conducted in the North Eastern Region. The target audience were farmers, women from rural locations, village level renewable energy service company, panchayat and village heads, officers from state nodal agencies, officials from state and central agriculture departments, the unemployed youth and entrepreneurs. The modules were developed by SCGJ and submitted to NISE for delivery of training programs.

2. Induction Program for IREDA Officials: An Induction Program for Officers of Indian Renewable Energy Development Agency was organized by SCGJ from 20th – 26th May, 2017 at India Habitat Centre, New Delhi. The program was coordinated by Skill Council for Green Jobs in close association with IREDA. This was a special assignment given by IREDA to SCGJ in view of its vast experience in Training leading to Certification.

Second time, a one month long Induction Program for Officers of Indian Renewable Energy Development Agency was organized by SCGJ from 19th June – 13th July, 2018 at IREDA office, New Delhi.

The content of the Induction Program included latest technical developments in the field of Renewable Energy and analysis of proposals from the point of view of financial institutions. The program also included a brief about overall functioning of Govt. of India and Public Sector Undertakings. About eight sessions in the Induction Program was devoted to development of Managerial and Soft Skills. The one month program provided an opportunity to the participants to interact with senior officials of IREDA and various corporate experts.

3. Up-skilling SafaiKaramcharis under RPL programme supported by NSKFDC: National Safai Karamcharis Finance & Development Corporation (NSKFDC) is a wholly owned Govt. of India undertaking under the Ministry of Social Justice & Empowerment (M/o SJ&E). NSKFDC is an Apex Corporation for the all-round socio- economic upliftment of the Safai Karamcharis, Scavengers and their dependents throughout India.

SCGJ has developed a Training Delivery Plan of 35 hrs for upskilling Safai Karamchari under Recognition of Prior Learning (RPL) programme. It covers important topics such as Mechanized Cleaning, Key Provisions of Manual Scavenging Act 2013 and Mechanized and Safe Cleaning of Sewer and Septic Tanks, Personal Health and Safety etc. A pictorial participant handbook on the safe sanitation cleaning processes has also been prepared.

Keeping in view the relevance of this, NSKFDC had sanctioned RPL programme to SCGJ for 5000 candidates during 2017-18. The project has been completed. During the year 2018-19, NSKFDC has further sanctioned RPL trainings of 5000 safaikaramcharies and 3000 waste pickers. The implementation of this project has started with the help of TPs of SCGJ.



2.1 Major Activities of SCGJ

4. Simultaneous intervention of renewable energy systems and skilling for smart model villages of Haryana adopted by Hon'ble President of India – Project extended to 45 more villages:

Rashtrapati Bhawan has been taking various initiatives in the field of energy conservation, green energy generation, waste management, water conservation, health and wellness, governance, Skill Development, Food Technology etc. in an attempt to improve the quality of life of the residents. These initiatives have resulted in the President's Estate becoming a Smart Township. In order to replicate this model of Smart Township to rural areas in the vicinity of Delhi, it was decided to extend this initiative to develop Smart Gram Model in five villages namely Daulha, Harchandpur, Alipur, Tajnagar and Rojka Meo selected by Govt. of Haryana. This project has been extended to 45 more villages of the same vicinity.

SCGJ, was given the mandate to study the energy and environment patterns of the villages and implement various concepts of green energy generation, energy conservation, waste management, and related skill development activity. An assessment by SCGJ on usage of types of cooking fuel, energy needs, solid waste management systems and availability of transport revealed use of traditional cook-stoves in spite of availability of LPG, availability of electricity for not more than 12 hours, lack of potable drinking water and use of diesel Autos and Tempos for transport.

SCGJ obtained initial financial assistance from Indian Renewable Energy Development Agency (IREDA) under its CSR mandate, for implementing 3000 nos. of clean cookstove & 2000 nos. of water purifiers in these five villages and supporting 25 nos. of entrepreneurs for adopting E-rickshaws under Smart Gram Initiative. Under this project CSR grant was available to meet 50% of the cost of improved cook-stoves & mechanical water filters and for 10% of the cost of E-Rickshaws with the balance to be funded by banks as loan and beneficiary. This phase of the project has been completed.

Rashtrapati Bhawan further decided to expand the selected initiatives under Smart Gram from 5 to 50 villages in the district of Gurgaon and Mewat. SCGJ prepared sustainable development plan for these 45 villages selected on peripheral fringes of the existing five villages in five clusters in a range of 5 KM which included providing improved cook stoves to every households and mechanical water filter, 10 Urja Shops(2 in each cluster), setting up of 10 Material Recovery Facility(MRF) for solid waste management (2 in each cluster) and 225 E-Rickshaw Entrepreneur(5 per village) along with skilling and training of the manpower to employed for managing these activities. The project has been sanctioned and is receiving funding from Rural Electrification Corporation Limited(RECL) under their CSR mandate. The implementation of the project has started.

SCGJ carried out a survey on the feedback and impact assessment in Tajnagar village where 167 cookstoves have been distributed in 515 households. User feedback in terms of reduction in smoke, quantity of fuel used, efficiency and improvement in health of women was obtained. Based on positive feedback of the survey, Delegates from 22 countries attending the Clean Cooking Forum 2017 organized by Global Alliance for Clean Cookstoves, UN Foundation based organization visited Tajnagar for interaction with the user women on 27th October 2017.



2.1 Major Activities of SCGJ

5. World Bank Grid connected Rooftop SPV Technical Assistance Programme.

Skill Council for Green Jobs is the capacity building and skill development partner under The World Bank Grid connected Rooftop Solar PV Technical Assistance Program. Under the guidance of MNRE, the World Bank is supporting the GoI's program to generate electricity from the widespread installation of GRPV by lending \$625 million to State Bank of India. In addition to lending, Ministry of New & Renewable Energy (MNRE) and the World Bank SBI have appointed Ernst & Young Consortium as the Project Management Consultant (PMC) for managing the administration of this five-year TA program. EY Consortium comprises of EY, SCGJ, IDAM Infrastructure, Emergent Ventures India, GSES and Edelman. This is expected to mobilize finance for solar rooftop projects and facilitate the Government of India in achieving its target of 40 Gigawatts (GW) of solar rooftop by 2022, as a part of its wider goal of 100 GW under the Jawaharlal Nehru National Solar Mission.

6. Skilling and Training in the Bio-energy Sector GOBARdhan Scheme.

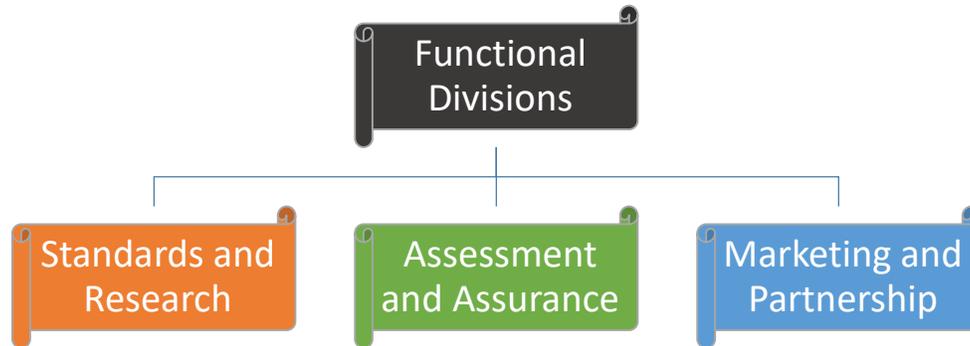
Ministry of Drinking Water and Sanitation (MDWS) had announced implementation of GOBARdhan scheme for galvanizing organic bio-resources especially animal waste for its gainful utilization so as to generate employment and additional income for farmers. The scheme envisages setting up of biogas plants and skilling and training of local youth as Biomitras for collection and aggregation of this waste. To cater to skilled man power requirement for implementation of GOBARdhan scheme, SCGJ has developed 4 Qualification Packs(QPs) for various job roles related to collection, aggregation and utilization of farm waste like animal dung and agro residue as per NSQ alignment.

In order to orient the Self Employed/ Turnkey Workers actively involved in installation of biogas plants, SCGJ organized an Orientation programme on 24th April, 2018 at Biogas Development Training Centre (BDTC), Department of Renewable Energy, Punjab Agricultural University. This was followed by a two-day RPL training for the 10 trainees on 25th and 26th April 2018.

National Workshop on Skilling under GOBARdhan : Skill Council for Green Jobs (SCGJ) supported the National Workshop on Skilling under GOBARdhan organized by Ministry of Drinking Water and Sanitation (MDWS) and National Skill Development Corporation (NSDC) on 30th July 2018 on the need of trained manpower and local entrepreneurship development for various components of GOBARdhan scheme. During the workshop, 4 Qualification Packs (QPs) developed by SCGJ for various job roles related to collection, aggregation and utilization of farm waste like animal dung and agro residue as per NSQ alignment were discussed



3.0 DIVISION WISE RESPONSIBILITY



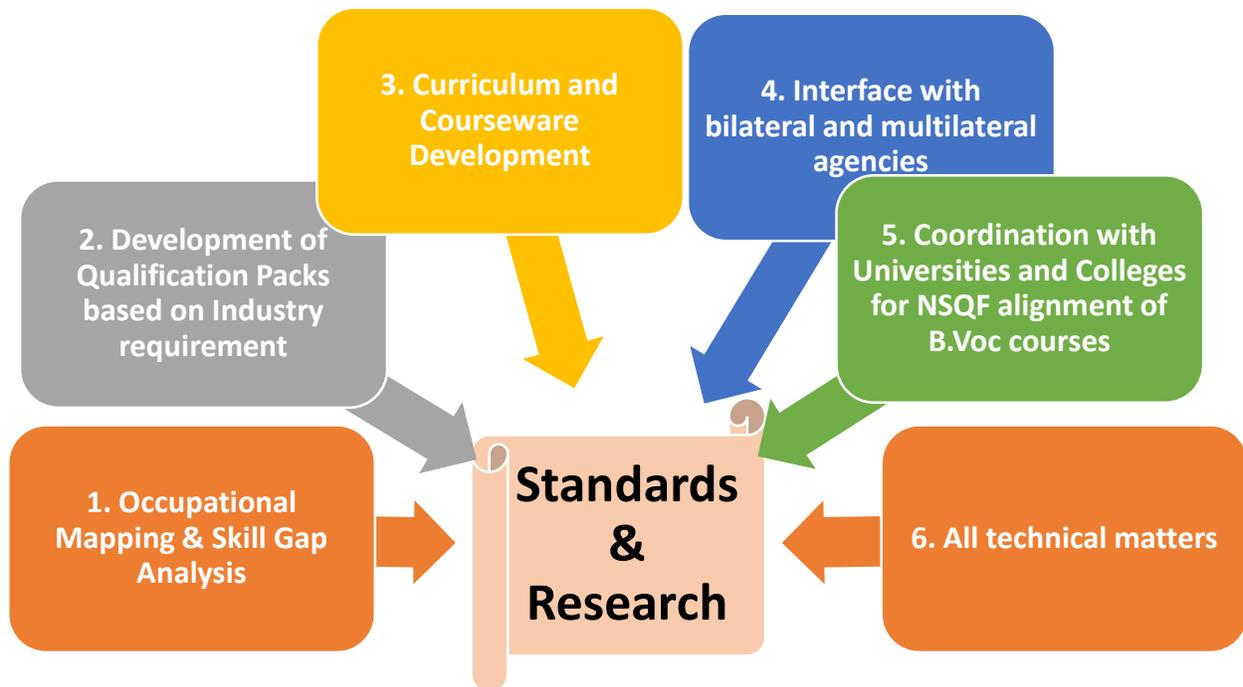
Major functional Responsibilities of the Each Division:

Standards and Research	Assessment and Assurance	Marketing and Partnership
<ul style="list-style-type: none"> • Occupational Mapping and Skill Gap Analysis • Development of Qualification Packs based on Industry requirement • Curriculum and Courseware Development • Interface with bilateral and multilateral agencies • Coordination with Universities and Colleges for NSQF alignment • All technical matters 	<ul style="list-style-type: none"> • Affiliating suitable training partners and assessment agencies • Organization of meetings of Affiliation Sub-committee • Mapping of Training Centres on National Portal with unique identification numbers • Training of Trainers • Planning of Delivery of Trainings by affiliated Training Centres as per annual targets • Assessment through third party • Certification of candidates • Coordination with NSDC and uploading of data on National Portal 	<ul style="list-style-type: none"> • Improving industry linkages in all the sub-sectors • Improving visibility of Skill Council for Green Jobs • Organization of AGM and Governing Council Meetings • All matters relating to Membership of SCGJ, including growth • MoUs with Industry and other Skill Development bodies



3.1 Standards & Research Group

3.1 The Standards and Research is the Technical Wing of Skill Council for Green Jobs the major responsibility and achievements during 2017-18 of Standards and Research group are as follows:



The Standards and Research Group develops 'National Occupational Standards' and 'Qualification Packs' as per the 'National Skills Qualification Framework' (NSQF). Since Qualification Packs are developed based on Job Roles available in the industry, this process involves extensive interface with the Sector specific industry, organizations and experts. The training is delivered in alignment with QP/NOSs developed by SCGJ. The Council has also developed Model Curriculum and Courseware for its Qualification Packs to supplement the training programs.



3.1 Standards & Research Group

3.1.1 Major Achievements during Q1 – Q3 of 2017-18

- Total Qualification Packs developed during 2017-18: 30
- Total QPs developed so far: 40
- Obtaining over 1000 industry validations for these QPs.
- Completion of Qualification Files and related documents for submission to NSDC and NSDA towards NSQC approval of 14 new Qualification Packs.
- Development of ToT Curricula for 6 Solar QPs, 2 Wastewater QPs and 3 Waste Management QPs.
- Development of 22 Model Curricula; 8 Curricula are under development.
- Participated in Advisory Board Committee for curriculum alignment of B.Voc. programme at Stella Maris College, Chennai, Tamil Nadu and St. Berchmans College, Changanacherry, Kerala.
- Meetings with GIZ, RENAC, USAID PACE-D, World Bank, NRDC, CEEW, UKAID, ICF.
- The Head – Standards and Research division, delivered advanced technical sessions to the engineers and managers of ‘Solar Energy Corporation of India’ (SECI) on Solar PV power plant designing; and a specialized session for ‘Evaluating solar and renewable energy proposals’ for the officers of Indian Renewable Energy Development Agency (IREDA).
- Design, Strategy and Implementation of the Solar Skills competition and Jury Member for the Assessment of the Solar Skills competition organized at Renewable Energy India (REI) Expo 2017, Greater Noida.
- Worked with IIT Bombay for rural livelihood project on decentralised solar energy solutions, for skill development, assessment and certification of the beneficiaries under the project.

3.1.2 Other Activities during Q1-Q3 of FY 2017-18

a. Progress in Skill Gap Studies

Occupational Mapping and Skill Gap Analysis work awarded to Ernst and Young has been completed and the report has been published on SCGJ website for Renewable Energy domain (Solar PV, Solar Thermal, Wind Energy and Small Hydro sectors).

Occupational Mapping and Skill Gap Analysis work awarded to KPMG has been completed and the report is in final stages for the following sub-sectors –

- Solid Waste Management
- Water Management
- Green Construction
- Carbon Sinks
- Renewable Energy – Clean Cookstoves



3.1 Standards & Research Group

Solar Photovoltaic

- Ground Mount Solar PV Power Plants
- Rooftop Solar PV Power Plants
- Solar Off Grid Systems
- Solar PV Module Manufacturing

Solar Thermal

- Ground Mount Solar Thermal Power Plants

Wind Power

- On Shore

Clean Cook Stoves

- Improved Cook Stove

Water Management

- Wastewater Treatment

Waste Management

- Solid Waste Management

b. Comprehensive list of Qualification Packs developed so far:

SCGJ has developed 40 Qualification Packs in following sub-sectors

Sl. No.	Qualification Pack Title	QP Code	NSQF level	Number of Industry validations/ endorsements	QRC approval date
1	Solar PV Installer (Suryamitra)	SGJ/Q0101	4	35	23-12-2015
2	Solar PV Installer - Electrical	SGJ/Q0102	4	35	23-12-2015
3	Solar PV Installer - Civil	SGJ/Q0103	4	35	23-12-2015
4	Rooftop Solar Photovoltaic Entrepreneur	SGJ/Q0104	6	32	23-12-2016
5	Solar Proposal Evaluation Specialist	SGJ/Q0105	7	41	23-12-2016
6	Rooftop Solar Grid Engineer	SGJ/Q0106	5	34	23-12-2016
7	Solar PV Business Development Executive	SGJ/Q0107	5	37	17-05-2017
8	Solar PV Site Surveyor	SGJ/Q0108	6	37	17-05-2017
9	Solar PV Structural Design Engineer	SGJ/Q0109	5	37	17-05-2017
10	Solar PV Designer	SGJ/Q0110	7	37	17-05-2017
11	Solar PV Project Helper	SGJ/Q0111	2	34	14-06-2017
12	Solar PV Engineer (Option: Water pumping system)	SGJ/Q0112	5	37	14-06-2017
13	Solar Site In-charge	SGJ/Q0113	6	37	14-06-2017
14	Solar PV Project Manager (E&C)	SGJ/Q0114	7	37	14-06-2017



3.1 Standards & Research Group

15	Solar PV Maintenance Technician - Electrical (Ground Mount)	SGJ/Q0115	4	37	14-06-2017
16	Solar PV Maintenance Technician - Civil (Ground Mount)	SGJ/Q0116	4	37	14-06-2017
17	Solar PV O&M Engineer	SGJ/Q0117	5	38	14-06-2017
18	Solar Off Grid Entrepreneur	SGJ/Q0118	5	36	14-06-2017
19	Solar Lighting Technician (Options: Home lighting system / Street lights)	SGJ/Q0201	4	32	23-08-2017
20	Solar PV Manufacturing Technician	SGJ/Q0119	4	37	17-05-2017
21	Solar Domestic Water Heater Technician	SGJ/Q0601	4	36	17-05-2017
22	Solar Thermal Plant Installation & Maintenance Technician	SGJ/Q0602	4	38	14-06-2017
23	Solar Thermal Engineer -Industrial Process Heat (Option: Consultant)	SGJ/Q0603	5	38	14-06-2017
24	Improved Cookstove Installer	SGJ/Q2101	4	30	06-10-2016
25	Portable Improved Cookstove Assembler	SGJ/Q2102	3	30	25-07-2017
26	Portable Improved Cookstove Sales and Maintenance Executive	SGJ/Q2104	4	30	25-10-2017
27	Portable Improved Cookstove Distributor	SGJ/Q2105	6	30	25-10-2017
28	Recyclable Waste Collector and Segregator	SGJ/Q6101	4	31	06-10-2016
29	Safai Karamchari (Options: Wet Cleaning / Mechanised Cleaning)	SGJ/Q6102	3	36	28-06-2017
30	Waste Picker	SGJ/Q6103	3	30	07-04-2017
31	Wastewater treatment plant technician	SGJ/Q6601	4	35	23-12-2015
32	Wastewater treatment plant Helper	SGJ/Q6602	3	35	23-12-2015
33	Assistant Planning Engineer-Wind Power Plant	SGJ/Q1201	4	30	24-11-2017
34	Site Surveyor Wind Power Plant	SGJ/Q1202	6	31	24-11-2017
35	Construction Technician (Civil)- Wind Power Plant	SGJ/Q1402	4	31	24-11-2017
36	Construction Technician (Mechanical)- Wind Power Plant	SGJ/Q1401	4	31	24-11-2017
37	Construction Technician (Electrical)- Wind Power Plant	SGJ/Q1403	4	31	24-11-2017
38	CMS Engineer- Wind Power Plant	SGJ/Q1501	4	31	24-11-2017
39	O&M Mechanical Technician-Wind Power Plant	SGJ/Q1502	4	31	24-11-2017
40	O&M Electrical & Instrumentation Technician –Wind Power Plant	SGJ/Q1503	4	31	24-11-2017

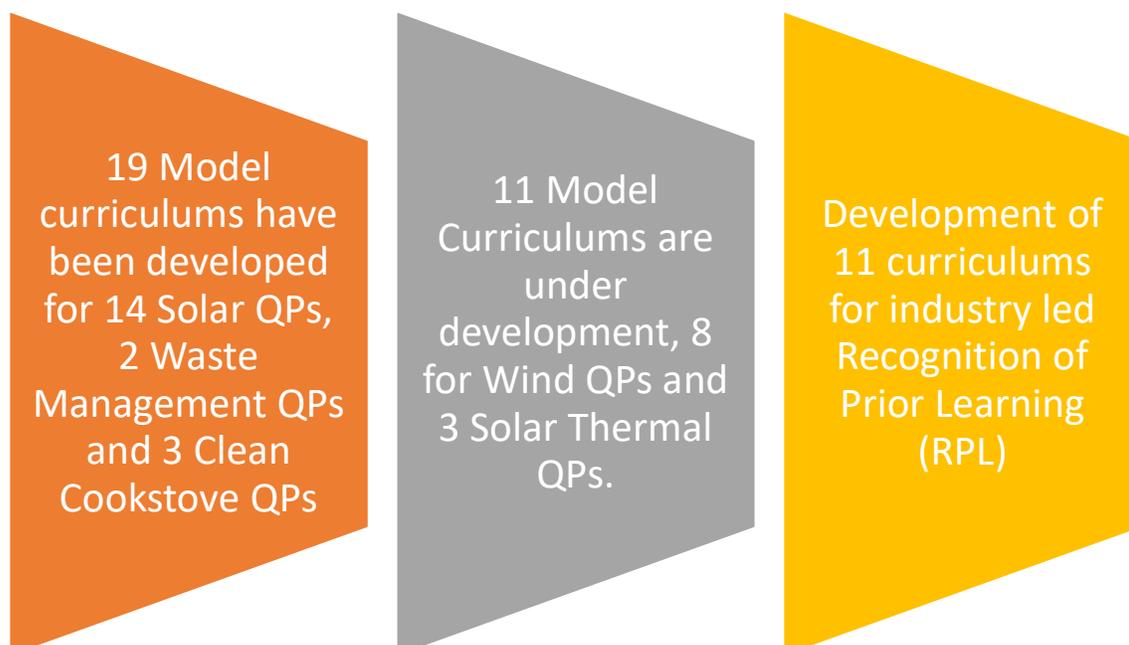


3.1 Standards & Research Group

- i. Sector-wise new qualification packs under development:



c. Model Curriculum and Courseware Development





3.1 Standards & Research Group

c.Iv Participant Handbooks prepared for following 9 QPs:





3.1 Standards & Research Group

v. Participant Handbooks are under development for 4 Solar QPs and 1 Waste Management QP

1. SGJ/Q0104: Rooftop Solar Photovoltaic Entrepreneur
2. SGJ/Q0106: Rooftop Solar Grid Engineer
3. SGJ/Q0201: Solar lighting Technician (Options: Home lighting system / street lights)
4. SGJ/Q0111: Solar PV Project Helper
5. SGJ/Q6101: Recyclable Waste Collector and Segregator

(d) Interface with bilateral and multilateral agencies

- i. Consortium Partner for implementation of the World Bank TA program for Rooftop Solar sector being implemented through SBI.
- ii. Joint development of Participant Handbooks for 3 Solar QPs with USAID PACE-D TA program.
- iii. Joint development of Participant Handbook for 1 Water Management QP with GIZ.
- iv. Interactions with IFC, GIZ, UKAID and ISA for capacity building in solar, wastewater and green construction sector.

(e) Coordination with Universities and Colleges for NSQF alignment of B. Voc. degree programs

- Participation in Advisory Board Committee for curriculum alignment of B.Voc. Programme in Renewable Energy Technology and Management at:
 - Stella Maris College, Chennai, Tamil Nadu,
 - Pt Ravishankar Shukla University
 - St. Berchmans College, Changanacherry, Kerala.



3.1 Standards & Research Group

(f) Skill Competition on Solar Rooftop Installations, September 21, 2017

Skill Council for Green Jobs in association with UBM group had launched “Solar Skills Competition” in Renewable Energy India Expo to be held on 21st September 2017 at India Expo Centre, Greater Noida. The competition focused on workmanship & accuracy, installation procedure, speed & timing for installation and health & safety aspects. The event marked a beginning of competitive and quality learning amongst personnel in this sector; and also exhibit industry's commitment towards “Skill India Mission”. The competition was for installation of 1 kWp Solar PV Rooftop system.

(g) SCGJ organized a dedicated session in Inter solar India

Intersolar India is the country’s largest exhibition and conference for the solar industry. It takes place annually at the Bombay Exhibition Centre (BEC) in Mumbai. The event’s exhibition and conference both focus on the areas of photovoltaics, PV production technologies, energy storage systems and solar thermal technologies. This year it was held on 5th -6th December,2017 in Mumbai.

Skill Council for Green Jobs (SCGJ) had organized a dedicated session on “Upcoming job opportunities in Solar sector” and an “Award ceremony in the solar domain” under the following categories .

- Outstanding contribution in Solar training domain
- Best Solar Training centre
- Best training institution with highest placements
- Training organisation with highest number of trainings imparted

The session on “Upcoming job opportunities in Solar sector” held on 5th December,2017 discussed skilled manpower requirements and industry readiness for adopting strategies to incorporate the importance of continual skill development & upskilling programs at all levels of the organizational hierarchy, for achieving sustainable growth. The discussion was also on policy and regulatory frameworks available and potential opportunities for uptake of skilled manpower by the solar industry.



3.1 Standards & Research Group

Based on the work done and training programs delivered with Skill Council for Green Jobs, following organizations were awarded:

Best Training Institution with highest number of trainings imparted :	<ul style="list-style-type: none"> Institute of Solar Power Technologies & Vocational Training, Hyderabad
Best Training Institution with highest Placements:	<ul style="list-style-type: none"> Aspire Disruptive Skill foundation, Ahmadabad
Outstanding industry contribution in skill development domain:	<ul style="list-style-type: none"> Mahindra Susten Pvt. Ltd
Best Solar Training centre:	<ul style="list-style-type: none"> GERMI, Ahmadabad
Outstanding contribution in solar training domain:	<ul style="list-style-type: none"> kWatt Solutions Private Limited (IIT Bombay)

(h) Other Technical Matters

i . Training of Master Trainers has been one of the major activities undertaken by SCGJ during the year. SCGJ is perhaps the only skill council organizing in-house training of master trainers. The entire ToMT program was planned and delivered by the Standards and Research team.

ii. Knowledge partners of 'Intersolar 2017', Mumbai for the special session on 'Upcoming Job Opportunities in Solar domain'.

iii. Knowledge partners of Windergy 2017 India, organized by Global Wind Energy Council and Indian Wind Turbine Manufacturers Association for a special session on "Skill gaps and job opportunities in the Wind energy sector".

iv. SCGJ has regularly participated in the training programs organized by the NISE, MNRE; GERMI, USAID and CBIP Centre of Excellence.

v. Standards team is active in dialogues with industry to understand their requirement and showcase the benefits of hiring skilled manpower.



3.2 Assessments & Assurance

3.2.1 The Assessment and Assurance Group operationalizes the national occupational standards and maintain the quality of the training programs. The major activities of this division is as follows :



3.2.2 Major Achievements during 2017-18

- Affiliated a cumulative no of 159 Training Partners with 306 Training Centers across India .
- Trained 473 Trainers across 8 Qualification packs in 4 different Subsector
- Conducted a 26 Training of Trainers across India
- Certified 12320 Candidates
- Conducted 3 Training of Assessors
- Trained 147 assessors across all the qualification packs
- RPL



3.2 Assessments & Assurance

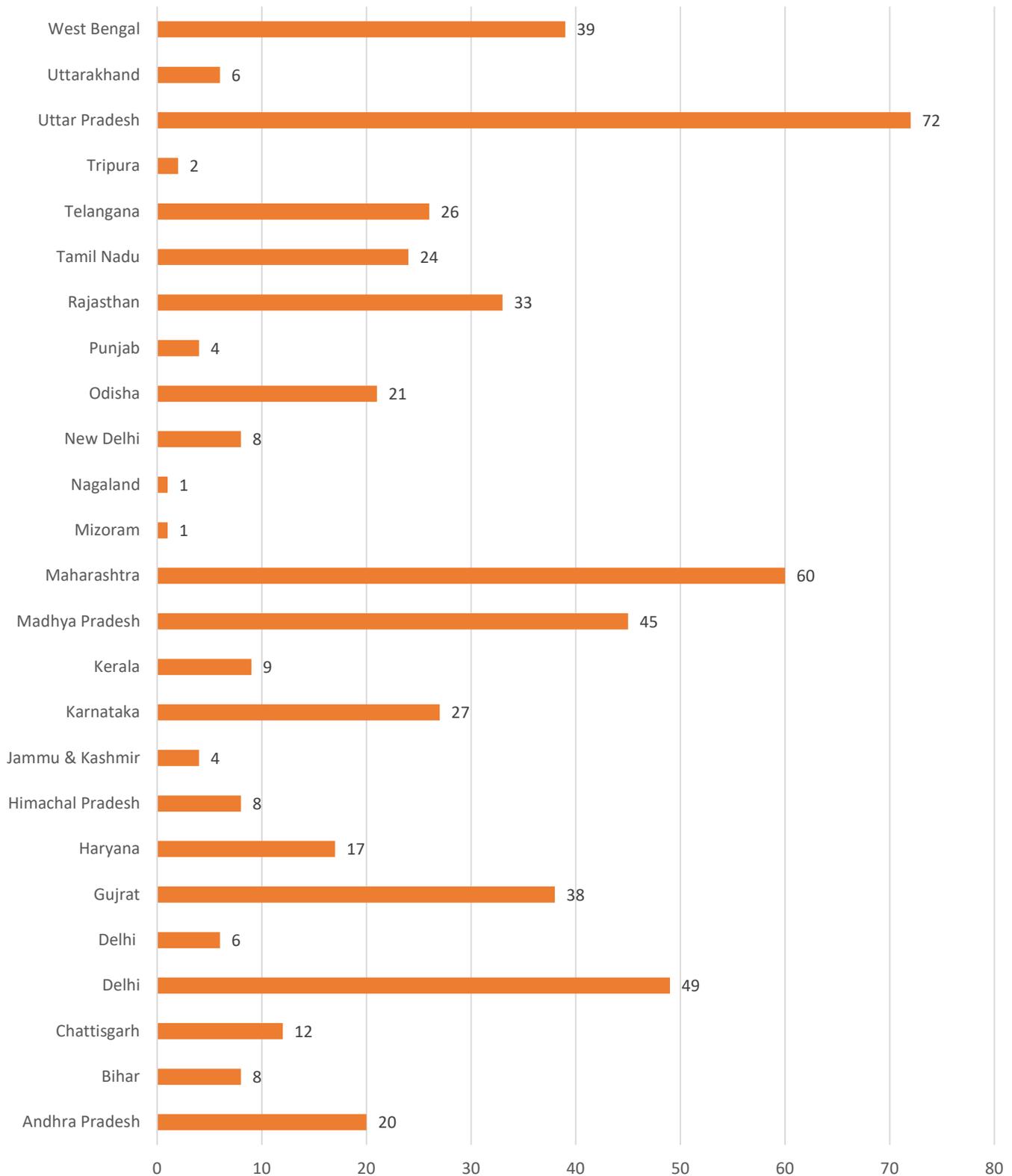
3.2.3 Training Partners of SCGJ

Skill Council has Pan India presence with its network of Training Partners and their Training Center: Total Number of affiliated Training center of SCGJ is 540 as on 31th April, 2018.



Training Centers of Skill Council for Green Jobs

Training Centers of Skill Council for Green Jobs



Skill Council for Green Jobs has a Total of 540 Training Centers across 25 states.



3.2 Assessments & Assurance Group

3.2.4 Assessment Agencies of SCGJ

S.no	State	Assessment Agency Name	Address
1	Delhi	Skill Training Assessment Management Partners Ltd.	D-114, Okhla Phase-1, Okhla Industrial Area, New Delhi - 110020
2	Delhi	Virtual Education Trust	2nd Floor, DDA Commercial Complex, RU Block, Outer Ring Road, Pitampura, New Delhi-110034
3	Delhi	Federation of Indian Women Entrepreneurs	A-163, 1st Floor, H.K House, Lado Sarai, New Delhi - 110030
4	Madhya Pradesh	Balmaan Educational Services Pvt. Ltd.	17 MLA Quarters Jawahar Chowk Bhopal-462003
5	Haryana	Trendsetters Skill Assessors Pvt. Ltd.	Unit 340, Tower B3, Spaze I Tech Park, Sohna Road, Gurugram-122018
6	Delhi	Ace Assessments Pvt. Ltd.	488, Sunview Apartments, Sector-11, Pocket-4, Dwarka, New Delhi-110075
7	Karnataka	Navriti technologies Pvt. Ltd.	#10, 5th Cross, 16th Main, KSRTC Layout, J P Nagar II Phase Bangalore - 78, 10, 5th Cross Rd, 2nd Phase, JP Nagar, Bengaluru-560078
8	Tamil Nadu	SAMHIT ASSESSMENTS & RESEARCH FOUNDATION	67, AF BLOCK, 2ND STREET, 11TH MAIN ROAD, ANNA NAGAR, CHENNAI - 600040
9	Haryana	Mettl	Plot No. 85, Sector – 44, Opp. HSBC Bank, Gurgaon– 122003
10	Delhi	Prima Competencies Private Limited	209, Second Floor, 29, Link Road, Lajpat Nagar III, New Delhi – 110 024
11	Delhi	India Skills Pvt. Ltd.	The Empire Apartments Suite No-503 A, 4th floor 98 MG road Sultanpur New Delhi 110030
12	Delhi	Manipal City & Guilds Pvt. Ltd.	No. 256, Okhla Industrial Estate, Phase-3, Modi Mill Compound, Opposite Post Office, New Delhi-110020
13	West Bengal	M S Certification Services Pvt. Ltd.	3/23 R K Chatterjee Road, Kolkata-7000442
14	Haryana	Confederation of Indian Industry (CII)	Plot No 249F, Sector 18, Udyog Vihar, Phase IV, Gurugram-122015
15	Chhattisgarh	Robust Computers Pvt. Ltd.	3rd Floor, Ashirwad Towers, Beside Raj Theatre, G.E. Road, Raipur-492001
16	Karnataka	TUV Rheinland (India) Pvt. Ltd.	82/A, West Wing 3rd Main Road, Electronic City Phase 1, Bangalore-560100
17	Madhya Pradesh	Indore Skill Assessment Services (ISAS) Pvt. Ltd.	32 Parasram Marg Gandhi Nagar Indore-452002
18	Tamil Nadu	AssessPeople Services (India) Pvt. Ltd.	1A, 5th Floor, Jhaver Plaza, Nungambakkam High Road, Nungambakkam, Chennai-600034
19	Delhi	Virtual SaaS Pvt. Ltd.	C-63/4, Okhla Phase- 2, New Delhi-110020
20	Uttar Pradesh	Udichi	2-30, Wave Silver Tower, Sector-18, Noida-201301
21	Haryana	IRIS Corporate Solutions Pvt. Ltd.	Building No.81, Sector-44, Gurgaon-122003



3.2 Assessments & Assurance Group

3.2.5 Status of Certified Candidates

S.no	Sector	Name of scheme	Numbers (as on 31.03.2018)	Total
1	Solar	PMKVY	9988	23733
		Non-PMKVY	12163	
		Market Mode	1377	
		RPL	205	
2	Waste Water	PMKVY	264	320
		Non-PMKVY	0	
		Market Mode	56	
		RPL	0	
3	Waste Management	PMKVY	0	1721
		Non-PMKVY	1268	
		Market Mode	0	
		RPL	453	
4	Clean Cooking	PMKVY	0	160
		Non-PMKVY	0	
		Market Mode	160	
		RPL	0	
Total				25934



3.2 Assessments & Assurance Group

3.2.6 Training of trainers and training of Assessors Program carried out by SCGJ in the year 2017-18

Quarter 4 of 2017-18

Training of Trainers and Assessors Calendar - Q4 FY 2017-18

Training of Assessors 12th March - 16th March 2018

Training of Trainers 26th March - 30th March 2018

Quarter 3 of 2017 -18

Training of Trainers and Assessors Calendar - Q3 FY 2017-18

Training of Trainer in Solar Sector in Kolkata from 20th Nov 2017

Training of Trainers in Waste Management Sector for the Job Role of SGJ/Q6102: Safai Karamchari from 15th November 2017

ToT on ROOFTOP SOLAR GRID ENGINEER at GOA from 27 Nov 2017

Training program for SGJ/Q0117: SOLAR PV O&M ENGINEER January 2018 at QUEST, Bangalore

Quarter 2 of 2017 -18

Training of Trainers and Assessors Calendar - Q2 FY 2017-18

Training of Trainers program (TOT) on Waste Water Domain (24th July - 2nd August 2017, NERD Campus, Coimbatore).

Training of Trainers Program (TOT) from 9th August 2017 to 18th August 2017 on Solar PV at Tonk Road, Jaipur – 302018

Quarter 1

Training of Trainers and Assessors Calendar - Q1 FY 2017-18

GERMI is also Conducting Training of Trainers from 1st May to 11th May 2017 at Gandhinagar, Gujrat

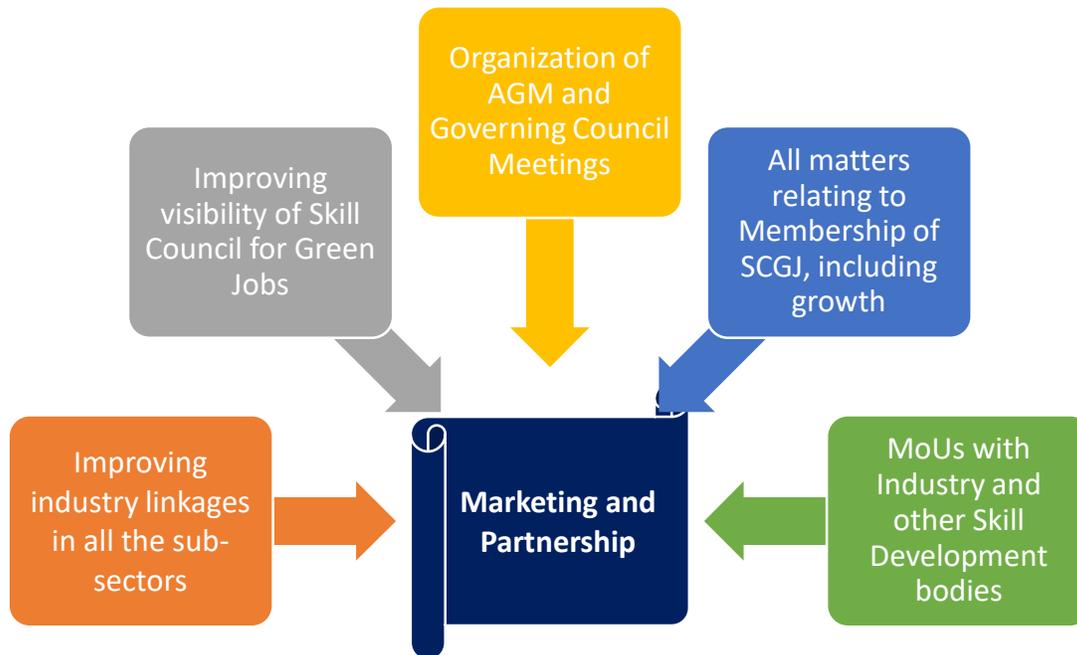
GERMI is also Conducting Training of Trainers from 12th to 22nd June 2017 at Gandhinagar, Gujrat

DETAILS AWAITED



3.3 Marketing & Partnership

3.3.1 The Marketing and Partnership Group has the following major responsibilities:



3.3.2 Major Achievements during 2017-18

- Obtained support letter from over 22 industry / organizations across 8 different states for formation of SCGJ
- Secured Registration of SCGJ as Society
- Obtained PAN and TAN of SCGJ
- Setting up of SCGJ Office at Chanakyapuri, New Delhi
- Opening of 2 Bank Accounts with HDFC Bank
- Organized Pre – Governing Council, First GC and Second GC meetings
- Secured Membership from 11 Industries (contribution of Rs. 39.00 Lakhs)



3.3 Marketing & Partnership

3.3.3 MOU's with the Industry:

Signing of MoUs with industry and skill agencies was also undertaken. SCGJ has so far signed MoUs with 8 industry / organizations with a view to cooperate in its activities and also help in achieving placement of SCGJ certified candidates. SCGJ has Signed MOU with the following Organizations.





3.3 Marketing & Partnership

3.3.2 Industry Members



Sai Engineering Foundation
a voluntary organisation





3.3 Marketing & Partnership





3.3 Marketing & Partnership

3.3.2 Industry Members

S No	Organization Name	Association with SCGJ
1	CVC Biorefineries Pvt Ltd	Governing Council Member
2	ReNew Power Ventures Pvt Ltd	Governing Council Member
3	Vestas Technology R&D Chennai Pvt. Ltd	Governing Council Member
4	Niagra Water Solutions Pvt Ltd	Governing Council Member
5	Jakson Limited	Governing Council Member
6	Suzlon Energy Ltd	Governing Council Member
7	Indian Renewable Energy Development Agency (IREDA)	Governing Council Member
8	National Institute of Wind Energy (NIWE / CWET)	Governing Council Member
9	Growdiesel Ventures Ltd	Governing Council Member
10	AHEC, IIT Roorkee	Governing Council Member
11	E-Parisaraa Pvt Ltd	Governing Council Member
12	IL&FS Energy Company Ltd	Governing Council Member
13	Leap Green Energy Pvt Ltd	Governing Council Member
14	Ramky Enviro Engineers Ltd	Governing Council Member
15	Ruchi Soya Industries Ltd	Governing Council Member
16	Sun Edison	Governing Council Member
17	Triveni Engineering & Industries Ltd	Governing Council Member
18	VA Tech Wabag India Ltd	Governing Council Member
19	Earth Watch Institute , India	Governing Council Member
20	Himalaya Power Producers Association	Governing Council Member
21	Indian Wind Turbine Manufacturers Association Federation of Industries and Commerce of North	Governing Council Member
22	East Region (FINER) Indian Electrical & Electronics Manufacturers' Association (IEEMA)	Governing Council Member
23	Confederation of Indian Industry (CII)	Governing Council Member
24	Vikram Solar	Advisory Board Member
25	E- Hrex Technologies Pvt. Ltd	Advisory Board Member
26	Center for Rural Energy & Water Access	Advisory Board Member
27	Indian Bioenergy Association	Advisory Board Member
28	Energy Devices	Member
29	Greenway Grameen Infra Pvt Ltd	Member
30	Ravi Engineering & Chemical Works, Delhi	Member
31	Desi Power Foundation	Member
32	Ram Electronic & Equipment	Member

S No	Organization Name	Association with SCGJ
34	Puri Oil Mills Ltd	Associate
35	Amrit Non conventional Energy System Ltd	Associate
36	Alien Energy Pvt. Ltd	Associate
37	Pranat Engineers Pvt. Ltd	Associate
38	Gearcon Lubricants	Associate
39	Enprotech Solutions	Associate
40	Biogass Forum India	Associate
41	Urja Bio System Pvt Ltd	Associate
42	Clean India Ventures	Associate
43	International Academy of Sanitation and Public Health	Associate
44	Sharda Vihar Bhopal	Associate
45	Gurgaon First	Associate
46	USAID PACE-D	Associate
47	Teri University	Associate
48	NAHARI Ventures	Associate
49	Kaama Associates	Associate
50	Kirti Solar	Associate
51	Vadodara Enviro Channel Ltd	Associate
52	Internal Society of Chartered Engineers for Renewable Energy Awareness (ISCERE)	Associate
53	Airsolwin Services	Associate
54	ADS Projects & Systems Pvt Ltd	Associate
55	Ultimate Sun Systems Pvt. Ltd , Kam Soalr Energy Consultant	Associate
56	Smalt & Beryl Pvt Ltd	Associate
57	Solkar Solar Indusrty Ltd	Associate
58	Brothers Solar Energy Solutions	Associate
59	Rotodyne Engineers Services Pvt. Ltd	Associate
60	Aspiration Energy Pvt. Ltd	Associate
61	Indian Wind Energy Association	Associate
62	Prakash Solar	Associate
63	Konark Energy Sollutions LLP	Associate
64	RRB energy Limited	Associate
65	Wind World India Ltd	Associate
66	APNA Global Industries Pvt. Ltd	Associate
67	STENIUM Asia Sustainable Development Society	Associate
68	Sunkalp Energy	Associate
69	Indian Wind Turbine Manufacturers Association	Associate
70	GKM Energy Pvt. Ltd	Associate
71	Sudhir Engineering Works	Associate
72	EnvironmentFirst Energy Services (P) Ltd	Associate
73	Abhishek Enterprises	Associate
74	Varad Prayavaran Pvt Ltd	Associate
75	Windsun Renewables Pvt. Ltd	Associate

S No	Organization Name	Association with SCGJ
76	Nature 2 Nature Ecosystem (P) Ltd	Associate
77	EcoFrost Technilogist Private Ltd	Associate
78	Trio-Chem Sucrotech Engg & Projects (P) Ltd	Associate
79	Cogeneration Association of India	Associate
80	kWatt Solutions Pvt. Ltd	Associate
81	Trident Renewable Energy (P) Ltd	Associate
82	Konark Energy Solutions LLP	Associate
83	Sterling and Wilson Pvt. Ltd	Validators
84	Tata Power Solar	Validators
85	Sunshine Technocom Pvt Ltd	Validators
86	Waree Energies Ltd	Validators
87	Sapphire Greentech Pvt. Ltd	Validators
88	Rotomag Motors & Controls Pvt. Ltd	Validators
89	Mytrah Energy (India) limites	Validators
90	Akshay Jyoti Solar Pvt. Ltd	Validators
91	MeetRa enrgy Pvt. Ltd	Validators
92	Offcom Systems Pvt. Ltd	Validators
93	Primotech Energy Solutions Pvt Ltd	Validators
94	Ladhak Renewable Industry Development Agency (LREDA)	Validators
95	Hensel Electric India Pvt. Ltd	Validators
96	Studer Innotec India Pvt. Ltd	Validators
97	m power Green Energy Pvt. Ltd	Validators
98	Gautam Solar Pvt. Ltd	Validators
99	Nexus Energy tech Pvt Ltd	Validators
100	Solar Systems Solution Pvt. Ltd	Validators
101	Greenthought Enviromental Solutions Pvt. Ltd	Validators
102	Vispra Power Controls Pvt Ltd	Validators
103	Gopinath Solar Enrgy Pvt. Ltd	Validators
104	Solkar Solar Industries Limited	Validators
105	Sukam Power Systems Ltd	Validators
106	ASG Infra Projects (P) Ltd	Validators
107	Rimmels Power Solution	Validators
108	Exclusive Marketing	Validators
109	Diesel Engine Sales & Service	Validators
110	Sunvest Energy Pvt. Ltd	Validators
111	AP Energy	Validators
112	SunSource Energy Pvt. Ltd	Validators
113	Orchid Pharma Ltd	Validators
114	Vadodara Emviro Channel Limited	Validators
115	United waters india Pvt. Ltd	Validators
116	Biotic Water Solutions Pvt. Ltd	Validators
117	Adwyn Chemicals Pvt Ltd	Validators
118	Rodic Consultants Pvt. Ltd	Validators
119	The Green Enviroment Co-op. Society Ltd	Validators
120	Akshara Ganga Resources Ltd	Validators



3.3 Marketing & Partnership

3.3.4 Governing Council of Skill Council for Green Jobs

Sr No	Organisation's Name
1	CVC Biorefineries Pvt Ltd
2	ReNew Power Ventures Pvt Ltd
3	Ministry of New Renewable Energy
4	Ministry of Skill Development & Entrepreneurship
5	Ministry of Power
6	National Skill Development Council
7	Confederation of Indian Industry
8	Indian Electrical & Electronics Manufacturers' Association (IEEMA)
9	Himalaya Power Producers Association
10	Indian Renewable Energy Development Agency (IREDA)
11	AHEC, IIT Roorkee
12	E-Parisaraa Pvt Ltd
13	Growdiesel Ventures Ltd
14	IL&FS Energy Company Ltd
15	Jakson Limited
16	Leap Green Energy Pvt Ltd
17	National Institute of Wind Energy (NIWE / CWET)
18	Niagra Water Solutions Pvt Ltd
19	Ramky Enviro Engineers Ltd
20	Ruchi Soya Industries Ltd
21	Sun Edison
22	Suzlon Energy Ltd.
23	Triveni Engineering & Industries Ltd.
24	VA Tech Wabag India Ltd
25	Vestas Technology R&D Chennai Pvt. Ltd.
26	Indian Wind Turbine Manufacturers Association
27	Earth Watch Institute , India
28	Federation of Industries and Commerce of North East Region (FINER)



3.3 Associates and Institutions



Repair Guru / Focal Skill Development Pvt. Ltd.

Focal Skill Development Pvt. Ltd empowers youngsters and entrepreneurs to develop technical skills across varied domains. Repair Guru is an emerging solution provider and entrepreneur development initiative by them.

Their endeavor is to reach out to the youth in rural and semi urban areas and empower them with livelihood opportunities using skill development.

www.focalskill.com

info@focalskill.com



Solar, E-Waste management, Wind, Bio – mass, Biofuels etc.



Mohali



Mohali, Punjab



SCF 284, SwastikVihar, Patiala Road, Zirakpur, Mohali, Punjab - 140603
+91-8054193050



Foresight Edutech Pvt. Ltd.

F-TEC Skill Development (Foresight Edutech Pvt Ltd), an NSDC Training Partner, is a Social Enterprise transforming the skills development, vocational training and corporate training landscape. They have a pan India presence with 100+ training centers operated by F-TEC Skill Development with trained manpower and has trained 4 Lacs+ youth in the country.

www.f-tec.net.in

mailus@f-tec.net.in



Skill Development



India



Delhi - India



404, Avalon Apartments, Manglapuri, MG Road (Opp Metro Pillar 46), New Delhi – 110030.
+91-11-40517335, 41094328



Partnership to Advance Clean Energy – Deployment (PACE-D)

It is the flagship program on clean energy between the U.S. and India to jointly work on a range of issues related to energy security, clean energy and climate change. PACE seeks to accelerate inclusive, low-carbon growth by supporting research and deployment of clean energy technologies and policies. PACE combines the efforts of several government and non-government stakeholders on both the U.S. and Indian sides and includes three key components: Research (PACE-R), Deployment (PACE-D), and Off-Grid Energy Access (PEACE).

www.usaid.gov/india

indiaprogramsupport@usaid.gov



Green Energy



India



Delhi



Mark A. White, Mission Director, USAID/India, American Embassy, Shantipath, Chanakyapuri, New Delhi
+91-11-24198000 +91 -11-24198612



3.3 Associates and Institutions



STENUM Asia - Sustainable Development Society

It was established in the year 2009. They are a not-for-profit organization, working with industries, services companies, housing societies, schools, and city or district administrations to help them improve their sustainability options. They help enterprises in the adoption of appropriate and sustainable technologies, such as energy saving devices and renewable energy options.

www.stenum-asia.org

info@stenum-asia.org, rajat.batra@stenum-asia.org



Renewable energy, Energy Efficiency



Haryana



Gurgaon, Haryana



SFF 101, Palam Triangle, PalamVihar, Gurgaon, Haryana - 122 017

+91 – 124 - 4037518, 9811051918



Internal Society of Chartered Engineers for Renewable Energy (ISCERE)

This body works towards innovation, updating and up gradation of technology for betterment in service and manufacturing industry.

www.iscere.in

info@iscere.in; ipagrahari@gmail.com



Bio-gas, Energy Audit



India



Lucknow, Uttar Pradesh



13/503, Indira Nagar, Near Munshi Puliya, Lucknow, Uttar Pradesh - 226016

+91 – 9999327669



Ladakh Renewable Energy Development Agency (LREDA)

It was first known as the Non-Conventional Energy Cell, established as an act of the Ladakh Autonomous Hill Development Council in 1995. They identify and develop project proposals, design and implement demonstration projects in Ladakh, using wind energy, hydro power and other renewable energy sources.

www.ladakhenergy.org

iredaleh@gmail.com



Renewable, Solar PV, Hydro



Ladakh



Leh, Ladakh



+91 - 19 - 82255733



3.3 Associates and Institutions



Indian Wind Energy Association (InWEA)

Indian Wind Energy Association (InWEA) was set up in 2002 as a not-for-profit organization under the Societies Act. The Mission is to utilize the wind energy resources in the country in an optimal manner and thereby contribute to the country's quest for affordable, clean energy as well as energy security. To promote and spread awareness about the benefits of wind energy and the crucial role it can play in ensuring a sustainable path for the country's economic and social development.

www.inwea.org

manish@inwea.org, inwea01@gmail.com



Wind



Delhi



New Delhi



2nd Floor, All India Federation of the Deaf (AIFD), Building, 12-13, Special Institutional Area, Shaheed Jeet Singh Marg, New Delhi-110 067
+91-11-46523042



Indian Wind Turbine Manufacturers Association

The association was founded by a group of members from the wind industry. IWTMA plays a role in policy making for the Wind Energy Industry both at Central Government (Ministry of New and Renewable Energy) and State Government with all other allied ministries and departments such as Ministry of Power, Ministry of Finance, Ministry of Environment & Forests, Central Electricity Regulatory Commission, Central Electricity Authority, National Load Dispatch Center etc.

www.indianwindpower.com

secretarygeneral@indianwindpower.com, ad.delhi@indianwindpower.com



Wind



Delhi, Tamilnadu



Chennai, Tamil Nadu



KRM Plaza, North Tower, 8th Floor, No. 2, Harington Road, Chetpet, Chennai, Tamil Nadu - 600031
+91 - 44-43016188, 43015773



Cogeneration Association of India

COGEN INDIA provides a platform for bringing together all concerned, in any manner, including co-generators, power utilities, users of electricity, State / Central Government Ministries, departments and other bodies, suppliers of equipment and services, academic and research Institutions.

www.cogenindia.org

cogenindia.pune@gmail.com



Bagasse Cogeneration, Sugar, Textile, Cement, Rubber, Paper



Maharashtra



Pune, Maharashtra



MSFCSF Ltd. (SakharSangh), SakharSankul, First Floor, Agricultural College Campus, Shivajinagar, Pune, Maharashtra - 411 005
+91 - 20 - 25511404 / 25511446



3.3 Associates and Institutions



Bihar Social Entrepreneurship Association (BSEA)

Bihar Social Entrepreneur Association (BSEA) was founded in 2011 by a combine effort of few organizations and enterprises. BSEA is an inside out entrepreneurship journey that recognizes and nurtures young and aspiring entrepreneurs to achieve their potential through outstanding opportunities of learning, inspiration, change-driven leadership, social impact and innovation in Bihar.

www.bseaindia.com

utpaldutttry@gmail.com; amitmgr@gmail.com



Skill Development



Bihar



Patna, Bihar



BSEA, 1st Floor, House no 255, Patliputra Colony, Patna

+91 9386898565, 9798000099



Biogas Forum India

It was formed in 2006 and formally registered on 23rd February, 2010 as a National Technical Society. Biogas Forum aims towards developing a conducive environment which can facilitate biogas programs implementation in an efficient and sustainable manner in the country with the participation of scientist, policy makers, implementing agency, entrepreneur, field workers, beneficiaries, Government agencies etc.

www.biogasforumindia.in

bigfin.india@gmail.com



Promotion of Biogas & Bio-fertilizer Technology



India



New Delhi



Centre for Rural Development and Technology, Indian Institute of Technology Delhi, HauzKhas, New Delhi 110016

+91-11-26596351

+91-11-26596351, 26591121



Gurgaon First

It was created in 2012 by progressive citizens of Gurgaon. Its stakeholders are the residents, the associations, the RWAs, the corporates and NGOs. Through its strategic conferences and business workshops. This civil society movement aims to showcase progress, highlight issues and suggest solutions in an effort to improve both living and working experience in the city of Gurgaon.

www.gurgaonfirst.org

teammurgaonfirst@gmail.com



Improving city's Infrastructure, Sustainable and Smart Solutions



Haryana



Gurgaon, Haryana



D4/29, DLF Phase 1, Gurugram, Haryana - 122002

+91 - 124-4259827



3.3 Associates and Institutions



TRY

TRY was established in 22 April 2004 as a centre of excellence supported by the community and the Ministry of Environment and forest, Government of India. A National and state wise mandate of TRY is to promote environmental awareness nationwide. TRY is affiliated to the different and inherits the rich multi- disciplinary resource base and varied experience of for Development. TRY develops programmes and educational material, and builds capacity in the field of education and communication for sustainable development.

www.tryindia.in

info@tryindia.in

 Education & Training

 Bihar, Chattisgarh

 Patna, Bihar

 255-A Patliputra Colony , Patna, Bihar 800013
+91 - 612-2270685



BPO Convergence

Started off in year 2005, BPO Convergence is a provider of VALUE in Business/Knowledge Process Outsourcing Services with emphasis on cost-effective & quality solutions, Having primary focus on delivering outsourcing benefits to its customers

www.bpoconvergence.com

info@bpoconvergence.com

 Business Process Outsourcing

 India

 Bhubaneshwar, Orissa



VM EduLife Pvt. Ltd

It was established in the year 2013. They are associated with many educational organizations and provide online services. Their main target is to implement online services which will be helping students, faculty and every one to streamline the current services by using novel online facilities. This will ultimately reduce use of papers which are routinely used for various documentation purpose.

www.vmedulife.com

nfo@vmedulife.com

 Educational, Online Service Provider and Skill Development

 Maharashtra

 Pune, Maharashtra

 C-2, 602, Ganga Oceana Meadows, Near Aditya Birla Hospital, Thergaon Link Road, Chinchwad, Pune, Maharashtra - 411033
+91 - 7350352872, 8390701133



3.3 Associates and Institutions

ACT

Action in Community and Training

Action in Community & Training (ACT)

It is a small experiment where they intend to add value to the world with whatever they have today. It provides a platform to connect experts who can help people across the leap forward with their help.

www.act-ngo.org

act_ngo@yahoo.co.uk



Women, children & health development



India



Delhi



J 1 /72, DDA Flats, Kalkaji New Delhi - 110019

+91-93139 84414



Teri School of Advanced Studies

It was established in the year 1988 & was conceived to cater to the need of disseminating the vast reservoir of knowledge created by TERI, a not for profit, independent research institute recognized globally for its contribution to scientific and policy research. Since its inception, the University offers not just world-class education, but also an environment that enables its students to develop fresh perspectives on their subjects of study. This includes regular interactions with researchers, scientists and academicians.

www.teriuniversity.ac.in

registrar@teriuniversity.ac.in



Energy, Environment, and Sustainable Development



New Delhi

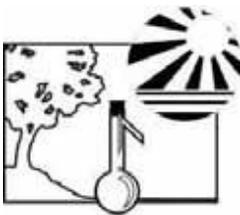


New Delhi



Plot No. 10, Institutional Area, Vasant Kunj, New Delhi, Delhi - 110070

+91- 11- 71800222 +91- 11- 26122874



Appropriate Rural Technology Institute (ARTI)

This Institute was started in the year 1996. The main activities of this NGO are to serve as an instrument of rural development through the application of scientific knowledge and technology. Thus the primary activity is to develop, standardize, commercialize and popularize novel appropriate rural technologies aimed at improving the quality of life and the standard of living of the rural inhabitants of India. Special emphasis is laid on making traditional rural enterprises more profitable and on generating new businesses and employment opportunities in the rural sector.

ARTI has developed more than 15 technologies in the field biomass energy and more than 15 technologies in the field of agriculture. All these technologies accepted by rural population. More than 200 entrepreneurs are engaged in the fabrication and marketing of ARTI technologies.

www.arti-india.org

arti_pune@vsnl.net; articontact@gmail.com



Bio-energy – Improved Cook stoves, Domestic and community size, Biogas Plants based on high calories feeding materials, briquetting from non-fodder, non-de- compostable waste biomass



Maharashtra



Pune, Maharashtra





4. Other activities of SCGJ

In the year 2017-18 Team SCGJ has organized/ participated in 190 events round the country and Abroad the month wise highlights are as follows:



India Habitat Center, New Delhi 19th March 2017

SCGJ organized the Summit “Green jobs for the Future”

Hon’ble Minister for Skill Development and Entrepreneurship Shri Rajiv Pratap Rudy Inaugurated the Summit ‘Green jobs for the Future’



Hotel Ashoka, New Delhi

26th March 2017



Special Session
Chaired by Dr.
Praveen Saxena on
Skill Gap in Wind
Energy Sector at
Windergy India 2017

Indian Wind Turbine Manufacturers Association (IWTMA) today announced that the Indian Wind industry will meet Government's target of 60 GW ahead of 2022 deadline. The domestic wind market is on a growth path in the competitive bidding regime and there is an increased demand for clean energy, which has now become a reliable, affordable and mainstream source of energy. The industry has regained momentum and there is a clear business visibility of 10 - 12 GW even before the start of this financial year with announcement and plan of bids by Ministry of New and Renewable Energy (MNRE). The industry is confident of the Government's continuous support.



Mumbai

10th May 2017



One Mega Event

Dr. Praveen Saxena and Mr. Tanmay Bishnoi Chaired a Session at the One MEGA Event. The event will focused on "Smarter Solutions for a Better Tomorrow." Every aspect of urban life will be covered at the event, including smart governance, uninterrupted clean power and water supplies, smart environment, efficient solid waste management, smart ICT, improved low emission public transport, electric and hybrid vehicles for private use, smart buildings, and so on.



CBIP, New Delhi

15th May 2017



Skill Gap Study for the Green Building Sector

Stake Holder Consultation meeting of the Green Construction Sector at CBIP building in Malcha Marg was organized by Skill Council for Green Jobs. This meeting was attended by top industries working in the sector of Green Buildings.

The SCGJ Team and the KPMG team presented the findings of the Skill Gap report to Industries.



IHC, New Delhi

20th May 2017

IREDA Induction Program 2017

SCGJ Conducted the Induction program of the new employees of IREDA at their office. The induction program was for five days where they were made familiarized with the sector and their role in IREDA.



Bhopal, Madhya Pradesh

30th May 2017



Skill Council for Green Jobs signed a MOU with JS Renewable for supply of 500 Skilled Manpower at Bhopal.

 Jodhpur, Rajasthan

31th May 2017



The CADET'S batch after going through 3 months training on Solar PV Installations i.e SURYAMITRA giving Assessments

 Gurugram, Haryana

2nd June 2017



Skill Council of Green Jobs received a grant of Rs. fifty Lakh from RECL for the Prestigious SmartGram Project.

Grugram , Haryana

2nd June 2017

SmartGram Consortium Members

1. President Secretariat, President House

2. NITI Aayog

3. Government of Haryana

4. Institute of Food Technology Management and Entrepreneurship

5. National Skill Development Corporation (NSDC)

6. State Industrial & Infrastructure Development Corporation

7. National Dairy Research Institute (NDRI)

8. Rural Electrification Corporation (REC)

9. National Building Construction Company (NBCC)

10. Dakshin Haryana Bijli Vidut Nigam (DHBVN)

11. School of Planning & Architecture (SPA)

12. Indian Farmer Fertilizer Co-operative Limited. (IFFCO)

13. Common Service Center-Special Purpose Vehicle (CSC-SPV)

14. Indian Renewable Energy Development Agency (IREDA)

15. INA Energy Pvt. Ltd.

16. Skill Council for Green Jobs (SCGJ)

17. Tata Power-Delhi Distribution Limited. (TPDDL)

18. Bharti Foundation

19. Prashak Techno Enterprises

20. RML AgTech (P) Ltd

21. Karma Healthcare

22. Max Life Insurance Company Ltd

23. Jaquar Foundation

24. I- Sprit

25. 3R Management

26. Nishwarth Kadam

27. Expressions India

28. Bhartiya Yuva Shakti Trust (BYST)

29. Saraswathi Institute of Medical Sciences

30. 4you Healthcare Pvt. Ltd.

31. Patanjali Ayurved Ltd

32. Aravali Vikas Sangathan

33. TATA Trusts

34. Oxen Farms Pvt Ltd

35. Shiv Nadar Foundation

36. Khadi Village Industries Commission (KVIC)

37. National Bank for Agriculture and Rural Development (NABARD)

38. Prepmyskills

SCGJ's Office at CBIP, Building, Kolkata

17th June 2017



Training of Assessor Program on Solid Waste Management (safai Karamchari), by S.K Bharadwaj. (Master Trainer- Waste Management)

Art of Living International Ashram, Bangalore.

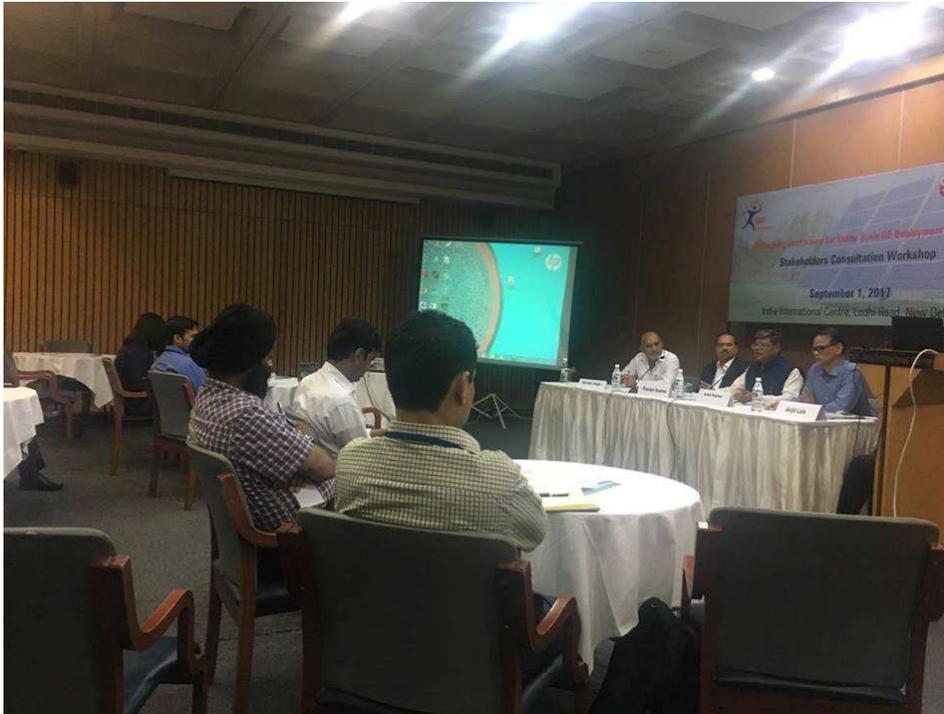
6th Aug 2017



Certification Ceremony of "Solar PV Installer – Electrical" (18 Students) at "Sri Sri Kaushal Vikash Kendra"

India International Center , New Delhi

1st September 2017



Dr. Praveen Saxena , CEO SCGJ addressing the issues of land availability for Grid Connected Utility Scale solar power projects

Ahmedabad

25th Sep 2017



Hon'ble Minister of Skill Development , Shri Dharmendra Pradhan visited Ahmedabad Skill Development Center headed by Mr. Satya , to inaugurate Skill Development Institute - a joint CSR initiative of all Oil PSU's

Kuala Lumpur, Malaysia

23rd September 2017



Dr. Praveen Saxena has made our country proud on numerous occasions as a venerated Diplomat of Govt. of India. But this time it was different.

Dr. P. Saxena received the coveted "International Leadership Award for Enhancing the Image of India Abroad" for his singular vision and leadership in the field of Renewable Energy and Skill Development, fostering sustainable, clean and green development across the world.



Dr. Praveen Saxena, CEO – Skill Council for Green Jobs was honored in Kuala Lumpur today by Govt. of Malaysia at the International Economic Summit 2017



SCGJ | SKILL COUNCIL FOR GREEN JOBS

Renewable Energy India Expo
A UBM Event

with

In Association With

SCGJ SKILL COUNCIL FOR GREEN JOBS

Skill India
शिक्षण-विज्ञान-प्रौद्योगिकी

N S D C
National Skill Development Corporation
Transforming the skill landscape



UBM

Presents



20-22 SEPTEMBER, 2017
India Expo Centre, Greater Noida

Skill Council for Green Jobs organized India's 1st Solar Skills Competition on 21st September 2017 at REI Expo in association with GERMI and UBM at India Expo Mart , Greater Noida

SOLAR SKILLS COMPETITION



Background:

The Indian Solar Industry has witnessed a massive growth in the last 3 years by adding about 10,000 MW Solar PV capacity across the country, and it's no surprise that its offering huge opportunity to the jobs in the sector.

It is expected that about 10 lakh jobs that will be added in Renewable Energy domain by 2022. Skill Council for Green Jobs (SCGJ), under the aegis of NSDC and Ministry of Skill Development & Entrepreneurship, Government of India; has introduced a market-driven system of skilling for technicians, engineers and managers working in the Solar PV industry and has brought out various Qualification Packs / National Occupational Standards for job roles in the solar domain.

Rooftop Solar PV Installer is the most sought-after job role by the industry for achieving the Government of India target of 40 GW Rooftop Solar by 2022. SCGJ is partnering with the Industry and renowned training institutions to roll out sector specific job roles.

About Solar Skills Competition:

Skill Council for Green Jobs in association with GERMI and UBM, launched the "Solar Skills Competition" in Renewable Energy India Expo on 21st September 2017 at 10:30 a.m. onwards at India Expo Centre, Greater Noida. The competition focused on workmanship & accuracy, installation procedure, speed & timing for installation and health & safety aspects. The event marked a beginning of competitive and quality learning amongst personnel in this sector; and also exhibited industry's commitment towards "Skill India Mission" of Government of India.

The competition was for installation of 1 KWp Rooftop Solar PV system.

Nominations Received and Shortlisting of Teams:

SCGJ received more than 80 interests for entries for the solar skill competition. These participants were individually asked to register for the Solar Skill Competition as a team of 3 members. There were participation both from training institutes as well as the solar Industry.

The State wise Break up of the teams which showed interested by registering are as follows:

	Solar Industry	Training Institution	Grand Total
DELHI	5		5
Gujrat	4	1	5
Haryana		3	3
MADHYA PRADESH		1	1
Maharashtra	1		1
RAJASTHAN	1		1
Tamil Nadu	1		1
Telangana	1		1
Uttar Pradesh		4	4
Grand Total	13	9	22

received. Based on the experiences of the organization and their team members the teams were selected.

Final Teams shortlisted for participating in Solar Skills Competition:

- For the category of 'Best Solar Skills Training Institution'

TEAM No.	Training Institute Name	Team Name
A	NISE	Nise Suryamitra
B	Inderprastha Engineering College	Tech Birds
C	Gujarat Institute Of Solar Energy	GISE
D	Dayalbagh Educational Institute	Natural Energies
E	Center For Smart Solar Energy	Solarists

- For the category of 'Best Rooftop Solar Installation organization'

TEAM No.	Organization Name	Team Name
I	Fourth Partner Energy Pvt. Ltd.	Fourth Partner Energy Pvt. Ltd.
II	Solar Energy Workforce	Solar Energy Workforce
III	Suryawanti Technologies	Suryawanti Technologies
IV	Powerxp Consultants Private Limited	Team PXP
V	Mahindra Susten Pvt. Ltd.	Mahindra Susten's Centre Of Excellence

Results



SKILL COUNCIL FOR
GREEN JOBS



WINNERS OF THE
SOLAR SKILLS COMPETITION

BEST SOLAR INSTALLATION ORGANIZATION

BEST SOLAR SKILLS TRAINING INSTITUTION

Winner

Runners-up

Winner

Runners-up



Pictures of the Event



Solar Skills Competition '17



28th Sept 2017

WATER SKILLS COMPETITION

for Operators of Industrial Wastewater Treatment Plants

Date: 28th September, 2017; Time: 1300 to 1600 hrs;

Venue: Activity Learning Center-IFAT India,
Bombay Exhibition Centre, Mumbai, India

IFAT India 2017

India's Leading Trade Fair for Water, Sewage, Refuse & Recycling



The Water Skills 2017 has marked the 2nd edition of our flagship competition – “**Water Skills**”. The competition will focus on quality, efficiency, coordination, and technology application. Participating teams demonstrate their expertise and skill in the areas below:

- ~ Maintenance of submersible pumps, valves and filters
- ~ Correct dosing of chemicals
- ~ Calibration of laboratory equipment

Participating teams should consist of 3 persons and bring their own work uniforms as well as safety gear. Technical equipment will be provided at the venue.

SCGJ, New Delhi

1st October 2017



Skill Council for Green Jobs Signed a Memorandum of Understanding with Natural Resource Defence Council (NRDC)

Dwarka, New Delhi

10th October 2017



Training of trainers for mechanized cleaning for Training Safai Karamcharis



39 Experts from 20 Countries across the world visits Tajnagar, the Village adopted by President of India under SmartGram Project.

Skill Council for Green Jobs (SCGJ) had organized a visit of the delegates of Global Alliance on Clean Cook stoves (GACC) participating in Clean Cooking Forum to Tajnagar, a village under President of India's SmartGram project on 27th October 2017. 39 Delegates from across 15 countries like USA, Germany, Uganda, Israel, Uganda, Netherlands, Kenya, France, Myanmar will be visiting the exhibition of clean cooking interventions introduced in the village by SCGJ and will also be visiting different homes to interact with their users to get a first-hand account of their experiences with Improved Clean Cook stoves. These Clean Cooking technologies includes several models of Improved Cook stoves, Induction Cooker and Biogas plants.

The Skill Council for Green Jobs has introduced five green / sustainable interventions in the villages under SmartGram project. These Interventions are Sustainable Lightings by using solar power, Clean Cooking, Green Transport by introduction of e-rickshaws, Clean water and Solid waste management. This visit of the delegates was to showcase the clean cooking interventions by SCGJ

The GACC is a non-profit organization operating under the support of the United Nations Foundation. Their work focuses on improving health and environment through encouraging changes in cooking methods and types of stoves used in developing countries to pollute less and reduce indoor air pollution. The Alliance was announced in 2010 by then-U.S. Secretary of State Hillary Rodham Clinton.

As on October 2017 date about 500 improved cook stoves and 70 mechanical water filters have been provided which includes 170 improved cook stoves in Tajnagar. In order to supplement the conventional electricity supply, rooftop solar PV of different capacities totalling to 43 KWp are also being set up in different public/Government buildings in Tajnagar. Green Store/ Urja Shops where RE products will be available conveniently are also being set up with initial financial assistance. SCGJ also donated one Home Biogas Plant, which is the first of its kind plant in India with the help of its Industry linkages, this biogas plant was brought from Israel.

New Delhi

6th Nov 2017



SCGJ Exchanged MOU with UNDP on 6th Nov for implementing Women Entrepreneurship and Skill Development programs in many states

Seacom Engineering College, Kolkata

29th Nov 2017



Training of Trainers program for Different job roles of Solar Sector



Skill Council for Green Jobs Forum and award ceremony for training providers at Intersolar India 2017

Skill Council for Green Jobs (SCGJ) had organized a dedicated session on “Upcoming job opportunities in Solar sector” and an “Award ceremony in the solar domain” in the Intersolar 5th -6th December,2017 in Mumbai.

The session on “Upcoming job opportunities in Solar sector” discussed skilled manpower requirements and industry readiness for adopting strategies to incorporate the importance of continual skill development & upskilling programs at all levels of the organizational hierarchy, for achieving sustainable growth. The discussion was also on policy and regulatory frameworks available and potential opportunities for uptake of skilled manpower by the solar industry.

Award Categories and Winners	
Best Training Institution with highest number of trainings imparted	Institute of Solar Power Technologies & Vocational Training, Hyderabad
Best Training Institution with highest Placements	Aspire Disruptive Skill foundation, Ahmadabad
Outstanding industry contribution in skill development domain	Mahindra Susten Pvt. Ltd
Best Solar Training centre	GERMI, Ahmadabad
Outstanding contribution in solar training domain	kWatt Solutions Private Limited (IIT Bombay)

 Across India

12th December 2017

Skill Council for Green jobs Supported the Green Business Challenge 2017, the Road show were organized in Bhubaneshwar, Guwahati & Kolkata



GIZ



Roadshow Invitation

ICCSPL and GIZ invite you to be a part of the ecosystem for promoting entrepreneurship under the

GREEN BUSINESS CHALLENGE 2017

The program will identify and nurture Rural Energy Enterprises (REEs) to promote socio-economic growth in the East & Northeast region of India

You presence will strengthen our cause of building an enterprising India!
Please join us for the Clean Energy ROADSHOW at the below address:

**INDIAN INSTITUTE OF BANK MANAGEMENT, KHANAPARA,
JAWAHAR NAGAR, GUWAHATI**

**12th December 2017
9.30 am onwards**

Partners



Contact Person: Jasmeet Singh | +91 95600 18494

The Green Business Challenge (GBC) is an initiative of Innovative Change Collaborative Services Pvt. Ltd. (ICCSPL) with a common mission to create and enable a platform to find and foster entrepreneurs/enterprises with innovative ideas that address today's 'clean energy' and 'agribusiness' challenges focusing on the Eastern the North Eastern region of India. The GBC 2017 will cover two broad thematic of CLEAN ENERGY and AGRICULTURE .

This event will provide a unique networking opportunity for clean-enterprises/agri, investors, leading clean business/agri professionals from the government, non-government and private sector. In order to further upscale agri-food chains and off-grid, clean energy technologies in India, the right ecosystem needs to be in place. In this context, the challenge will look at ways of upgrading value chains by empowering enterprises and integrating them in strategic partnerships, including impact investments. In addition, as part of the closing event of Green Business Challenge 2017, we will seek to identify and award the most outstanding entrepreneurs/enterprises with the most innovative ideas and entrepreneurial minds

Ghaziabad

15th Dec 2017



Student Handbook of Safai Karamchari in the waste management sector was launched by the Mayor of Ghaziabad, Municipal commissioner of Ghaziabad, Nodal officer - Swatchch Bharat Abhiyan, Head of Assessment and Assurance - SCGJ & Project Manager of NSKFDC.

Coimbatore

23rd Jan 2018



Solar PV domain SCGJ TOT program organised at GCT in association with Mangla Smart Energy Solutions Private Limited at Coimbatore.

Coimbatore

23rd jan 2018



Solar PV domain SCGI TOT program organised at GCT in association with Mangla Smart Energy Solutions Private Limited at Coimbatore.

Dwarka, New Delhi

2nd Feb 2018



Conference on Solar awareness" for 350 Societies RWA , GreenBizIndia(GBI) Organizer & Co-organised Delhi Engineers organisation , media partner Green Business

 National Institute of Solar Energy, Gurugram

17th feb 2018



Dr Praveen Saxena, CEO SCGJ addressing the participants of the 6 months advanced solar professionals course launched by NISE today in collaboration with SCGJ. Other dignitaries at the launch are Mr Upendra Tripathi, Interim Director General, International Solar Alliance; Dr A K Tripathi, DG NISE, Prof H P Garg, Senior Consultant NISE and Dr A K Saxena, AGM, BHEL. The course covers multiple QPs developed by SCGJ and the certification to be provided by SCGJ

 Dwarka, New Delhi

2nd Feb 2018



Launch of RPL program inaugurated by the Hon'ble Member of Parliament, Smt Meenakshi Lekhi. A triparty MOU was signed between SCGJ, NDMC and NSKFDC to conduct trainings for NDMC Safaikaramcharis. Dr. Praveen Saxena, CEO - SCGJ addressed the crowd and educated everyone about the benefits of training and discussed various opportunities that lie ahead in the Waste Management Sector.

SCGJ office, New Delhi

11th march 2018



MOU signed between SCGJ and Seacom Skills University for the Centre of Excellence. All the activities of West Bengal and North East shall be driven from our new Centre of Excellence. Thanks to Dr. Praveen Saxena, CEO - Skill Council for Green Jobs and Mr. Anish, Chairman Seacom Group for this new initiative

Kolkata

17th March 2018



Successfully organized Entrepreneurship development program under USAID PACE-D TA Project at Multiple locations. The Program was supported by NISE, MNRE, USAID and SCGJ . The EDP program in Kolkata was executed by NPTI Durgapur.

Seacom Marine College, Kolkata

17th march 2018



5 days training program was conducted to Train 38 assessors for the different from across the country on four job roles in solar PV Sector



Green Jobs News

January, 2018

CONSULTATIVE WORKSHOP ON NEW NATIONAL POLICY ON BIOFUELS – A REPORT

CHAIRMAN'S MESSAGE

Towards Affordable Disposal Alternatives of biomass: Need for strategic approach

The Kyoto Protocol, which has marked its 20th anniversary in December 2017, remains an “essential vehicle” for developed countries to more rapidly and urgently cut their emissions. The latest UN Environment Programme Emissions Gap Report shows that current pledges will only deliver a third of what is needed to stay in the safety zones of the Paris Agreement. The Global Carbon Project reported that 2017 will see the first increase in CO₂ emissions in three years. The window of opportunity to meet the 2-degree target may close in 20 years or less. And we may have only five years to bend the emissions curve towards 1.5 degrees. We need at least a further 25 per cent cut in emissions by 2020. A consultative workshop on New National Policy on Biofuels & Pradhan Mantri Ji- Van Yojana was organized in New Delhi by Ministry

of Petroleum and Natural Gas for inviting suggestions for drafting a suitable roadmap for Biofuels in India. The workshop was organized as the government is promoting Biofuels with an objective to reduce dependency on import of crude oil, savings in foreign exchange, provide better remuneration for the farmers and address growing environment concerns in the light of India's commitment at COP 21.

During the day long workshop, 5 Working Groups on 1-G Ethanol, 2-G Ethanol, Biodiesel, Municipal Solid Wastes to Fuel & Bio-CNG comprising of all the stakeholders (producers, bankers and buyers) deliberated issues related to their segment in detail and came up with many constructive suggestions and inputs. Minister of Petroleum and natural Gas, Skill Development and Entrepreneurship Shri Dharmendra Pradhan in his speech said that 1-G



This is the first issue of the Newsletter published by Skill Council for Green Jobs (SCGJ). This sector skill council, which is responsible for addressing issues of skilling in the sustainable development domain, has just completed two years. Its creation coincides with the COP-21 held in December, 2015.

India, at COP 21 in Paris, declared a voluntary goal of reducing the emissions intensity of its GDP by 20–25%, over 2005 levels by 2020. India has adopted several ambitious measures for clean and renewable energy, energy efficiency in various sectors of industries, achieving lower emission intensity in the automobile and transport sector, non-fossil based electricity generation and building sector based on energy conservation. Thrust on Renewable Energy, Promotion of Clean Energy, Enhancing Energy Efficiency, Developing Climate resilient Urban Centres and Sustainable green transport network are some of the measures for achieving this goal. This newsletter will capture each of these topics in its coming issues. I convey my best wishes to the effort by SCGJ team.

and 2-G Ethanol, Biodiesel, MSW to Fuel and Bio-CNG together with Methanol(DME) have huge potential in augmenting economic growth, generating employment and doubling farmers' income. He said this will be instrumental in achieving the target of 10% import reduction by 2022. During the workshop many constructive suggestions related to feedstock management, technology, capacity augmentation, fiscal incentives and Supply chain management were received

Agricultural residues are classified in to two main categories: Crop Residues and Process Residues. The total amount of agri-residue generated from a particular crop can be estimated from of crop production, residue to crop ratio and dry matter fraction in the crop biomass. For most of the crops the dry matter fraction factor ranges to 0.88. A part of agricultural residues generated in the country are consumed in traditional uses such as construction material for rural housing, domestic fuel for cooking etc. The surplus that is generated is burned by farmers in open fields in the absence of affordable disposal alternatives.

Several studies such as UNEP-DTU were done to project the quantity of crops that are likely to be produced in India by 2020 & 2030. As per these studies the total residue generated in 2010 was 540 million tons which is expected to reach 629 million tons in 2020 and 703 million tons in 2030. The total surplus generated was 176 million tons in 2010 and is expected to be 205 million tons in 2020 and 229 million tons in 2030. The agri-residues utilized by farmers was 364 million tons in 2010 and 424 million tons in 2020 and 473 million tons in 2030.

Surplus Agriculture residues are best processed to Bio-Energy products (with Compost being Co-Product in case of Biomethane & 2G Ethanol Plants). Pure composting would not be techno-economically viable in view of the substantial amount of Manure that is generated as Farm Waste. Recoverable cattle manure would be 572.11 million tons in 2020 and 1176.97 million tons in 2030.

It is estimated that that total paddy straw being annually burnt on the fields (September end to mid-November) in Punjab, Haryana, Uttar Pradesh & Bihar, is about 40 million tons, representing about 30 million dry tons. About 75% of this emanates from Punjab & Haryana, leading to heavy smog in North India due to high particulate emissions, which are carried by the North Westerly winds. At the same time, in the absence of remunerative utilization of paddy straw, it is not possible to prevent farmers from adopting stubble burning, as they incur costs for mechanized removal or mulching.

The technology options for paddy straw utilization can be making of Bales, Pellets, and Bio-methanation. Paddy straw bales can be fired on Biomass Boilers. While, this can be part of the strategic approach, utilization of 30 million dry tons of paddy straw to produce electricity in "stand alone Biomass Power Plants" has techno-economic limitations. The other option is Palletisation. Pellets find market as Cooking fuel, as replacement of LPG. However, Pellets would not be an economical option for co-firing with Coal in Utility range Boilers, unless the Buyer is willing to pay a significant premium over Coal cost.

Anaerobic digestion of finely shredded agriculture residues, would

give biomethane. Employing advanced Pre-Treatment technologies, Biomethane yield could increase. Compost would be a Co-Product. In rural Districts, Biomethane, as Piped Gas or as Bio-CNG, can be market competitive with Petrol/ LPG. Biogas & Biomethane technologies are commercialized and field proven. Hence, they can be adopted for large scale replication. In rural Districts, having multiple Biomethane Plants. Biomethane could also displace 80% diesel in D.G.Sets. Pre-Treatment of lingo-cellulosic biomass & subsequent enzymatic hydrolysis as well as Supercritical Hydrolysis have progressed from Lab scale to Demonstration projects to some Commercial scale projects. With some technologies, the Biorefinery effluent has potential to yield Biomethane. The 2G Ethanol technologies are progressing towards commercialization.

Adopting strategic approach of intensive deployment of Biomethane Plants and 2G Ethanol Plants and can not only mitigate the issue of "stubble burning" but also facilitate enhancing access to clean gaseous fuels and meeting of blending targets. With the recent technological solutions at hand, a planned move is required to resolve the issue of burning of agriculture surplus and can give affordable disposal alternatives.



Dr. P.Saxena, CEO,SCGJ

DEVELOPMENT OF SWACH, SWASTH AND SASAKAT VILLAGE UNDER SMART GRAM INITIATIVE

India, today needs to pursue the path of sustainable development through a low carbon economy so as to eradicate poverty and achieve sustainable lifestyles. Hence there is a need to promote enterprises with a reduced environmental impact that generate meaningful employment and the regeneration of natural resources. Environmentally sustainable decent jobs need to be developed in a climate challenged world to facilitate a 'just transition' that reflects the environmental, economic and social pillars of sustainable development. Skill Council for Green Jobs, has been set up to provide skilling and training in Green Jobs sector for promoting

sustainable development and responding to the global challenges of environmental protection, economic development and social inclusion. These efforts will create decent employment opportunities, enhance resource efficiency and build low-carbon sustainable societies.

Rashtrapati Bhawan invited Skill Council for Green Jobs(SCGJ) to study the energy and environment patterns of the villages and implement various concepts of green energy generation, energy conservation, waste management, and related skill development activity. Based on the study, interaction and awareness carried out by SCGJ for promoting Renewable Energy (RE) interventions for providing clean fuels and water, green transport and sustainable environment, a CSR project funded by IREDA was implemented in five villages namely Daulha, Alipur, Harchandpur, Tajnagar and Rojka Meo in the State of Haryana.

The interventions by SCGJ in these 5 villages under the project was to provide 3000 nos. of clean cookstove & 2000 nos. of water purifiers for the villages and support 25 nos. of entrepreneurs for adopting e-Rickshaws. The goal was to have at least one improved cookstove in each house which would reduce indoor air pollution and empower women as entrepreneurs while providing mechanical water purifier will lead to reduction in a

water borne diseases. Both these interventions will have long term implications for the health and longevity of the villagers especially women and children. The running of e-Rickshaws will provide sustainable transport and opening up of opportunities for employment for young entrepreneurs and also the smooth connectivity from village to the town and within village itself.



Chairman SCGJ discussing concept of SCGJ intervention with Secretary to Hon'ble President

As a part of this initiative awareness campaign were conducted by SCGJ and vendors through organizing Gram sabha where live demonstrations were made to explain the benefits in terms of minimum smoke better efficiency, handling and safety features. SCGJ had developed a training module for promotion and sale of cookstove through women entrepreneurs. Women interested in promotion and sale were trained on lighting, handling and maintaining of the cookstoves. They were also educated on the benefits and the methods to be adopted for communicating with other women residents on the need to adopt these cookstoves for reducing indoor air pollution and other health related problems with fuel conservation. Selected women were provided with

cookstoves for demonstration and facilitated these selected women with an incentive of Rs. 100 per cookstove to be sold at 50% cost with the balance cost through CSR funding.



In all the five villages the response was immediate and positive with some women depositing the cost with the manufacturer and purchasing the Improved Cookstove. 09 women entrepreneurs who had been involved for distribution of clean Cookstoves/water filters by Hon'ble Chief Minister of Haryana during his visit on 11th Nov. 2016 to the resident of Smart Grams.

In order to reach out to women house to house demonstrations were also carried out for promotion and also to appraise of link between health and time benefits and also caters to large number of cooking norms recipes styles and utensils.



Canopies were set up in the villages by vendors for display and sale of the products. In order to facilitate purchase of the devices by low income groups Improved Cook stoves were made available on installments Awareness workshops and one to one interaction were held for identification of entrepreneurs for e-Rickshaws. Workshops were also held with bank officials to educate them about the e-Rickshaws. Training of the entrepreneurs on handling and maintenance of e-Rickshaws were carried out. Local youths were involved in setting of Service-cum-Sale centres.

SCGJ carried out a survey on the feedback and impact assessment in Tajnagar village where 167 cookstoves have been distributed in 515 households. User feedback in terms of reduction in smoke, quantity of fuel used, efficiency and improvement in health of women was obtained. Based on positive feedback of the survey, Delegates from 22 countries attending the Clean Cooking Forum 2017 organized by Global Alliance for Clean Cookstoves, UN Foundation based organization visited Tajnagar for interaction with the user women on 27th October 2017.

Under the IREDA project, SCGJ has inculcated a strong feeling among residents of these villages for adopting clean and environment friendly technologies that will be self-sustaining and efficient. In addition, skilling and training of enthusiast women as women entrepreneurs for promotion, sale and adoption of Improved Cookstoves, setting up of Urja Shops for local youths for taking up sales of solar home lighting and other Renewable Energy Devices, creation of Entrepreneurs for running e-Rickshaws and setting up of a Solid Waste Management system with Material Recovery Facility would certainly create avenues of employment and also meet the objectives of developing Swach, Swasth and Sasakat Gram Models as a part of the Smart Gram Initiative. This initiative has created a momentum which will flow into the other 45 villages identified by Restrapate Bhawapur cluster, Daulha Cluster, Harchandpur Cluster, Tajnagar Cluster and RojkaMeo Cluster in the project sanctioned by REC under their CSR initiative for implementation.

Project Coordinated by



Dr.(Mrs.) Parveen Dhamija
Advisor, SCGJ
(Biomass & Sustainable Livelihood)

Smart Gram Initiative through Pictures



SCGJ organized a visit of the delegates of Global Alliance on Clean Cook stoves (GACC) participating in Clean Cooking Forum to Tajnagar, a village under President of India's SmartGram project on 27th October 2017. 39 Delegates from across 15 countries like USA, Germany, Uganda, Israel, Uganda, Netherlands, Kenya, France, Myanmar visited.



Upskilling Safai Karamcharis under RPL programme supported by NSKFDC



As part of Skill India Mission, Ministry of Skill Development and Entrepreneurship, Government of India has created sector skill council for green jobs which is working in the domain of capacity building in cutting edge climate friendly technologies. The SCGJ scope covers sectors of Renewable Energy, Solid Waste Management, Water Management, e-Waste Management, Green Construction, Green Transport, Carbon Sinks etc. SCGJ has developed a number of Qualifications Packs as per NSQF including a Job Role of Safai Karamchari which is very relevant for the target group of East Delhi Municipal Corporation (EDMC). The Job Role focuses on skill up-gradation in areas such as personal health and safety, mechanized cleaning, effective cleaning

National Safai Karamcharis Finance & Development Corporation (NSKFDC) is a wholly owned Govt. of India undertaking under the Ministry of Social Justice & Empowerment (M/o SJ&E). NSKFDC is an Apex Corporation for the all-round socio-

economic upliftment of the Safai Karamcharis, Scavengers and their dependents throughout India.

SCGJ in consultation with NSKFDC, has developed a Training Delivery Plan of 35 hrs for upskilling Safai Karamchari under Recognition of Prior Learning (RPL) programme. It covers important topics such as Mechanized Cleaning, Key Provisions of Manual Scavenging Act 2013 and Mechanized and Safe Cleaning of Sewer and Septic Tanks, Personal Health and Safety etc. A pictorial participant handbook on the safe sanitation cleaning processes has also been prepared. Keeping in view the relevance of this, NSKFDC has sanctioned RPL programme to SCGJ for about 2500 candidates.

The Candidates attending the training will undergo a training of 35 hours as per the training delivery Plan attached, which covers important topics such as Mechanized Cleaning, Key Provisions of Manual Scavenging Act 2013 and

Mechanized and Safe Cleaning of Sewer and Septic Tanks, Personal

Health and Safety etc. Each candidate attending the RPL programme will receive a job role kit, a pictorial participant handbook on sanitation cleaning processes aligned with the qualification pack SGJ/Q6102 and free medical check-up. Each participant will have to undergo an assessment on the fifth day and on the successful completion he/she would be awarded by a NSQF (National Skills Qualification Framework) aligned certificate (directly to their respective bank accounts).



Hon'ble Mayor, Managing Director NSKFDC - Mr. Narayan, Municipal Commissioner Ghaziabad MC - Mr. Chandra Prakash, CEO Skill Council for Green Jobs - Dr. Praveen Saxena, on successful completion of 5 day RPL training at GMC. Ghaziabad,

Event coordinated by:



Arpit Sharma
Head Assessments & Assurance

SCGJ participation in Inter solar India

5th-7th December, 2017,
Mumbai.



Intersolar India is the country's largest exhibition and conference for the solar industry. It takes place annually at the Bombay Exhibition Centre (BEC) in Mumbai. The event's exhibition and conference both focus on the areas of photovoltaics, PV production technologies, energy

storage systems and solar thermal technologies. This year it was held on 5th -7th December, 2017 in Mumbai.

Skill Council for Green Jobs (SCGJ) had organized a dedicated session on "Upcoming job opportunities in Solar sector" and an "Award ceremony in the solar domain" under the following categories

- Outstanding contribution in Solar training domain
- Best Solar Training centre
- Best training institution with highest placements
- Training organisation with highest number of trainings imparted

To address the requirement of Talent Acquisition and Manpower Management in achieving the 175 GW Renewable Energy goal, Skill Council for Green Jobs (SCGJ) is placing special focus by reaching out to the industry. The main objective has been to undertake Skill Gap study and Training Need Analysis of RE sectors.

Equipping the workforce with the skills required for the jobs in renewable energy world of today and those of tomorrow is of strategic concern. Extensive stakeholder consultations were done to assess the manpower employment pattern. Subsequently, the skill gap in the sector has been assessed based on the proposed capacity addition plans and stakeholder inputs on the manpower requirements.

Based on national level study of the Solar industry, 20 skilling standards have been identified and course curriculum developed in consultation with industry experts. SCGJ, through

its over 350 affiliated training centres of national, state-level and private Training Institutions, including NISE, TERI, GERMI, IL&FS, TUV Rheinland, etc. has already trained and certified more than 15,000 candidates spread throughout the country in the Solar and Wind domain. A National database has been maintained for these candidates.

The session on "Upcoming job opportunities in Solar sector" held at 3.30 pm on 5th December, 2017 discussed 5th manpower requirements and industry readiness for adopting strategies to incorporate the importance of continual skill development & upskilling programs at all levels of the organizational hierarchy, for achieving sustainable growth. The discussion was also on policy and regulatory frameworks available and potential opportunities for uptake of skilled manpower by the solar industry. Following were the key talking points:

- Occupational Map of the solar industry for career progression in

- Engineering, Procurement & Construction (EPC)
- Operation & Maintenance (O&M)

- Importance of skilling in Utility scale and Rooftop Solar PV sector for better quality projects

- Current job employment and Job opportunities in next 5 years

- Expected Job creation in achieving 100MW of Rooftop Solar PV Plants for a smart / solar city

- Upskilling the skills of the solar industry

- Solar Job census and activities of donor agencies in solar domain

Awards in Solar Sector given by SCGJ

Based on the work done and training programs delivered with Skill Council for Green Jobs, following organizations were awarded:



<i>Best Training Institution with highest number of trainings imparted</i>	<i>Institute of Solar Power Technologies & Vocational Training, Hyderabad</i>
<i>Best Training Institution with highest Placements</i>	<i>Aspire Disruptive Skill foundation, Ahmadabad</i>
<i>Outstanding industry contribution in skill development domain</i>	<i>Mahindra Susten Pvt. Ltd</i>
<i>Best Solar Training centre</i>	<i>GERMI, Ahmadabad</i>
<i>Outstanding contribution in solar training domain</i>	<i>kWatt Solutions Private Limited (IIT Bombay)</i>

Event conceived and coordinated by



*Tanmay Bishnoi, Chartered Engineer
Head - Standards & Research
Head- Curriculum and Content Development*

Thank you so much for the award. This award proved a point that do your work sincerely and time will give you the right reward.

It also improved my confidence in life and Really made me feel that I am alive and kicking. It gave me a reason to fight for life so that I can continue to contribute what ever miniscule I can.

God has been kind to give me a family which has been my pillar of strength and an extended family in the form of SCGJ which has been so supportive.

Thank you from the bottom of my heart for all your support.

Vamsi Krishna
*Institute of Solar Power Technologies & Vocational Training,
Hyderabad*



The Summit 'Green jobs for the Future'

The Summit – “Green Jobs for future” was organized on the occasion of completion of one year of operation of Skill Council for Green Jobs (SCGJ).

In the first year, SCGJ, had focused on understanding short term and long term skill needs of the sector, kind of skill sets required to fulfill the goal of 2030 and create an ecosystem for delivering quality training. Understanding current and future Industry needs of skilled manpower in 14 sectors and sub-sectors has been achieved with in-house research, interacting with industry and with studies carried out by Ernst and Young and KPMG. In order to further strengthen these findings and discuss business trends in Green Jobs and future skilled manpower needs.

Skill Council for Green Jobs in association with Governance Today, had organizing the Summit on “Green Jobs for Future: Towards Skilling India Goals 2030” on 19th of April 2017 at India Habitat Centre,

New Delhi. Hon'ble Minister for State (Independent Charge)

Shree Rajiv Pratap Rudy, Ministry of Skill Development

and Entrepreneurship, Government of India inaugurated the summit and released Special issue of Governance Today on Green Jobs and a booklet on Industry connect of SCGJ. The summit had covered the following four distinct areas of business:

- Renewable Energy
- Waste Management
- Green Transportation
- Green Construction

Detailed studies carried out in the above sectors to understand future skilled manpower needs and associated job and business opportunities were presented. The summit attracted participation of subject matter experts, training partners & assessment bodies allied to Green Jobs. The outcome of the summit was giving direction to skilling opportunities in these sectors.



Seminar on Green Growth and the Future Jobs

30 June 2017 at Chandigarh.

India has declared a voluntary goal of reducing the emissions intensity by 33–35%, over 2005 levels by 2030. Increasing renewable power capacity to 175 GW by 2022 is one of the main targets to reduce emission intensity. The Indian INDC brings a huge responsibility

The Indian INDC brings a huge responsibility on the country and equally big opportunity for green business and poses skilled man power requirement. As per the recent studies of Skill Gap and possible jobs to be created in this sector, it is indicated that about 1.5 million jobs would be created by 2022 in the Renewable Energy sector alone. Against this backdrop, Confederation of Indian Industry (CII) with Green Job Sector Skill Council organized a Seminar on “Green Growth and the Future Jobs” The sessions focused on the ‘Skilling ecosystem for Green: Nature and Number’ and ‘Partnerships for achieving Sustainable Development Goals in Green’.

Events coordinated by



Ms. Sangeeta Patra Head Marketing & Partnerships

Skill Council for Green Jobs signed and exchanged MoU with UNDP for implementing women entrepreneurship and skill development programs in multiple states.



SCGJ - 2nd RPL training of Safaikaramharis complete in Jharkhand.

2nd October, 2017



Skill Council for Green Jobs signed and exchanged MoU with NRDC.

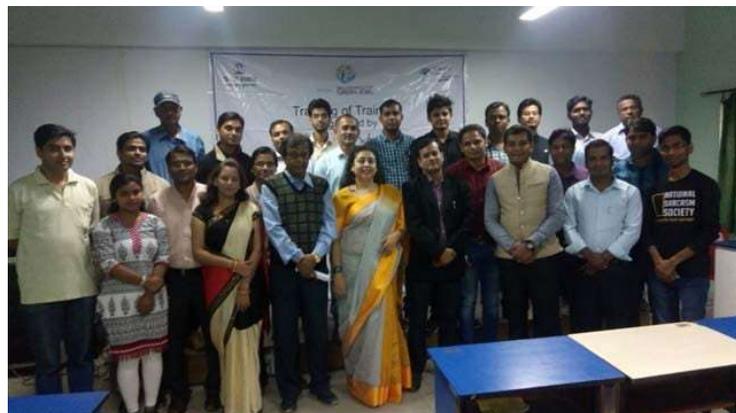
4th October, 2017



MOU signing ceremony with Chairman cum Managing Director, NSFDC (Ministry of Social Justice) for upliftment and social elevation of Schedule Classes. Renewable Energy and Waste Management to play a Vital role to execute such vision



Successful completion of Training of Trainers program in Solar Domain at Kolkata, Mr. Bikram Das from NSDC was present. The event was organised by Mr Arpo Mukherjee. Manager Projects at Kolkata



Participation in World Future Energy Summit



International Participation of SCGJ



Working Group for Standards for Field Testing of IC



Approved QPs

S. No.	Q P ID	Qualification Pack Title	NSQF level
SOLAR PHOTOVOLTAIC			
1	SGJ/Q0101	Solar PV Installer (Suryamitra)	4
2	SGJ/Q0102	Solar PV Installer -Electrical	4
3	SGJ/Q0103	Solar PV Installer - Civil	4
4	SGJ/Q0104	Rooftop Solar Photovoltaic Entrepreneur	6
5	SGJ/Q0105	Solar Proposal Evaluation Specialist	7
6	SGJ/Q0106	Rooftop Solar Grid Engineer	5
7	SGJ/Q0107	Solar PV Business Development Executive	5
8	SGJ/Q0108	Solar PV Site Surveyor	6
9	SGJ/Q0109	Solar PV Structural Design Engineer	5
10	SGJ/Q0110	Solar PV Designer	7
11	SGJ/Q0111	Solar PV Project Helper	2
12	SGJ/Q0112	Solar PV Engineer (Options: Solar Water Pumping system)	5
13	SGJ/Q0113	Solar Site In-charge	6
14	SGJ/Q0114	Solar PV Project Manager (E&C)	7
15	SGJ/Q0115	Solar PV Maintenance Technician - Electrical (Ground Mount)	4
16	SGJ/Q0116	Solar PV Maintenance Technician - Civil (Ground Mount)	4
17	SGJ/Q0117	Solar PV O&M Engineer	5
18	SGJ/Q0118	Solar Off Grid Entrepreneur	5
19	SGJ/Q0119	Solar PV Manufacturing Technician	4
20	SGJ/Q0201	Solar Lighting Technician (Options: Home lighting system / street lights)	4

SOLAR THERMAL			
21	SGJ/Q0601	Solar Domestic Water Heater Technician	4
22	SGJ/Q0602	Solar Thermal Plant Installation & Maintenance Technician	4
23	SGJ/Q0603	Solar Thermal Engineer -Industrial Process Heat	5
WIND			
24	SGJ/Q1101	Assistant Planning Engineer- Wind Power Plant	4
25	SGJ/Q1102	CMS Engineer- E&C and O&M- Wind Power Plant	5
26	SGJ/Q1103	Construction Technician (Mechanical)-Wind Power Plant	4
27	SGJ/Q1104	O&M Mechanical Technician-Wind Power Plant	4
28	SGJ/Q1105	O&M Electrical & Instrumentation Technician –Wind Power Plant	4
29	SGJ/Q1106	Construction Technician (Civil)- Wind Power Plant	4
30	SGJ/Q1107	Construction Technician (Electrical)- Wind Power Plant	4
31	SGJ/Q1110	Site Surveyor Wind Power Plant	6
BIOMASS			
32	SGJ/Q2101	Improved Cookstove Installer	4
33	SGJ/Q2102	Portable Improved Cookstove Assembler	3
34	SGJ/Q2104	Portable_Improved_Cookstove_Sales_and_Maintenance Executive	4
35	SGJ/Q2104	Portable_Improved_Cookstove_Distributor_	6
WASTE MANAGEMENT			
36	SGJ/Q6101	Recyclable Waste Collector and Segregator	4
37	SGJ/Q6102	Safai Karamchari	3
38	SGJ/Q6103	Waste Picker	3
39	SGJ/Q6104	Wastewater_Treatment_Plant_Technician_	4
40	SGJ/Q6105	Wastewater_Treatment_Plant_Helper_	3

Team SCGJ



The Editor of this edition



*Geetika Chauhan
Manager - Projects*

I am extremely happy to tell you that after a memorable experience with Skill Council for Green Jobs, I am now taking the next step towards my professional and personal development.

It is with a deep nostalgia that I announce the end of my tenure with Skill Council for Green Jobs. I will be moving for my studies to Germany in January 2018.

I have decided to pursue my interest in the areas of Renewable Energy and Sustainable Development. Towards this goal, I am delighted to share that I have been selected for the programme 'Masters in Energy and Environmental Management' at the University of Flensburg, Germany.

I must share with you, that my journey with SCGJ is as old as the Sector Skill Council itself. Under the vision and mentorship of Dr. Saxena, CEO- SCGJ, the challenge of setting up a new organization along with our core team was formidable, sometimes daunting, but always exciting! Being a part of the Skill India Mission was a matter of pride and gave me a platform for tremendous development. Since this was my first job after completing undergraduate studies, the learnings through our interactions have benchmarked expectations from future organizations and people.

It has been wonderful to be associated with you!

Green Jobs News

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NATIONAL CONSULTATIVE WORKSHOP ON SOLID AND LIQUED RESOURCE MANAGEMENT 22ND AND 23RD FEBURARY 2018 , NEW DELHI.

GOVERNING COUNCIL MEETING

Environment, Ecology & Economics – Sustainable Forestry & Green Jobs

THE CONTEXT: As per World Bank data, Global Forests occupy 4 billion hectares, which still constitutes about 31% of total land area and close to 1.3 billion of global population reside in Forests and peripheral areas. As per the International Labor Organization, there is a definite linkage between providing jobs that can deliver economic growth for forest dwellers and prevention of environment & forests degradation.

In India, Ministry of Environment, Forest and Climate Change (MoEF&CC) has embarked on an **ambitious** programme to promote green jobs with aim of mitigating environmental damage & climate change. Furthermore, India's NDC, under Paris Agreement, includes increase in Carbon Sinks by 2.5 to 3.0 billion tons equivalent CO₂, by 2030. Hence, it is imperative to adopt a holistic approach towards "Sustainable Forestry Management",

which synergizes Biodiversity & Carbon Sinks with enhanced Livelihoods & Living Standards of Forest Dwellers. Emphasis on "Living Standards" since, historically, the approach has been to focus on livelihoods linked traditional skills, so as avoid any adverse social impact. However, the recent proliferation of smart phones and 4G networks, tribal youth are increasingly conscious of the gap between their living standards and that of urban dwellers. Sense of deprivation creates far more angst & anger than poverty.

Recent studies clearly demonstrate that environment and forestry sector offers great potential for revenue generation by Forest Departments, through Green Businesses, without any compromise on conservation & wildlife protection. In Indian context, managing carbon sinks & biodiversity has potential to create

Sixth Meeting of the Governing Council, SCGJ.

The Sixth Meeting of the Governing Council of Skill Council for Green Jobs was held at 11.30 am 26th February, 2018 under the Chairmanship of Mr. K. Krishan, Chairman, CVC Bio-refineries Private Limited and Chairman, SCGJ at CBIP, New Delhi 110 021.

The Chairman, SCGJ, shared his vision about the activities of SCGJ in the following years. Dr. P. Saxena, CEO, SCGJ informed the GC members about progress during 2017-18 and presented ABP and budget of for the year 2018-19. The GC approved activities and budget for the year 2018-19.



millions of jobs, along with enhancing access to clean energy, water & green affordable housing.

OPEN FORESTS & NTFP MANAGEMENT: As per ISFR (Indian State of Forests) close to 40% of Indian Forest is categorized as "Open Forests", with tree cover of canopy less than 40%. National Mission for Greening India aims to enhance forest/ tree cover in 10 million hectares. While laudable, it's perhaps necessary to adopt a more strategic approach, which also integrates the forest dwellers need for jobs & living standards, which are not grossly inferior to those available to other citizens. There is also need to avoid adverse impact to wildlife & biodiversity, as has happened in some areas, through excessive cultivation of plantation wood species (eg eucalyptus, acacia).

Green Jobs Skills Council (SCGJ) mandate includes the Green Jobs creation that would be generated through Indian NDC of enhancing Carbon Sinks by 2.5 to 3.0 billion tons, equivalent CO₂, by 2030. Through consultation with MoEF&CC as well as domain experts, SCGJ is developing QP's (Qualification Packs), for capacity building in forest dwellers, with focus on NTFP (Non Timber Forest Produce), including Bamboo, and TBO (Tree Based Oilseeds). These encompass the entire "value chain", from Afforestation to NTFP harvesting/ collection & transport to aggregation points. The outcomes would include (i) Carbon Sink enhancement (ii) SDG's achievement progress (iii) Entrepreneurs developed & Jobs created, including Skills upgrading (iv) Adaptation measures implementation as per SAPCC (v) Biodiversity.

GREEN BUSINESSES LINKED TO NTFP: SCGJ focus is on deployment of advanced, yet situationally

relevant, technologies, to optimize resource efficiency as well as local value addition, thereby maximizing the benefits to the forest dwellers. These Green Businesses would be located outside the Forest Areas and managed by local entrepreneurs, either as independent MSME's or in partnership with larger Industrial units. These have been, broadly, grouped by SCGJ as **# NTFP Aggregation & Preliminary processing**: encompassing (i) Biomass Depots for NTFP & Forest waste, with facilities for preliminary processing as required for, downstream, Green Energy & Green Construction Businesses (ii) TBO expeller units, producing refined SVO (Straight Vegetable Oil), De-Oiled Cake and Briquettes (from Pod covers/ trimming waste).

Green Construction Materials: which would include (i) Bamboo Plywood (ii) MDF – Medium Density Fibreboard (iii) Particle Board. These would be manufactured adopting appropriate technologies, so as to be a mainstream alternative to Timber. These would be supplied to, further, downstream units, who would manufacture (a) Door & Window Frames (b) Partitions & Pelmetts (c) Flooring (d) Furniture, with the focus being on Green Affordable Housing.

Green Energy Products: which would include (i) Pellets (ii) Bio-Oil (iii) Producer Gas. These would be based on advanced technologies, but as appropriate for "Decentralized Energy Generation" solutions, so as to be a mainstream alternative to Fossil Fuels. Special focus would be on production of Co-Products, eg Bio-Char and, where feasible, activated carbon. The goal is to make optimal use of the dry matter in NTFP, thereby increasing the value realization for local entrepreneurs engaged in NTFP aggregation & preliminary processing. Furthermore, the Green

Energy Products would address all energy needs of the local community, viz electricity, cooking/ heating fuel & mobility, including hybridization with Solar, where feasible, to improve cost economics. **# Outcomes Monitored & Reported:** would include (i) GHG Mitigation & Adaptation measures implementation as per SAPCC (ii) SDG's achievement progress (iii) Entrepreneurs developed & Jobs created, including Skills upgrading (iv) Investment made & Income generation from Green Businesses

ENHANCING ACCESS TO CLEAN ENERGY & WATER: having a key goal of improving living standards of forest dwellers, SCGJ would develop local entrepreneurs, along with skilled human resource, for a wide range of Cleantech products, which would meet the aspirational needs of the local community. As illustration, these would include (i) Solar Home Systems (ii) Solar Street Lighting (iii) Hybrid, Solar & Biomass, Power Plant, firing Bio-Oil or Producer Gas (iv) Micro hydel, run of the stream, power plants (v) Pellets Cook Stoves (vi) e-Carts, e-Rickshaws & e-Auto rickshaws (vii) Rain Water Harvesting Installations (viii) Filters for Potable water

In conclusion, I recall these words of Mahatma Gandhi, "What we are doing to the Forests of the world is but a mirror reflection of what we are doing to ourselves and to one another". We probably should extend the analogy to forest dwellers and ensure that their aspirational needs for good jobs & modern living standards are met.



K. Krishan
Chairman,
Skill Council for Green Jobs

Renewable Energy

Global trends in 2018

A report launched by the International Renewable Energy Agency during COP23 has found that many countries now have higher renewable energy targets than are stated in their national climate action plans or NDCs – indicating that in some countries, at least in respect to green energy, higher ambition is already being locked in. A special scientific report, produced for the conference by Future Earth and the Earth League, says renewable energy expansion around the globe is doubling around every 5.5 years--consistent with the complete de-carbonization of the energy sector by mid-century

The Indian NDC brings a huge responsibility on the country and equally big opportunity for green business and poses skilled man power requirement. The year 2017 ended with a total Installed Capacity of 335.6 GW which includes 220 GW from Thermal, 0.449 GW from Hydro, 0.06 GW from Nuclear and 64 GW from various Renewable Energy Sources. The 64 GW Installed Capacity from renewable energy includes 33 GW from wind energy, 18

GW from solar energy and 12 GW from biomass, small hydro and waste to energy. A target of 14,550 MW from various renewables was fixed for the financial year 2017-18. A capacity of only about 8000 MW has been added in 2017-18.

We have moved to address the financial health of our utilities and tackle grid-integration issues drive a more optimistic forecast. By 2022, India is expected to more than double its current renewable electricity capacity. For the first time, this growth over the forecast period is higher compared with the European Union.

Solar PV and wind together represent 85% of India's capacity growth as auctions yielded some of the world's lowest prices for both technologies. In some of our states, recent contract prices are comparable to coal tariffs. India's accelerated case indicates that renewable capacity expansion could be boosted by almost a third, providing that existing grid integration and infrastructure challenges are addressed, policy and regulatory uncertainties are reduced, and costs continue to fall. With this growth India would equal the United States, becoming the joint second- largest growth market after China.

We are set to become the biggest energy market. Affordability, access and inclusiveness are driving India's energy policies. India has the capability to lead the global efforts to take on the challenge of climate and will remain in the forefront of harnessing solar and other forms of renewable energy to make the world a better place to live.

The country, which is projected to see its demand quadrupling in the coming years, will also lead the way in scaling up energy efficiency in line with its commitments towards combating the challenges of climate change. The idea is to make power available to all at affordable prices.

Globally, wind and solar together will represent more than 80% of global renewable capacity growth in the next five years. By 2022, Denmark is expected to be the world leader, with 70% of its variable renewables coming from European countries (Ireland, Germany and the United Kingdom), the share of wind and solar in total generation will exceed 25%. In China, India and Brazil, the share of variable generation is expected to double to over 10% in just five years. These trends have important implications going forward. Without a simultaneous increase in system flexibility (grid reinforcement and interconnections, storage, demand-side response and other flexible supply), variable renewables are more exposed to the risk of losing system value at increasing shares of market penetration since wholesale prices are depressed precisely when wind and solar production exceeds demand.



Dr. P. Saxena, CEO, SCGJ

Solid Waste Management

- Issues and Solutions

Solid waste is defined as any discarded solid fractions, generated from domestic units, trade centers, establishments, industries and agriculture, institutions, public services and mining activities. Characteristic of waste vary based on place of generation and the season in which it is generated. The Ministry of Urban Development has classified solid waste in fourteen categories based on the source, origin and type of waste i.e. domestic waste, municipal waste, commercial waste, institutional waste, garbage, rubbish, ashes, bulky waste, street sweepings, dead animals, construction and demolition waste, industrial waste, hazardous waste and sewage waste. Solid Waste Management system includes collection, segregation, transportation, processing and disposal of waste.

India, currently the world's second most populous nation, has witnessed a rapid increase in the rate of urbanization and industrialization in the recent past. This growth in the economy has also brought about a corresponding increase in the demands of its citizens, due to rise in purchasing power and exposure to versatile goods and commodities. Consequently, the quantities of solid waste generated from various cities has also risen in an analogous manner, making it imperative to bring about waste management which encompass the functions of disposal, collection, recycling, monitoring, and regulation.

Urban areas in India generate more than 1,50,000 tons of municipal waste per day (CPHEEO, 2013). Big cities collect about 70 - 90% of MSW generated, whereas smaller cities and towns collect less than 50% of waste generated. More than 91% of the MSW collected formally is landfilled on open lands and dumps. It is estimated that about 2% of the uncollected wastes are burnt openly on the streets. About 10% of the collected MSW is openly burnt or is caught in landfill fires. The amount of waste that is generated, if collected and treated well, can be effectively used to generate energy.

Collecting, processing, transporting and disposing Municipal Solid Waste (MSW) is the responsibility of Urban Local Bodies (ULBs), consisting of municipal corporations, municipalities, nagar panchayats,

etc. The Municipal Solid Waste (Management and Handling) Rules, 2016 (the 'MSW Rules'), issued by the Ministry of Environment, Forests and Climate Change, Government of India prescribe the manner in which the Authorities have to undertake collection, segregation, storage, transportation, processing and disposal of the municipal solid waste (the 'MSW') generated within their jurisdiction under their respective governing legislation. Compliance with the MSW Rules requires that appropriate systems and infrastructure facilities be put in place to undertake scientific collection, management, processing and disposal of MSW. However, it has increasingly come to the attention that, the Authorities are unable to implement and sustain separate and independent projects to enable scientific collection, management, processing and disposal of MSW. This is mainly due to lack of financial and technical expertise and scarcity of resources, such as land and manpower, with the Authorities, which makes it difficult for them to discharge their obligations individually in relation to scientific collection, management, and processing and disposal of MSW. The Government of India recognizes that the existing state of MSW management systems in the country is also raising serious public health concerns and sanitation issues, causes environmental pollution, accelerates natural resources degradation, causes climate change that need to be addressed because total GHG emission from waste is around 57.73 million tons of CO₂ eq

which has been increased from 23.23 million tons of CO₂ eq in 1994 (INCAA 2010). Availability of adequate trained man-force to implement the procedures of the adopted technology in a correct manner is another important aspect. Staff deployed by Local Administration to carry out waste disposal is most of the times not trained, motivated & efficient.

Skill Council for Green Jobs along with KPMG, India has carried out sector analysis and skill gap studies in the domain of waste management in India and has observed that this sector remains largely fragmented and unorganized owing to challenges in infrastructure, governance, and lack of cooperation from citizens. Municipal authorities have largely remained detached from processing and recycling of waste, and essentially dump majority of the waste in landfills leading to loss in revenue (through the potential recovery and sale of recyclables) and increase in mountains of waste. Despite rapid urbanization, residents of cities have failed to adopt the practices of segregation of waste at source due to lack of motivation and interest, which leads to the generation of a co-mingled stream of waste from city homes. Consequently, take immediate measures towards mobilization of resources for comprehensive management of waste in urban India.

The introduction of Solid Waste Management Rules, 2016, has given

an impetus to municipal authorities and private concessionaires to engage in waste processing and management activities. Correspondingly, it shall also lead to widespread creation of employment in the areas of waste collection, segregation, transport, processing, and disposal. This report extrapolates the growth of waste management sector till 2030, while simultaneously trying to analyze the potential growth in employment in this sector. comprehensive examination of the waste management practices prevalent in India and consultation with prominent players from this domain, it is projected that the urban municipal solid waste management sector would provide employment opportunities to a large number through incorporation and mainstreaming of various waste processing technologies such as waste-to-energy, bio-methanation, pyrolysis, composting, and other solid waste recycling techniques.

There is therefore a need for significant improvement in terms of strategy formation, planning, implementation, and finance. Authorities must devise multi-stakeholder approaches to waste management through adoption of technical, regulatory, and administrative reforms. Recent initiatives such as "Smart Cities Mission" and "Swachh Bharat Abhiyan", provide a good opportunity for law makers, industrialists, and citizens to brainstorm, showcase, and develop best practices in the domain of urban

solid waste management and provide solutions. These initiatives will also contribute to reducing GHG emissions as per the India's commitment to the Intended Nationally Determined Contribution (INDC) to reduce the emissions intensity of its GDP by 33 to 35 percent by 2030 from 2005 level.



Dr. (Mrs.) Parveen Dhamija
Advisor, SCGJ
(Biomass & Sustainable Livelihood)



India Sustainability Conclave

March 5-6, 2018
Federation House, New Delhi

FICCI organised the 5th India Sustainability Conclave on March 5-6, 2018, at FICCI, Federation House, New Delhi. FICCI's India Sustainability Conclave has been the annual platform focusing on corporate sustainability and the drivers to keep sustainability high on the corporate agenda. The Conclave aims to help businesses find solutions to address the challenge of embedding sustainability in their day-to-day operations. The Conclave served as a knowledge and best practice sharing platform and drew participation from leading companies and organizations that are at the forefront of sustainability, as well as global thought leaders, experts, policy makers and sustainability service providers. The second day of the Conclave was being spear-headed by corporate CFOs in acknowledgement of the fact that linking sustainability to company's financial decisions is very crucial, as companies recognize the strategic significance of creating sustainable businesses. It was felt that companies while keeping themselves abreast of the sustainability agenda, also need to look at developing dynamic, industry-relevant, curricula for green jobs and impart requisite skill-sets. The need to equip the youth with skills needed for green jobs of the future and identifying interventions needed was discussed at length.



Dr K P Krishnan, Secretary, Ministry of Skill Development & Entrepreneurship, Government of India delivered the Special Address at Valedictory Session on Skills for Sustainability on March 6, 2018

Shri K.Krishnan, Chairman SCGJ who is also the Chair of FICCI's Climate Change Committee delivered the Concluding Remarks during the Valedictory Session.



Dr Praveen Saxena, CEO SCGJ addressed the NULMe participants of the six months advanced solar professionals course launched by NISE in collaboration with SCGJ. Other dignitaries at the launch are Mr Upendra Tripathi, Interim Director General, International Solar Alliance; Dr A K Tripathi, DG NISE, Prof H P Garg, NISE

Tripartite MOU between SCGJ, NDMC and NSKFDC for upskilling NDMC SafaiKaramcharis under RPL programme



Waste Management is one of the most important activity of SCGJ. SCGJ has developed number of Qualifications Packs as per NSQF including a Job Role of Safai Karamchari which is very relevant for the target group of various Municipal bodies.. The Job Role focuses on skill up-gradation of people engaged in waste management activities including skilling them about their personal health and safety, mechanized cleaning etc.

National Safai Karamcharis Finance & Development Corporation (NSKFDC) is a wholly owned Govt. of India undertaking under the Ministry of Social Justice & Empowerment (M/o SJ&E). NSKFDC is an Apex Corporation for the all-round socio-economic upliftment of the Safai Karamcharis, Scavengers and their dependents throughout India.

SCGJ in consultation with NSKFDC, has developed a Training Delivery Plan of 35 hrs for upskilling Safai

Karamchari under Recognition of Prior Learning (RPL) programme. It covers important topics such as Mechanized Cleaning, Key Provisions of Manual Scavenging Act 2013 and Mechanized and Safe Cleaning of Sewer and Septic Tanks, Personal Health and Safety etc. A pictorial participant handbook on the safe sanitation cleaning processes has also been prepared. Keeping in view the relevance of this, NSKFDC has sanctioned RPL programme to SCGJ for about 5000 candidates during 2017-18. The programme is proposed to be expanded for PAN India in the year 2018-19.

SCGJ, NDMC and NSKFDC had launched a programme for RPL of Safai Karamchari of New Delhi Municipal Council (NDMC). The programme was launched by Smt Meenakshi Lekhi -MP NDMC on 15th February, 2018 at NDMC's Purana Qila Road Nursery premises. Chairman NDMC – Mr Naresh Kumar and other members of the NDMC council were present

The Candidates attending the training are undergoing a training of 35 hours including 17hrs of practical training on Mechanized Cleaning.



Arpit Sharma
Head Assessments & Assurance



Skilling Initiatives in Energy Access, Energy Storage and Electric Vehicles



round-the-clock electricity to all households by Mar 2019. DRE systems can accelerate this transition.

Mr. Tanmay Bishnoi was invited as a Speaker to the Energy Access

Energy Storage is one of the possible choices for increasing RE penetration. The Energy Storage System is charged while the electrical supply system is powering minimal load and the cost of electric usage is reduced, such as at night. It is then discharged to provide additional power during periods of increased loading, while costs for using electricity are increased. It also effectively shifts the impact of the load on the system, minimizing the generation capacity required.

To interact with the Government, industry professionals and other multiple stakeholders, Skill Council for Green Jobs participated in the 5th International Conference & Expo on Energy Storage and Microgrids, held at India Habitat Centre, New Delhi, India. The event had 2000+ Industry Experts from 25+ Countries and 100+ Speakers were invited to the international conference. Mr. Tanmay Bishnoi, Head – Standards and Research, was invited as the Speaker to the conference session on “Testing, Certification & Safety Standards” held on Thursday, 11th January, having an in-depth interaction and panel discussion.

The conference & exhibition was inaugurated by Shri Suresh Prabhu, Honorable Minister for Industry and Commerce. Mr. R V Deshpande, Minister of Large and Medium Scale Industries and Infrastructure Development, Govt. of Karnataka gave the keynote speech for Electric Vehicle Session and told the audience about the release of Karnataka state Electric Vehicle and Energy Storage Policy.

It has been an eventful quarter for the Standards and Research Department at Skill Council for Green Jobs, with high industry interactions and starting the activities in two of the most emerging technologies, energy storage and electric vehicles.

Another major focus of SCGJ has been in the **Distributed Renewable Energy (DRE)** sector. What makes DRE even more attractive, is its potential in triggering development impacts for communities by enabling income-generating opportunities, improving quality of education, health and sanitation, and allowing financial inclusion through banking and so on. To improve quality of life and boost rural economy, the Government of India aims to provide

Practitioners Meet, organized by CLEAN during the India Energy

Access Summit 2018, held at India Habitat Centre, New Delhi, India, where the skilling initiatives by SCGJ to the support the sector was presented and deliberated with industry interactions. The session was to foster an open discussion between Distributed Renewable Energy (DRE) practitioners on ground challenges and expectations from ecosystem enablers with the Key Note Speech delivered by Mr. Upendra Tripathy, Interim Director General, International Solar Alliance and the activities of CLEAN were outlined by Dr. S N Srinivas, CEO, CLEAN.

During the summit, Mr. Tanmay Bishnoi was invited to another session on Prosperity and Growth through Jobs and Skilling, deliberating on the crucial linkage of skills and capacity development for alleviating rural poverty and boosting economy. organised by World Resources Institute, India. Considering the sectors value chain and the future technology advancements & disruptions, there will be a huge requirement of skilled

workforce at all levels. India would need a number of Designers who are qualified and skilled to design an optimised hybrid system integrating Renewable Energy, Energy storage and the grid, installers to install the system and Operation and maintenance staff for managing these assets. Occupational Mapping will be done for the entire value chain of energy storage systems, charging infrastructure and electric vehicles manufacturing, installation, operation and maintenance. Skill Council for Green Jobs is starting the skill gaps study to have an in-depth study of the industry and develop the critical National Standards for skilling development the conference, destination for manufacturing Energy Storage Systems and Electric Vehicles, and accelerate the energy access market through DRE systems and adaptability of large scale hybrid Renewable energy systems with battery storage.

Mr. Rajesh Agarwal, JS MSDE addressing in the Schneider Electric India Foundation -SEIF on completion of its 10 years in operation. SCGJ participated in the event.



Tanmay Bishnoi,
Head - Standards & Research SCGJ



Mr. Arpit Sharma(Head, Assessment and Assurance), SCGJ participated as a keynote speaker at "Conference on Solar awareness" for 350 Societies RWA Organized by GreenBizIndia(GBI) and Co-organized Delhi Engineers organization.



Dr. P.Saxena,, CEO SCGJ addressing NISE /SCGJ Training Partners of Surya Mitra to plan training activities for year 2018-19.



Skill Initiative in Jharkhand

Skill Summit 2018

Government of Jharkhand has put Skill Development at the forefront of all development activities in the State. Jharkhand Skill Development Mission Society (JSDMS) aims to establish Jharkhand as the "Skill Hub of India" in the next five years. In this direction the State Government had organized a flagship event – Skill Summit 2018, Momentum Jharkhand, on 12th January 2018, the birth anniversary of Swami Vivekananda and the National Youth Day, at Tana Bhagat Stadium, Ranchi.

The summit focused on:

- Improving the Skill Ecosystem in the state and providing an opportunity to the prospective stakeholders to understand the potential and offerings of the State of Jharkhand.
- Providing a platform for various countries to share their 'best practices' and assist the state in formulating a successful skill implementation strategy.

In order to demonstrate the employability of the skilled youth of Jharkhand, Hon'ble Chief Minister distributed 27,800 Job Offers to the youth of the State.

While skill training is being provided in approx. 30 sectors in Jharkhand, some sectors like Apparel, IT & ITES, Electronics, Retail, Automobile, Green Jobs, Tourism & Hospitality are very popular among youths and having huge ready to employ numbers whereas few sectors which are critical to economic growth of Jharkhand such as Mining & Minerals, Iron & Steel, Handicrafts & Agriculture etc. needed more attention to focus upon. JSDMS already signed an MoU with 32 Sector Skill Councils during the SSC Summit held on the 5th October 2017 in Ranchi.

Prior to the event from Jan 8th to 11th, a series of open campus drives for various sectors was organized at Khel Gaon and any skilled from Jharkhand who has got trained under NSQF (National Skill Qualification Framework) courses can get a job over there.

Summit will included three sectoral seminars and more than 30 international class exhibition stalls, demonstrating the skill ecosystem of Jharkhand. Jharkhand Skill Policy was also be launched on 12 January 2018 to provide ~~package~~ ~~to~~ ~~attract~~ ~~potential~~ Training Partners and will attract the investment in the skill ecosystem of the State. The Skill Summit 2018, Momentum Jharkhand will lead to an upliftment of the Skill Ecosystem of Jharkhand.



Ms. Sangeeta Patra Head Marketing & Partnerships

A Page from Eastern Region office, SCGJ

With a vision to increase the awareness of Green Jobs in the eastern region, Mr. Arpo Mukherjee , Manager SCGJ has been sent to Kolkata to setup a regional office. In the mean while an invitation came from the Seacom Skills University to support the idea of setting up the regional center. Skill Council for Green Jobs opened up its regional office in West Bengal to facilitate the requirement of the Industry in a better manner. The office is setup at Marine Building, of.

Later on Seacom Skills University Signed an MOU with Skill Council for Green Jobs to setup a center of excellence where people from different states can visit and get skilled with the support state of art technologies related to Solar PV, Solar Thermal , Wind, Biogas, Biomass, waste water treatment, Waste Management and much more. The MOU was signed on 9th March 2018.



Dr. P.Saxena, CEO- Skill Council for Green Jobs signing an MOU for Center of Excellence with Mr. Anish Chakroborty , Chairman - SEACOM Group



SCGJ participated in Bengal Global Business Summit, which aimed to create 20 Lakh Jobs by bringing investments. As per the govt. of West Bengal itself generated Six Lakh skilled manpower annually. <https://bengalglobalsummit.com/>



Training of Trainers for the Job role of Solar PV Installer (Suryamitra), Solar PV Helper, Solar PV Installer – Electrical/ Civil



Visiting the Industry / Sites nearby with the Students so that participants can learn by their senses.

The Editor of this edition



Arpo Mukherjee is one of the founder members of SCGJ. He joined SCGJ just after 3 months of its formation.

Arpo Mukherjee, at present holds the position of Manager Projects, Skill Council for Green Jobs. He has been given the responsibility to handle the activities of SCGJ in Eastern and the North-eastern States of India. Arpo has also

developed several Qualifications packs, Curriculums and Courseware related to Solar Sector, Wastewater Sector, Waste Management Sector. Arpo has also organized India's first Solar Skills Completion in Sep' 2017.

Arpo Mukherjee is a Mechanical Engineer with his Masters in Business Administration in Power

Management from UPES. He has served renewable energy sector for more than 7 years. He also worked in MNRE (Ministry of New and Renewable Energy) as a Technical Analyst. He is a passionate cyclist and earned his SR (Super Randonneur) Title in the year 2017.

Green Jobs News

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6. Balance Sheet FY 2017-18

SKILL COUNCIL FOR GREEN JOBS INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03.2018

INCOME	Schedule	(Amount - Rs.)	
		01.04.2017 To 31.03.2018	01.04.2016 To 31.03.2017
Income from Sales / Services	12	-	-
Grants / Subsidies	13	-	-
Fees / Subscriptions Received	14	35,676,464.91	12,772,204.25
Income from Investments (Income on Invest. from earmarked/endow. Funds transferred to Funds.)	15	-	-
Income from Royalty, Publication etc.	16	-	54,488.00
Interest Earned	17	55,921.00	322,742.00
Other Income	18	-	360.00
Increase / (decrease) in stock of Finished goods and works-in-progress	19	-	-
TOTAL (A)		35,732,385.91	13,149,794.25
EXPENDITURE			
Establishment Expenses	20	32,390,676.00	10,930,519.00
Other Administrative Expenses etc.	21	2,904,960.66	2,714,888.13
Expenditure on Grants, Subsidies etc.	22	-	-
Interest	23	1,016.00	1,314.00
Depreciation (Net Total at the year-end - corresponding to Schedule 8)		263,061.93	414,812.58
		35,559,714.59	14,061,533.71
Excess of Income over Expenditure/(Excess of Expenditure over Income)		172,671.32	(911,739.46)
Transfer to Earmarked/Endowment Funds - Schedule 3		(172,671.32)	911,739.46
			-
Net Surplus/Deficit		0.00	0.00
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

The Notes form an integral part of these financial statements.

As per our separate report of even date annexed.

For V.D. Tiwari & Co.

(FRN: 002882N)

CA Pushpinder Tiwari

Partner

M.No: 503170

Place: New Delhi

Date: 23.08.2018

For SKILL COUNCIL FOR GREEN JOBS

Chairman

Treasurer

Secretary





6. Balance Sheet FY 2017-18

SKILL COUNCIL FOR GREEN JOBS SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2018

		(Amount - Rs.)	
SCHEDULE 1 - CORPUS / CAPITAL FUND :		31.03.2018	31.03.2017
Balance as at the beginning of the year		5,280,000.00	3,900,000.00
Add: Grant Fund Carried Forward to Subsequent years Expenditure			
Add: Addition During the Year	350,000.00		1,380,000.00
Add/ (Deduct) : Balance of net income/ (expenditure) transferred from the Income and Expenditure Account	-	5,630,000.00	-
BALANCE AS AT THE YEAR - END		5,630,000.00	5,280,000.00
SCHEDULE 2 - RESERVES AND SURPLUS :		31.03.2018	31.03.2017
1. Capital Reserve :			
As per last Account			
Addition during the year			
Less: Deductions during the year			
2. Revaluation Reserve			
As per last Account			
Addition during the year			
Less: Deductions during the year			
3. Special Reserves :			
As per last Account			
Addition during the year			
Less: Deductions during the year			
4. General Reserve :			
As per last Account			
Addition during the year			
Less: Deductions during the year			
TOTAL			

For SKILL COUNCIL FOR GREEN JOBS

Place: New Delhi
Date: 23.08.2018



Chairman

Treasurer

Secretary





6. Balance Sheet FY 2017-18

SKILL COUNCIL FOR GREEN JOBS SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31st MARCH, 2018

(Amount - Rs.)

SCHEDULE 3 - FARMARKED / ENDOWMENT FUNDS	IREDA Fund	NBCFDC Fund	NSDC Grant	NSKFDC Fund	RECL Fund	TOTAL	
						31.03.2018	31.03.2017
a) Opening balance of the funds	2,234,375.00	1,551,360.00	13,826,257.45	-	-	17,611,992.45	14,737,996.91
b) Additions to the Funds :							
i) Grant Received-NSDC	-	-	6,000,000.00	0.00	0.00	6,000,000.00	0.00
ii) Funds Received*	620,000.00	3,487,410.00	-	3,598,281.00	12,178,500.00	19,884,191.00	4,052,375.00
TOTAL (a + b)	2,854,375.00	5,038,770.00	19,826,257.45	3,598,281.00	12,178,500.00	43,496,183.45	18,790,371.91
c) Utilisation / Expenditure towards objectives of funds							
i. Capital Expenditure							
- Fixed Assets	-	-	-	-	-	-	-
- Other	-	-	-	-	-	-	-
ii. Revenue Expenditure							
- Transfer of Excess of Expenditure Over Income	-	-	-172,671.32	-	-	-172,671.32	911,739.46
- Training Expenses	2,854,375.00	4,410,470.00	-	3,483,703.00	4,829,758.00	15,578,306.00	266,640.00
TOTAL (C)	2,854,375.00	4,410,470.00	-172,671.32	3,483,703.00	4,829,758.00	15,405,634.68	1,178,379.46
NET BALANCE AS AT THE YEAR- END (a + b - c)	0.00	628,300.00	19,998,928.77	114,578.00	7,348,742.00	28,090,548.77	17,611,992.45

Notes:

*IREDA,NSKFDC,RECL,NSDC and NBCFDC Fund was received in F.Y. 2017-18 as per applicable conditions.

For SKILL COUNCIL FOR GREEN JOBS

Place: New Delhi
Date: 23.08.2018

Chairman Treasurer Secretary





6. Balance Sheet FY 2017-18

SKILL COUNCIL FOR GREEN JOBS BALANCE SHEET AS AT 31.03.2018

		(Amount - Rs.)	
CORPUS / CAPITAL FUND AND LIABILITIES	Schedule	31.03.2018	31.03.2017
CORPUS / CAPITAL FUND	1	5,630,000.00	5,280,000.00
RESERVES AND SURPLUS	2	-	-
EARMARKED / ENDOWMENT FUNDS	3	28,090,548.77	17,611,992.45
SECURED LOANS AND BORROWINGS	4	-	-
UNSECURED LOANS AND BORROWINGS	5	1,662,375.00	2,162,375.00
DEFERRED CREDIT LIABILITIES	6	-	-
CURRENT LIABILITIES AND PROVISIONS	7	4,286,851.76	1,213,919.74
TOTAL		39,669,775.53	26,268,287.19
ASSETS			
FIXED ASSETS	8	16,738,271.76	14,471,963.69
INVESTMENTS - FROM EARMARKED / ENDOWMENT FUNDS	9	-	-
INVESTMENTS - OTHER	10	-	-
CURRENT ASSETS, LOANS, ADVANCES ETC.	11	22,931,503.77	11,796,323.50
MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)		-	-
TOTAL		39,669,775.53	26,268,287.19
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

The Notes form an integral part of these financial statements.

As per our separate report of even date annexed.

For V.D. Tiwari & Co.
(FRN: 002882N)

CA Pushpinder Tiwari
Partner
M.No: 503170

Place: New Delhi
Date: 23.08.2018

For SKILL COUNCIL FOR GREEN JOBS

Chairman

Treasurer

Secretary



Annexure

- Brief Description of Qualification Packs

Brief Description of Qualification Packs



SKILL COUNCIL FOR
GREEN JOBS

SOLAR ENERGY				
S. No	Qualification Pack Title	NSQF level	Training hours for Trainee	Description
1	<p>Solar PV Installer(Suryamitra) SGJ/Q0101</p> <p>Trainee Qualification & entry age: 10th pass + ITI / Diploma (Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation, Welder) Minimum age: 18 years</p> <p>Trainer Qualification & Experience: ITI/Diploma+3 years of experience B.Tech+2 years of experience</p> <p>Assessor Qualification: ITI/Diploma+5 years of experience B.Tech+3 years of experience</p> <p>And the education qualification is relaxed in case of extraordinary field experience</p>	4	300	<p>After the training, the candidate would be suitable to work as Solar PV Installer. S/He has the competence for mechanical, civil and electrical installation of rooftop Solar PV Power Plants as well as maintaining them properly ensuring proper customer support.S/He will be trained on Solar PV and will be able to do:</p> <ul style="list-style-type: none"> • Site Survey for installation of Solar PV System • Assess the customer's Solar PV requirement • Procure Solar PV system components • Install Civil and Mechanical parts of Solar PV System • Install Electrical components of Solar PV System Test and Commission Solar PV System • Maintain Solar Photovoltaic System • Maintain Personal Health & Safety at project site • Customer orientation for Solar PV System <p>S/He will be able to check, configure, install, inspect, test, and commission different components of photovoltaic systems, that meet the performance and reliability needs of customers by incorporating quality craftsmanship and complying with all applicable codes, standards, and safety requirements.</p>

2	<p>Solar PV Installer – Electrical SGJ/Q0102</p> <p>Trainee Qualification & entry age: 10th pass + ITI / Diploma (Electrical, Electronics) Minimum age: 18 years</p> <p>Trainer Qualification & Experience: ITI / Diploma (Electrical, Electronics)+3 years of experience or B.Tech (Civil / Electrical / Electronics /Electrical and Electronics Eng.) or MSc Physics+2 years of experience</p> <p>Assessor Qualification: ITI / Diploma (Electrical, Electronics)+5 years of experience or B.Tech (Civil / Electrical / Electronics / Electrical and Electronics Eng.) or MSc Physics+3 years of experience</p>	4	200	<p>After the training, the candidate would suitable to work as Solar PV Installer-Electrical. S/He specializes in electrical installations and commissioning of Solar Photovoltaic Systems.S/He will be trained on Solar PV and will be able to do:</p> <ul style="list-style-type: none"> • Site Survey for installation of Solar PV System • Install Electrical components of Solar PV System • Test and Commission Solar PV System • Maintain Personal Health & Safety at project site <p>S/He will install, tests, and commissions' different electrical components of photovoltaic systems, that meet the performance and reliability needs of customers by incorporating quality craftsmanship and complying with all applicable codes, standards, and safety requirements.</p>
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3	<p>Solar PV Solar PV Installer – Civil SGJ/Q0103</p> <p>Trainee Qualification & entry age: 10th pass + ITI / Diploma (Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation, Welder, Mason) Minimum age: 18 years</p> <p>Trainer Qualification & Experience: 10th pass + ITI / Diploma (Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation, Welder, Mason)+3 years of experience or B.Tech(Civil/Mechanical /Electrical/ Instrumentation / Electronics / Electrical and Electronics Eng.)+2 years of experience</p> <p>Assessor Qualification: 10th pass + ITI / Diploma (Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation, Welder, Mason) +5 years of experience or B.Tech(Civil/Mechanical /Electrical/ Instrumentation / Electronics / Electrical and Electronics Eng.)+3 years of experience</p>	4	180	<p>After the training, the candidate would suitable to work as Solar PV Installer – Civil. S/He specializes in civil and mechanical installation of Solar Photovoltaic Systems.S/He will be trained on Solar PV and will be able to do:</p> <ul style="list-style-type: none"> • Site Survey for installation of Solar PV System • Install Civil and Mechanical parts of Solar PV System • Maintain Personal Health & Safety at project sit <p>S/He will install different civil and mechanical components of photovoltaic systems that meet the performance and reliability needs of customers by incorporating quality craftsmanship and complying with all applicable codes, standards, and safety requirement.</p>
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4	<p>Rooftop Solar PV Entrepreneur SGJ/Q0104</p> <p>Trainee Qualification & entry age: B.E. / B. Tech. / Any Graduate with Science background, preferred. Minimum age: 21</p> <p>Trainer Qualification: B.E. / B.Tech / MSc Physics or B.Tech + MBA Or B.Tech + M.Tech Minimum 5 years of relevant industry experience for B.E./B.Tech / MSc Physics graduates or Minimum 3 years of relevant industry experience for (B.Tech. + M.Tech.) or (B.Tech + MBA) graduates</p> <p>Assessor Qualification: Minimum 4 years of relevant industry experience for (B.Tech. + M.Tech.) or (B.Tech + MBA) graduates</p> <p>And the education qualification can be relaxed in case of extraordinary relevant field experience.</p>	6 120	<p>After the training, the candidate would suitable to work as Rooftop Solar PV Entrepreneur. S/He is an individual having the ability to venture into Solar Rooftop market to lead an enterprise, prepare the feasibility study report and is responsible for the managing the complete Solar rooftop PV project lifecycle. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Carry out market research and prepare a cost estimate for a Rooftop Solar Photovoltaic plant • Prepare site feasibility report • Manage Solar PV project for its entire lifecycle • Entrepreneurship skills • Maintain Personal Health & Safety at project site <p>S/He will be able to venture into Solar Rooftop market to lead an enterprise as S/He would have understanding of solar business models and the technical knowledge of rooftop solar PV plants along with the components available in the local market. S/He will prepare feasibility study report and basic energy generation forecasting using simulation software. S/He will be responsible for the managing the complete Solar PV rooftop project for its life.</p>
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5	<p>Solar Proposal Evaluation Specialist SGJ/Q0105</p> <p>Trainee Qualification: B.E. / B.Tech. / BBA / B.Com. / B.Sc. / C.A. with Minimum 2 year of experience in a financial institution / bank / managing project finance for B.E. / B.Tech. / BBA / B.Com. / B.Sc.</p> <p>No experience required for MBA / CA Minimum age: 23</p> <p>Trainer Qualification: B.E. / B.Tech. / BBA / B.Com. / B.Sc. / C.A. Minimum 2 projects or 20 MW of consulting or project finance experience on ground mount solar PV power plants Or Minimum 10 projects or 1000 kWp of consulting or project finance experience on Rooftop solar PV power plants</p> <p>Assessor Qualification: B.E. / B.Tech. / BBA / B.Com. / B.Sc. / C.A. Minimum 3 projects or 30 MW of consulting or project finance experience on ground mount solar PV power plants Or Minimum 10 projects or 1500 kWp of consulting or project finance experience on Rooftop solar PV power plants</p> <p>And the education qualification can be relaxed in case of extraordinary relevant field experience</p>	7 80	<p>After the training, the candidate would suitable to work as Solar Proposal Evaluation Specialist. S/He has competency to review feasibility of the site for installation, assess the techno - commercial feasibility and financial viability of setting up a Solar PV Power Plant. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Check site feasibility of Solar PV Power Plant • Assess the technical feasibility of Solar PV Power Plant • Determine financial viability of the Solar PV Power Plant • Optional: Entrepreneurship Skills <p>S/He will be able to review feasibility report of the site for installation, assess the techno - commercial feasibility and financial viability of setting up a Solar PV Power Plant. S/He will be able to providing techno - commercial advice, preparing lending or funding documents and write or review Solar PV project report.</p>
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6	<p>Rooftop Solar Grid Engineer SGJ/Q0106</p> <p>Trainee Qualification: Diploma (Electrical, EEE) Minimum age: 20</p> <p>Trainer Qualification: Diploma (Electrical, EEE) Or B.Tech/B.E. (Civil, Electrical, Mechanical, Energy) or M.Tech. (Electrical, EEE, Renewable Energy) Minimum 3 years of relevant industry experience for M.Tech. graduates Or Minimum 5 years of relevant industry experience for B.E./B.Tech graduates Or Minimum 6 years of relevant industry experience for Diploma graduates</p> <p>Assesor Qualification: Minimum 4 years of relevant industry experience for M.Tech. graduates Or Minimum 6 years of relevant industry experience for B.E./B.Tech graduates Or Minimum 7 years of relevant industry experience for Diploma graduates</p> <p>And the education qualification can be relaxed in case of extraordinary relevant field experience</p>	5 80	<p>After the training, the candidate would suitable to work as Rooftop Solar Grid Engineer. S/He has competency of pre-commissioning inspection, interconnection and post commissioning testing of grid connected Solar PV Roof Top Power Plants. S/He is able to monitor safe and appropriate performance of the grid connectivity.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Pre-Commissioning Inspection of the Grid Connected Rooftop Solar PV Power Plant • Post Commissioning Testing of the Grid Connected Rooftop Solar PV Power Plant • Maintain Personal Health & safety at project site <p>S/He will be able to checks, audits, inspects and tests different components of the gridconnected Solar PV Power Plant in compliance with all relevant codes, standards, and safety requirements. S/He will be able to interconnect the solar plant with grid and perform post commissioning tests.</p>
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7	<p>Solar PV Business Development Executive SGJ/Q0107</p> <p>Trainee Qualification: B.B.A./B.Com./B.Tech. Minimum Age: 21</p> <p>Trainer Qualification: Any Graduate with two years of Business Development experience in solar PV sector</p> <p>Assessor Qualification: Graduate with three years of Business Development experience in solar PV sector</p>	5 140	<p>After the training, the candidate would suitable to work as Solar PV Business Development Executive. S/He is specialized in developing solar PV business for a company. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Develop and mobilize rooftop solar PV business • Develop of off grid solar PV business • Develop of ground mount solar PV business • Work effectively with others <p>S/He will be able to tell to the client advantages of using solar power devices and systems to develop and generate business for the organization is working for. S/He would have understanding of the rooftop SPV market, ground mount SPV market and decentralized SPV system market and will be able to suggest right kind of solar solution to meet the specific needs of the clients. S/He would have fair understanding of the solar PV technology, its applications and economics. S/He would keep track of central and state solar policies/programs to inform the client and let him avail the benefits of same.</p>
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8	<p>Solar PV Site Surveyor SGJ/Q0108</p> <p>Trainee Qualification: Diploma/ B.E. / B.Tech preferably in CivilEngineering Experience:3 Years Minimum Age: 25</p> <p>Trainer Qualification: Diploma/ B.E. / B.Tech preferably in CivilEngineering+ 3 years of experience in doing site surveys for Solar PV power plants</p> <p>Assessor Qualification: Four years of experience in doing sitesurveys for Solar PV power plants</p>	6 120	<p>After the training, the candidate would suitable to work as Solar PV Site Surveyor. S/He is specialized in survey of the site for setting up a solar power plant. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Survey site for installation of ground mount solar PV power plant • Survey site for Installation of rooftop solar PV power plant • Maintain personal health & safety at project site • Work effectively with others <p>S/He would be able to survey the proposed site, provide complete land map with elevations, arrange for soil testing & test reports, provides details of approach to site, water table at site, quality of ground water, availability of water for module cleaning at site, availability of grid, location nearest substation where the solar power is to be delivered etc. For rooftop solar power plants, s/he would be able to survey rooftop for availability of shadow free open area, roof load bearing capacity, drawings of beams and columns, load of the building and the voltage at which it is to be connected to grid etc.</p>
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9	<p>Solar PV Structural Design Engineer SGJ/Q0109</p> <p>Trainee Qualification and entry age: Diploma in Civil Engineering/Structural Engineering Minimum Age: 20 years</p> <p>Trainer Qualification & Experience Diploma in Civil Engineering/Structural Engineering+5 years of relevant work experience</p> <p>Assessor Qualification & Experience Diploma in Civil Engineering/Structural Engineering+7 years of relevant work experience</p>	5 200	<p>After the training, the candidate would suitable to work as Solar PV Structural Design Engineer. S/He is specialized in civil and structural design of a rooftop or ground mount solar PV power plant. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Prepare the civil and structural design of solar PV power plant • Maintain personal health & safety at solar PV project site • Work effectively with others <p>S/He designs the module mounting structures, foundations for the module mounting structures, inverters and transformers and the complete layout of the solar PV power plant including walkways between the module mounting structures civil/ structural work for the control room, and allied structural works for the rooftop or ground mount solar PV power plant</p>
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10	<p>Solar PV Designer SGJ/Q0110</p> <p>Trainee Qualification: B. Tech/ B.E. (Solar/ Electrical, Electronics, Civil, Mechanical/ Energy Systems) or M.Tech (Solar/ Renewables/ Energy Studies)+ 3 years of Solar PV experience for B.Tech/ B.E and fresher for M.Tech Minimum Age: 25</p> <p>Trainer Qualification: B. Tech/ B.E. (Solar/ Electrical, Electronics, Civil, Mechanical/ Energy Systems)+ 5 years of Solar PV experience or M.Tech (Solar/ Renewables/ Energy Studies)+2 years of Solar PV experience</p> <p>Assessor Qualification: B. Tech/ B.E. (Solar/ Electrical, Electronics, Civil, Mechanical/ Energy Systems)+ 6 years of Solar PV experience or M.Tech (Solar/ Renewables/ Energy Studies)+3 years of Solar PV experience</p>	7 200	<p>After the training, the candidate would suitable to work as Solar PV Designer. S/He is specialized in designing of solar PV power plant.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Review the structural design of solar PV power plant • Review electrical design of solar PV power plant • Prepare energy simulation report • Maintain personal health & safety at solar PV project site • Work effectively with others <p>S/He would be able to review civil and electrical design of the Solar PV power plant & prepares the energy simulation report.</p>
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11	<p>Solar PV Project Helper SGJ/Q0111</p> <p>Trainee Qualification: 5th pass preferably Minimum Age: 18</p> <p>Trainer Qualification: 10th Pass+ ITI Or Diploma in technical education+ 2 years of hands-on working experience of Installation and Maintenance of Solar PV power plants</p> <p>Assessor Qualification: 10th Pass+ ITI Or Diploma in technical education+ 3 years of hands-on working experience of Installation and Maintenance of Solar PV power plants</p> <p>and the education qualification can be relaxed in case of extraordinary relevant field experience.</p>	2 200	<p>After the training, the candidate would suitable to work as Solar PV Project Helper. S/He would be trained to assists in various activities relating to SPV installations both ground mounted and roof top.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Assist in installation and maintenance of solar PV power plant • Assist in installation and maintenance of off grid solar systems • Maintain personal health & safety at workplace <p>S/He would be able to assist in site survey, erection and commissioning activities and maintenance activities for ground mounted solar PV power plants as well as roof top and also assist in installation of off grid solar systems.</p>
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12	<p>Solar PV Engineer (Option: Solar Water Pumping Engineer) SGJ/Q0112</p> <p>Trainee Qualification: Diploma (Electrical/Electronics/ Civil/ Mechanical) or Pre-final engineering and technology candidate with 3 years of formal engineering education. Minimum Age: 20</p> <p>Trainer Qualification: Engineering Graduate with Minimum 2 years of experience in designing and installation of Solar PV Power plant Or Diploma with Minimum 3 years of of experience in designing and installation of Solar PV Power plant</p> <p>Assessor Qualification: Engineering Graduate with Minimum 3 years of experience in designing and installation of Solar PV Power plant Or Diploma with Minimum 4 years of experience in designing and installation of Solar PV Power plant</p>	5	300+ 120 optional	<p>After the training, the candidate would become Solar PV Engineer. S/He would be trained to design, installation and commission solar PV power plant, its quality assurance and HSE issues.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Prepare site feasibility study report • Design of solar PV power plant • Installation and commissioning of solar PV power plant • Quality Assurance of solar PV power plant & components • Maintain personal health & safety at project site • Work effectively with others <p>S/He would be able to take responsibility of design, installation and commissioning of solar power plant at site, its quality QA and HSE issues.</p> <p>Option: Solar Water Pumping Engineer: As part of optional learning, he would also be able to design, install and commission solar water pumping systems.</p>
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13	<p>Solar Site In-charge SGJ/Q0113</p> <p>Trainee Qualification: B.E./B.Tech.(Civil/Mechanical/EEE/Instrumentation/Construction Management) with 3 years' experience in solar PV power plant installation and commissioning or M.Tech. / MBA with 1 year of experience in solar PV power plant installation and commissioning Minimum Age: 25</p> <p>Trainer Qualification: Any Graduate with 3 years of experience in managing installation & commissioning of solar PV power plants</p> <p>Assessor Qualification: Any Graduate with 4 years of experience in managing installation & commissioning of solar PV power plants</p>	6	200	<p>After the training, the candidate would be suitable to work as Solar PV power plant Site In-charge. S/He will be trained to be responsible for all the activities at site relating to Installation and commissioning of solar PV power plant.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Manage installation and commissioning of solar PV power plant at site • Maintain health & safety at project site • Work effectively with others <p>S/He would receive components of the solar PV power plant, check them for specifications and quality and get the solar PV power plant installed as per the design.S/He would also get the substation and grid interface constructed incorporating grid code and regulatory provisions. He will be able to commission DC and AC parts of solar power plant and undertake grid connection, data acquisition and monitoring equipment installed.</p>
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12	<p>Solar PV Engineer (Option: Solar Water Pumping Engineer) SGJ/Q0112</p> <p>Trainee Qualification: Diploma (Electrical/Electronics/ Civil/ Mechanical) or Pre-final engineering and technology candidate with 3 years of formal engineering education. Minimum Age: 20</p> <p>Trainer Qualification: Engineering Graduate with Minimum 2 years of experience in designing and installation of Solar PV Power plant Or Diploma with Minimum 3 years of of experience in designing and installation of Solar PV Power plant</p> <p>Assessor Qualification: Engineering Graduate with Minimum 3 years of experience in designing and installation of Solar PV Power plant Or Diploma with Minimum 4 years of experience in designing and installation of Solar PV Power plant</p>	5	300+ 120 optional	<p>After the training, the candidate would become Solar PV Engineer. S/He would be trained to design, installation and commission solar PV power plant, its quality assurance and HSE issues.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Prepare site feasibility study report • Design of solar PV power plant • Installation and commissioning of solar PV power plant • Quality Assurance of solar PV power plant & components • Maintain personal health & safety at project site • Work effectively with others <p>S/He would be able to take responsibility of design, installation and commissioning of solar power plant at site, its quality QA and HSE issues.</p> <p>Option: Solar Water Pumping Engineer: As part of optional learning, he would also be able to design, install and commission solar water pumping systems.</p>
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13	<p>Solar Site In-charge SGJ/Q0113</p> <p>Trainee Qualification: B.E./B.Tech.(Civil/Mechanical/EEE/Instrumentation/Construction Management) with 3 years' experience in solar PV power plant installation and commissioning or M.Tech. / MBA with 1 year of experience in solar PV power plant installation and commissioning Minimum Age: 25</p> <p>Trainer Qualification: Any Graduate with 3 years of experience in managing installation & commissioning of solar PV power plants</p> <p>Assessor Qualification: Any Graduate with 4 years of experience in managing installation & commissioning of solar PV power plants</p>	6	200	<p>After the training, the candidate would be suitable to work as Solar PV power plant Site In-charge. S/He will be trained to be responsible for all the activities at site relating to Installation and commissioning of solar PV power plant.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Manage installation and commissioning of solar PV power plant at site • Maintain health & safety at project site • Work effectively with others <p>S/He would receive components of the solar PV power plant, check them for specifications and quality and get the solar PV power plant installed as per the design.S/He would also get the substation and grid interface constructed incorporating grid code and regulatory provisions. He will be able to commission DC and AC parts of solar power plant and undertake grid connection, data acquisition and monitoring equipment installed.</p>
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14	<p>Solar PV Project Manager(E&C) SGJ/Q0114</p> <p>Trainee Qualification: B.E. / B.Tech. in Engineering and technology or Construction Management or related Discipline + 6 years of experience in renewable energy/power sector utilities/consulting firms/ PV power plant installation and commissioning Or M.Sc. / M.Tech. / MBA + 3 years of experience in renewable energy/power sector utilities/consulting firms/ PV power plant installation and commissioning. Minimum Age: 30</p> <p>Trainer Qualification: 7 years of experience in managing installation & commissioning of Solar PV projects for B.E./ B.Tech. in Engineering and Technology Or 5 years of experience in managing installation & commissioning of Solar PV projects for M.Sc. / M.Tech. / MBA</p> <p>Assessor Qualification: 8 years of experience in managing installation & commissioning of Solar PV projects for B.E./ B.Tech. in Engineering and Technology Or 6 years of experience in managing installation & commissioning of Solar PV projects for M.Sc. / M.Tech. / MBA</p> <p>And the education qualification can be relaxed in case of extraordinary relevant field experience.</p>	5	80	<p>After the training, the candidate would be suitable to work as Solar PV Project Manager (E&C) with competency to manage erection and commissioning of one/ multiple solar PV power plants at one site or different sites. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Manage installation of solar PV power plant • Maintain health & safety at project site • Work effectively with others <p>S/He with his team of site in-charge and commercial manager, receives different components of the solar PV power plant (modules, inverter, transformers etc.) procured as per the design, checks the components for specifications and quality, installs the solar PV power plant as per the design, construct the substation and grid interface incorporating grid code and regulatory provisions incorporated in the design.</p>
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15	<p>Solar PV Maintenance Technician -Electrical (Ground Mount) SGJ/Q0115</p> <p>Trainee Qualification: ITI - Electrical and Electronics Minimum Age: 18</p> <p>Trainer Qualification: Graduate with two years of experience in Operation and Maintenance of Solar PV power plant.</p> <p>Assessor Qualification: Graduate with three years of experience in Operation and Maintenance of Solar PV power plant.</p>	4	200	<p>After the training, the candidate would be suitable to work as Solar PV Maintenance Technician for electrical components in a ground mount power plant. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Carry out electrical maintenance of the ground mount solar PV power plant • Maintain personal health & safety at solar PV power plant • Work effectively with others <p>S/He would be able to periodically check and maintain all the electrical components of the solar PV power plant for proper electrical connectivity, incorporating quality craftsmanship and complying with all applicable codes, standards, and safety requirements.</p>
16	<p>Solar PV Maintenance Technician - Civil (Ground Mount) SGJ/Q0116</p> <p>Trainee Qualification: 10th pass preferred Minimum Age: 18</p> <p>Trainer Qualification: Graduate with two years of experience in Operation and Maintenance of Solar PV power plant.</p> <p>Assessor Qualification: Graduate with three years of experience in Operation and Maintenance of Solar PV power plant.</p>	4	200	<p>After the training, the candidate would be suitable to work as Solar PV Maintenance Technician for civil components in a ground mount power plant. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Carry out civil/ mechanical maintenance of solar PV power plant • Maintain personal health & safety at solar PV power plant • Work effectively with others <p>S/He would be able to periodically checks all the civil / mechanical parts of the solar power plant for its stability and long life incorporating quality craftsmanship and complying with all applicable codes, standards, and safety requirements.</p>

17	<p>Solar PV O&M Engineer SGJ/Q0117</p> <p>Trainee Qualification: Diploma (Electrical/Electronics/ Civil/ Mechanical) or Pre-final engineering and technology candidate with 3 years of formal engineering education+ 1 year of relevant experience Minimum Age: 20</p> <p>Trainer Qualification: Graduate with one year of experience as certified solar PV O&M Engineer or Graduate with two years of experience in Operation and Maintenance of Solar PV power plant.</p> <p>Assessor Qualification: Graduate with two year of experience as certified solar PV O&M Engineer or Graduate with three years of experience in Operation and Maintenance of Solar PV power plant.</p>	5	200	<p>After the training, the candidate would be suitable to work as Solar PV O&M Engineer. S/He would be able to monitor operation of the Solar PV power plant using SCADA or any other monitoring system.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Operate Solar PV power plant • Carry out electrical maintenance of Solar PV power plant • Carry out civil / mechanical maintenance of Solar PV power plant • Maintain personal health & safety at project site • Work effectively with others <p>S/He would be able to keep watch on voltages at various levels, operational efficiencies of individual components, generation of power; computes performance ratio and compares with simulated values etc. S/He is trained to identify electrical faults from SCADA/any monitoring system and get them rectified in the plant down to modules string level. S/He also trained to maintain civil and mechanical works of the plant through maintenance team.</p>
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18	<p>Solar Off Grid Entrepreneur SGJ/Q0118</p> <p>Trainee Qualification: 12th pass preferably Minimum age: 18</p> <p>Trainer Qualification: Graduate+2 years of working experience in Solar off-grid sector</p> <p>Assessor Qualification: Graduate+3 years of working experience in Solar off-grid sector</p> <p>And the education qualification can be relaxed in case of extraordinary relevant field experience.</p>	5	200	<p>After the training, the candidate would be suitable to work as Solar Off Grid Entrepreneur, who does business of solar off grid systems.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Develop solar lighting solutions business • Develop solar PV pumping business • Develop solar PV off – grid power plant business • Entrepreneurship skills • Maintain personal health and safety at project site • Work effectively with others <p>S/he would be able to identify potential market and the client needs / requirements to propose the right kind of technically and economically feasible Off Grid Solar solution. S/he is well acquainted with Government policies and different suppliers of Off Grid solar solutions like home lighting, lanterns, street lighting, small solar systems and pumps. S/he will be able to select right product from the suppliers and sells them to the customer. S/he would have knowledge of standard installation and maintenance practices for different kinds of Off Grid solar products.</p>
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19	<p>Solar PV Manufacturing Technician SGJ/Q0119</p> <p>Trainee Qualification: 10th pass preferably Minimum Age:18</p> <p>Trainer Qualification: Graduate with two years of work experience in a solar PV module manufacturing plant.</p> <p>Assessor Qualification: Graduate with three years of work experience in a solar PV module manufacturing plant.</p> <p>And the education qualification can be relaxed in case of extraordinary relevant field experience</p>	4 200	<p>After the training, the candidate would be suitable to work as Solar PV Manufacturing Technician. S/He would learn various processes involved in manufacturing of Solar PV Modules.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Carry out the manufacturing of Solar PV Modules • Maintain personal health & safety in a manufacturing facility • Work effectively with others <p>S/He would be able to clean and check front glass cover for the PV module; monitors the process of soldering solar cells to the strings to make interconnect, lamination of modules, framing of solar PV module, module testing and packaging for transit.</p>
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20	<p>Solar Lighting Technician (Options: Home Lighting System/ Street Lights) SGJ/Q0201</p> <p>Trainee Qualification: 8th pass preferably Minimum Age:18</p> <p>Trainer Qualification: 10th pass+ ITI or Diploma in technical education with one year of manufacturing solar lighting device or Two years of experience in O&M of solar lighting devices.</p> <p>Assessor Qualification: 10th pass+ ITI or Diploma in technical education with two year of manufacturing solar lighting device or three years of experience in O&M of solar lighting devices.</p>	4 160	<p>After the training, the candidate would be suitable to work as Solar Lighting Technician. S/He would assemble, tests and repairs different types of solar photovoltaic (SPV) lamps adhering to basic electrical standards.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Assembly of different types of solar lamps • Repair of solar lamps • Maintain personal health & safety in a manufacturing facility • Maintain Personal Health and safety at project site <p>Option1: Home lighting system Assembly and Repair of solar home lighting systems</p> <p>Option2: Street light Assembly and Repair of solar street lights</p>
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21	<p>Solar Domestic Water Heater Technician (Option: Manufacturing Technician) SGJ/Q0601</p> <p>Trainee Qualification: 8th pass preferably Minimum Age: 18</p> <p>Trainer Qualification: 10th pass+ ITI or Diploma in technical education with one year of manufacturing solar domestic water heater or two years of experience in O&M of solar domestic water heater.</p> <p>Assessor Qualification: 10th pass+ ITI or Diploma in technical education with two year of manufacturing solar domestic water heater or three years of experience in O&M of solar domestic water heater.</p>	4	200+ 100 optional	<p>After the training, the candidate would be suitable to work as Solar Domestic Water Heater Technician. S/He would specialize in the installation, commissioning and maintenance of Solar Water Heaters. He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Carry out installation and commissioning of Solar Water Heater • Carry out maintenance of Solar Water Heater • Maintain personal health & safety at solar thermal project site • Work effectively with others Option: Manufacturing Technician • Carry out manufacturing of Solar Water Heater Tank <p>S/He would be able to install, commission and maintain solar water heater of a desired capacity designed as per the specifications of components such as collectors (PFC/ETC), storage tanks, hot and cold water pipelines, piping for hot water up to the use point, heat exchanger, circulation pumps, controls etc.</p> <p>Option: Manufacturing Technician: As an additional skill, manufacturing of Solar Water Heater Tank will be offered as it complements the skills of the technician and helps him in lean periods of seasonal business.</p>
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22	<p>Solar Thermal Plant Installation & Maintenance Technician SGJ/Q0602</p> <p>Trainee Qualification: 10th pass + ITI/Diploma (Civil, Plumbing, Mechanical) Minimum Age: 18</p> <p>Trainer Qualification: 10th pass+ITI/Diploma (Civil, Plumbing, Mechanical) + 2 years of relevant experience</p> <p>Assessor Qualification: 10th pass+ITI/Diploma (Civil, Plumbing, Mechanical) + 3 years of relevant experience</p>	4	280	<p>After the training, the candidate would be suitable to work as Solar thermal plant installation and maintenance technician. He specializes in the installation, testing, commissioning and maintenance of solar thermal systems. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Carry out Installation, testing and commissioning of solar thermal systems • Carry out maintenance of solar thermal systems • Maintain personal health & safety at solar thermal project site • Work effectively with others <p>S/He would be able to install, test, commission and maintain foundations for mounting structures for the trackers, tracker mounting, reflectors, receivers, heat extracting fluid and the pipes through which it is circulating, fluid circulating pumps, expansion tank, storage tanks, heat exchangers, safety valves etc of the solar thermal system. S/he ensures smooth working of system and early diagnostic and rectification of fault to minimize system dead time.</p>
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23	<p>Solar Thermal Engineer - Industrial Process Heat (Option: Consultant) SGJ/Q0603</p> <p>Trainee Qualification: B.E. / B.Tech (Mechanical /Chemical/ Civil) Minimum Age: 21</p> <p>Trainer Qualification: B.E. / B.Tech (Mechanical /Chemical/ Civil)+ 2 years of experience as Solar Thermal Engineer</p> <p>Assessor Qualification: B.E. / B.Tech (Mechanical /Chemical/ Civil)+ 3 years of experience as Solar Thermal Engineer</p>	5	360+ 40 optional	<p>After the training, the candidate would be suitable to work as Solar Thermal Engineer -Industrial Process Heat. S/He would specialize in utilization, installation and maintenance of Solar Thermal Technologies based systems for supply of process heat in industry. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Design solar thermal technology solutions for industrial process heat applications • Ensure installation, testing and commissioning of solar thermal systems • Carry out maintenance of solar thermal systems • Maintain personal health & safety at solar thermal project site • Work effectively with others <p>Option: Solar Thermal Consultant Industrial Process Heat: S/He would be able to identify the requirement of heat at desired temperatures for different processes across the industry, identifies the solar thermal technologies capable of delivering heat at those temperatures with relative efficiencies and cost. S/He will be able to survey available open ground/ roof area for installation of solar thermal technologies, select the technology, gets system of appropriate capacity installed and integrate with the existing heat source and ensure regular maintenance of the system. S/He will be developing entrepreneurship skills for starting and managing new business.</p>
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IMPROVED BIOMASS COOKSTOVE

S. No	Qualification Pack Title	NSQF level	Training hours for Trainee	Description
24	<p>Improved Cook- Stove Installer SGJ/Q2101</p> <p>Trainee Qualification: 5th Pass Preferably Minimum Age: 18</p> <p>Trainer Qualification: High School/Intermediate with 2 years experience in civil/mason work</p> <p>Assessor Qualification: High School/Intermediate with 3 years experience in civil/mason work</p>	4	200	<p>After the training, the candidate would be suitable to work as Improved Cookstove Installer. S/He would specialize in construction of cookstove as per standard mould(s) and installation at appropriate site. S/He will be trained on:</p> <ul style="list-style-type: none"> • Collection of Materials and Preparation of Appropriate Mixture • Construction of Improved Cookstove • Installation and Demonstration of Improved Cookstove • Health and Work Safety while Construction and Installation of Improved • Cookstove Entrepreneurship in Installation of Improved Cookstove <p>S/He would be able to select materials, prepare appropriate mixture, construct cookstove as per standard mould(s), embedding non-masonry items, fire for curing, installation at the appropriate site and demonstrate functioning of the Cookstove.</p>

25	<p>Portable Improved Cookstove Assembler SGJ/Q2102</p> <p>Trainee Qualification: 10th Pass Minimum Age: 18</p> <p>Trainer Qualification: 10th Pass+ 2 years of relevant industry experience</p> <p>Assessor Qualification: 10th Pass+ 3 years of relevant industry experience</p>	3	200	<p>After the training, the candidate would be suitable to work as Portable Improved Cookstove Assembler. S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Collect Different Parts of Portable Improved Cookstove • Assemble and fit components of Portable Improved Cookstove • Work Safely while Assembling and Fitting of Component <p>S/he assembles and fits various parts of the cookstove to manufacture the final product which meets performance and reliability standards. He /She incorporates quality craftsmanship and complies with all applicable standards.</p>
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26	<p>Portable Improved Cookstove Sales and Maintenance Executive SGJ/Q2104</p> <p>Trainee Qualification: 8th Pass Minimum Age: 18 Years</p> <p>Trainer Qualification: 10th Pass + 2 years of experience in any sales and maintenance or similar profile</p> <p>Assessor Qualification: 10th Pass + 3 years of experience in any sales and maintenance or similar profile</p>	4	200	<p>After the training, the candidate would be suitable to work as Portable Improved Cookstove Sales and Maintenance Executive. After the training, s/he will be trained on:</p> <ul style="list-style-type: none"> • Identification and Operation of Portable Improved cookstove. • Demonstration and Handling of Sales of Portable Improved Cookstove. • Health and Work Safety while Identification and Demonstration of Portable Improved Cookstove. • Aftersales and Maintenance Services of Portable Improved Cookstoves <p>Portable improved cookstove sales and maintenance executive is responsible for marketing, selling and aftersales service of cookstove.</p>
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27	<p>Portable Improved Cookstove Distributor SGJ/Q2105</p> <p>Trainee Qualification: 12th Pass +Two years of experience in any distribution or similar operations. Minimum Age: 21 years</p> <p>Trainer Qualification: 12th pass with four years of experience in any distribution or similar occupation for 12th pass or Graduate with two years of experience in any distribution or similar occupation.</p> <p>Assessor Qualification: 12th pass with five years of experience in any distribution or similar occupation for 12th pass or Graduate with three years of experience in any distribution or similar occupation.</p>	6	200	<p>After the training, the candidate would be suitable to work as Portable Improved Cookstove Distributor. After the training, s/he will be trained on:</p> <ul style="list-style-type: none"> • Ensure statutory compliances, laws, policies and procedures • Develop product portfolio • Recruit key personnel for management of operations • Develop demand and distribution channel • Manage overall operations of the business and its expansion • Ensure health and safety in operations <p>S/He is responsible for increasing market for portable improved cookstoves through vendor selection, warehouse development, logistic and aftersales service support. S/He develops a portfolio of products, undertakes targeted promotion, and ensures availability of the products to potential customers.</p>
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WASTE MANAGEMENT				
S. No	Qualification Pack Title	NSQF level	Training hours for Trainee	Description
28	<p>Recyclable Waste Collector and Segregator SGJ/Q6101</p> <p>Trainee Qualification: 5th Pass Preferably Minimum Age:16</p> <p>Trainer Qualification: 10th Pass, Preferably+ Minimum 2 years of relevant industry experience</p> <p>Assessor Qualification: 10th Pass, Preferably+ Minimum 3 years of relevant industry experience</p>	4	160	<p>After the training, the candidate would be suitable to work as Recyclable Waste Collector. S/He would be responsible for collection and proper segregation of Recyclable waste.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Collect Recyclable waste. • Segregate Recyclable waste • Maintain health and work safety. • Entrepreneurship <p>S/He would be able to properly collect, identify different types of waste and segregate at source or at collection center as per recycling / reuse / disposal requirement.</p>

29	<p>Safai Karamchari (Option: Wet Cleaning/ Mechanized Cleaning) SGJ/Q6102</p> <p>Trainee Qualification: 5th Pass Preferably Minimum Age: 18</p> <p>Trainer Qualification: 10th Pass+ Minimum 2 years of experience in supervising cleaning activity</p> <p>Assessor Qualification: 10th Pass+ Minimum 3 years of experience in supervising cleaning activity</p>	3	160	<p>After the training, the candidate would be suitable to work as Safai Karamchari. S/he would be able to sweeps, cleans and removes garbage from public areas and buildings. S/he would learn about sweeping the floor, scrubs the floor using appropriate deaning solution to remove the fine dust. S/he would be able to removes the garbage and aggregates the garbage in the designated areas.S/He will be trained on:</p> <ul style="list-style-type: none"> • Cleaning of roads, pavements and public areas • Cleaning of floor(s) of buildings • Maintain personal health & safety while cleaning • Work effectively with others while cleaning <p>He would be able to sweep with a broom and / or other suitable equipment to remove dust, debris and garbage. In buildings, s/he will be able to sweep floor, scrub the floor using appropriate cleaning solution to remove the fine dust.</p> <p>Option1: Wet Cleaning S/he would specialize in wet cleaning, cleaning and washing bathrooms, lavatory and removing garbage and other waste in closed dustbin.</p> <p>Option2: Mechanized Cleaning S/he will specialize in mechanized cleaning sweeps, cleaning and Removing garbage with the help of vacuum cleaner, mechanical sweeper, mechanical sweeper ride and mechanized scrubbing machine.</p>
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30	<p>Waste Picker SGJ/Q6103</p> <p>Trainee Qualification: NA Minimum Age: 18 years</p> <p>Trainer Qualification: 10th Pass, Preferably+ Minimum 2 years of relevant industry experience or working in relevant NGO/ Organizations.</p> <p>Assessor Qualification: 10th Pass, Preferably+ Minimum 3 years of relevant industry experience or working in relevant NGO/ Organizations.</p>	3	160	<p>After the training, the candidate would be suitable to work as Waste picker. He / she will be able to collect and recover reusable and recyclable solid waste from the source of waste generation for sale to recyclers directly or through intermediaries to earn his / her livelihood.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> • Search and collect reusable and recyclable refuse • Preparation and sale of reusable and recyclable refuse • Collection of waste from door-to-door • Maintain personal health and safety <p>S/He would be able to prepare the equipment used for waste collection, identify source of waste generation in local area including the streets, bins, landfills, material recovery facilities, processing and waste disposal facilities. Also identify different color codes used in waste management. As per type of refuse, s/he would suitably modify the collected waste, possibly for a better value.</p>
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WASTEWATER TREATMENT				
S. No	Qualification Pack Title	NSQF level	Training hours for Trainee	Description
31	<p>Wastewater treatment plant technician SGJ/Q6601</p> <p>Trainee Qualification: 12th Pass, 10th Pass+ITI/Diploma, 8th pass + 4 years experience as Wastewater Treatment Plant Helper Minimum Age:18 Years</p> <p>Trainer Qualification: ITI /Diploma+ Minimum 3 years of relevant industry experience or Minimum 2 years of relevant industry experience for B.Tech and The education qualification can be relaxed in case of extraordinary relevant field experience.</p> <p>Assessor Qualification: ITI /Diploma+ Minimum 4 years of relevant industry experience for ITI/Diploma or Minimum 3 years of relevant industry experience for B.Tech and The education qualification can be relaxed in case of extraordinary relevant field experience.</p>	4	200	<p>After the training, the candidate would be suitable to work as Wastewater Treatment Plant Technician. S/He would specialize in operation & maintenance of the Industrial and Housing Societies Wastewater Treatment Plants.S/He will be trained on and will be able to:</p> <ul style="list-style-type: none"> Operate the Wastewater Treatment Plant Monitor and Maintain Wastewater Treatment Plant Work Safety at Wastewater treatment plant. <p>S/He would be able to operate Wastewater Treatment Plant and other related equipment. S/He would be able to perform the operation and cleaning of different screens, valves in a Wastewater Treatment Plant and charge the slurry tank. S/He would be able to do add desired quantity of chemicals and microbes to treat water. S/He would also facilitate the calibration of process control equipment as needed.</p>

32	<p>Wastewater treatment plant Helper SGJ/Q6602</p> <p>Trainee Qualification: 8th Pass Minimum Age: 18</p> <p>Trainer Qualification: ITI /Diploma+ Minimum 3 years of relevant industry experience or Minimum 2 years of relevant industry experience for B.Tech and The education qualification can be relaxed in case of extraordinary relevant field experience.</p> <p>Assessor Qualification: ITI /Diploma+ Minimum 4 years of relevant industry experience or Minimum 3 years of relevant industry experience for B.Tech and The education qualification can be relaxed in case of extraordinary relevant field experience</p>	3	160	<p>After the training, the candidate would be suitable to work as Wastewater Treatment Plant Helper. S/He would assist in Operation and Maintenance of Industrial and Housing Societies Wastewater Treatment Plant.S/He will be trained on:</p> <ul style="list-style-type: none"> Maintain the Wastewater Treatment Plant. Assist the Supervisor in Wastewater Treatment Plant Work Safety at Wastewater treatment plant. <p>S/He would be able to help in operation of Wastewater Treatment Plant and other related equipment. He would be able to measure and record all meter and gauge readings, perform maintenance on filters and valves, Cleaning of Tanks, cleaning of work area and equipment.</p>
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WIND ENERGY				
S. No	Qualification Pack Title	NSQF level	Training hours for trainee	Description
33	<p>Assistant Planning Engineer – Wind Power Plant SGJ/Q1201</p> <p>Trainee Qualification: ITI / Diploma (Electrical, Mechanical, Civil) Minimum Age:18 Years</p> <p>Trainer Qualification: ITI /Diploma+ Minimum 3 years of relevant industry experience or BE/B.Tech with Minimum 2 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience.</p> <p>Assessor Qualification: ITI /Diploma+ Minimum 4 years of relevant industry experience for ITI/Diploma or BE/B.Tech with Minimum 3 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience.</p>	4	200	<p>After the training, the candidate would be suitable to work as Assistant Planning Engineer – Wind Power Plant. S/He will be trained on:</p> <ul style="list-style-type: none"> • Assist in project planning for wind power plant • Assist in project evaluation and monitoring for wind power plant • Perform basic health and safety practices at project site (Ground and Height) • Work effectively with others <p>S/He would carry out planning of workflow for turbines & electrical system's Erection & Commissioning (E&C), conduct statistical studies of product quality and time usage and analyse production costs and complying with all operational manuals, applicable codes, standards and safety requirements.</p>
34	<p>Site Surveyor-Wind Power Plant SGJ/Q1202</p> <p>Trainee Qualification: B.E. / B. Tech. (Electrical/ Mechanical/ Civil/ Electronics and Communication / Electrical and Electronics/ Control & Instrumentation) Minimum Age:21 Years</p> <p>Trainer Qualification: B.E/B. Tech (Electrical/ Mechanical/ Civil/ Electronics and Communication / Electrical and Electronics/ Control & Instrumentation) with 2 years of relevant industry experience or M.E/M. Tech (Electrical, Electronics, Instrumentation, Renewable Energy) with 1 years of relevant industry experience</p> <p>Assessor Qualification: B. Tech (Electrical/ Mechanical/ Civil/ Electronics and Communication / Electrical and Electronics/ Control & Instrumentation) with 3 years of relevant industry experience or M.E/M. Tech (Electrical, Electronics, Instrumentation, Renewable Energy) with 2 years of relevant industry experience</p>	6	120	<p>After the training, the candidate would be suitable to work as Site Surveyor - Wind Power Plant. S/He will be trained on:</p> <ul style="list-style-type: none"> • Conduct site survey for wind power plant • Perform basic health and safety practices at project site (Ground and Height) • Work effectively with others <p>S/He carries out site inspection, site assessment, checking site access, approach roads, grid availability for power evacuation, substation availability & its capacity and other relevant proximity of site.</p>

35	<p>Construction Technician (Mechanical) - Wind Power Plant SGJ/Q1401</p> <p>Trainee Qualification: 12th pass, preferably Minimum Age:18 Years</p> <p>Trainer Qualification: ITI /Diploma+ Minimum 3 years of relevant industry experience or BE/B.Tech with Minimum 2 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience</p> <p>Assessor Qualification: ITI /Diploma+ Minimum 4 years of relevant industry experience for ITI/Diploma or BE/B.Tech with Minimum 3 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience.</p>	4	200	<p>After the training, the candidate would be suitable to work as Construction Technician (Mechanical) - Wind Power Plant. S/He will be trained on:</p> <ul style="list-style-type: none"> • Carry out the installation of mechanical components of wind power plant • Perform testing and commissioning of mechanical components of wind power plant • Perform basic health and safety practices at project site • Work effectively with others <p>S/He carries out installation, testing, erection & commissioning of all mechanical parts & components of wind power plant including WTG, transformer, blades, nacelle, junction boxes and other associated accessories as per design drawing.</p>
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36	<p>Construction Technician (Civil) - Wind Power Plant SGJ/Q1402</p> <p>Trainee Qualification: 12th pass, preferably Minimum Age:18 Years</p> <p>Trainer Qualification: ITI /Diploma+ Minimum 3 years of relevant industry experience or BE/B.Tech with Minimum 2 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience.</p> <p>Assessor Qualification: ITI /Diploma+ Minimum 4 years of relevant industry experience for ITI/Diploma or BE/B.Tech with Minimum 3 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience</p>	4	200	<p>After the training, the candidate would be suitable to work as Construction Technician (Civil) - Wind Power Plant. S/He will be trained on:</p> <ul style="list-style-type: none"> • Carry out installation of civil components of wind power plant • Perform basic health and safety practices at project site (Ground and Height) • Work effectively with others <p>S/He undertakes site labelling, tower foundation, transformer foundation, switchyard & switchgear foundation and control room building foundation as per design drawing and preparation of approach road to the site.</p>
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37	<p>Construction Technician (Electrical) - Wind Power Plant SGJ/Q1403</p> <p>Trainee Qualification: 12th pass, preferably Minimum Age:18 Years</p> <p>Trainer Qualification: ITI /Diploma+ Minimum 3 years of relevant industry experience or BE/B.Tech with Minimum 2 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience.</p> <p>Assessor Qualification: ITI /Diploma+ Minimum 4 years of relevant industry experience for ITI /Diploma or BE/B.Tech with Minimum 3 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience</p>	4	200	<p>After the training, the candidate would be suitable to work as Construction Technician (Electrical) - Wind Power Plant.S/He will be trained on:</p> <ul style="list-style-type: none"> • Carry out installation of electrical components of wind power plant • Perform testing and commissioning of electrical components of wind power plant • Perform basic health and safety practices at Project Site (Ground and Height) • Work effectively with others <p>S/He carries out installation, testing & commissioning of wind power plant including WTG, transformer, poles, O/H line, U/G cables, junction boxes, feeder pillars and other associated accessories like CMS with applicable codes, standards, and safety requirements.</p>
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38	<p>CMS Engineer- Wind Power Plant SGJ/Q1501</p> <p>Trainee Qualification: B. Tech (Electrical, Electronics) Minimum Age:20 Years</p> <p>Trainer Qualification: B.E/B. Tech (Electrical, Electronics) with 3 years of relevant industry experience or M.E/M. Tech (Electrical, Electronics, Instrumentation, Renewable Energy) with one years of relevant industry experience</p> <p>Assessor Qualification: B.E/B. Tech (Electrical, Electronics) with 4 years of relevant industry experience or M.E/M. Tech (Electrical, Electronics, Instrumentation, Renewable Energy) with two years of relevant industry experience</p>	5	200	<p>After the training, the candidate would be suitable to work as CMS Engineer- Wind Power Plant. S/He responsible for carrying out installation and commissioning of Condition Monitoring System (CMS) of the wind power plant. S/He will be trained on:</p> <ul style="list-style-type: none"> • Carry out installation and commissioning of Condition Monitoring System of Wind Power Plant • Operate and Maintain CMS of Wind Power Plant • Perform basic health and safety practices at Project site (Ground and Height) • Work effectively with others <p>S/he further, plans and monitors the operation and maintenance of the CMS with a continuous stream of system data, mostly based on vibration monitoring and other operating conditions.</p>
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39	<p>O&M Mechanical Technician – Wind Power Plant SGJ/Q1502</p> <p>Trainee Qualification: 12th pass, preferably Minimum Age:18 Years</p> <p>Trainer Qualification: ITI /Diploma+ Minimum 3 years of relevant industry experience or BE/B.Tech with Minimum 2 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience.</p> <p>Assessor Qualification: ITI /Diploma+ Minimum 4 years of relevant industry experience for ITI/Diploma or BE/B.Tech with Minimum 3 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience</p>	4	200	<p>After the training, the candidate would be suitable to work as O&M Mechanical Technician–Wind Power Plant. S/He will be trained on:</p> <ul style="list-style-type: none"> • Carry out operation of mechanical components of wind power plant • Carry out maintenance of mechanical components of wind power plant • Perform basic health and safety practices at project site (Ground and Height) • Work effectively with others <p>S/He carries out operation and maintenance of mechanical components of wind power plant, complying with all operational manuals, applicable codes, standards, and safety requirements.</p>
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40	<p>O&M Electrical & Instrumentation Technician – Wind Power Plant SGJ/Q1503</p> <p>Trainee Qualification: 12th pass, preferably Minimum Age:18 Years</p> <p>Trainer Qualification: ITI /Diploma+ Minimum 3 years of relevant industry experience or BE/B.Tech with Minimum 2 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience.</p> <p>Assessor Qualification: ITI /Diploma+ Minimum 4 years of relevant industry experience for ITI/Diploma or BE/B.Tech with Minimum 3 years of relevant industry experience and The education qualification can be relaxed in case of extraordinary relevant field experience</p>	4	200	<p>After the training, the candidate would be suitable to work as O&M Electrical & Instrumentation –Wind Power Plant. S/He would inspect, diagnose, troubleshoot and repair electrical & instrumentation systems of wind power plant. S/He will be trained on:</p> <ul style="list-style-type: none"> • Carry out operation of electrical & instrumentation systems of wind power plant • Carry out maintenance of electrical & instrumentation systems of wind power plant • Perform basic health and safety practices at project site (Ground and Height) • Work effectively with others <p>S/he is expected to perform operation and maintenance of switchgear, transformer, O/H and U/G Lines, SCADA, communication system (Fiber Optics) and complying with all operational manuals, applicable codes/standards, and safety requirements.</p>
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