



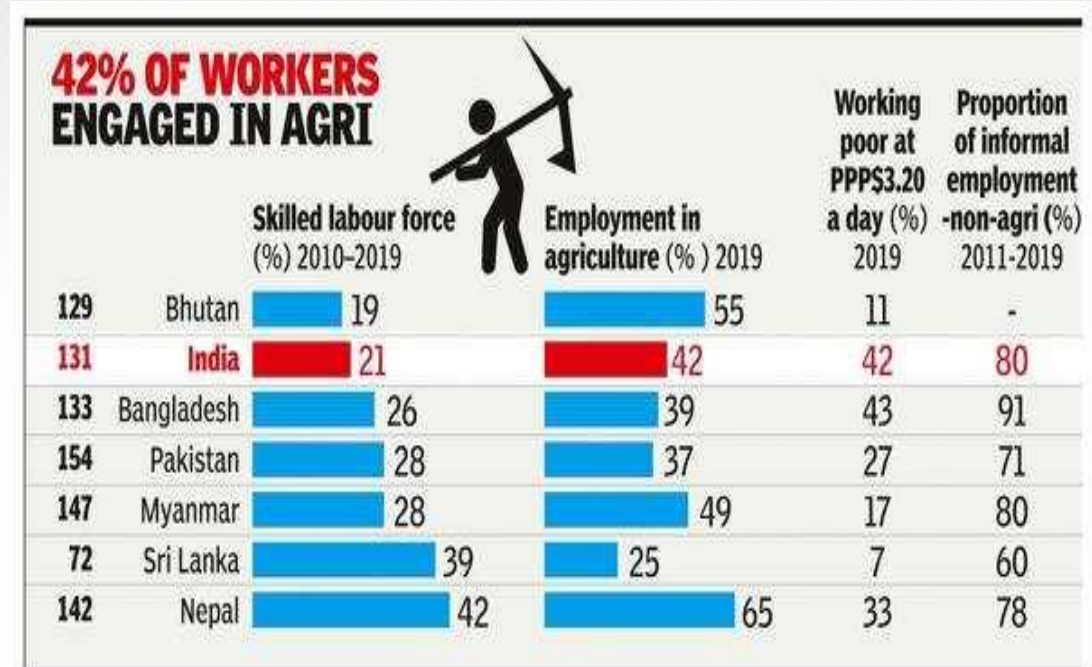
Online Event on Green Skills by Euro Chambers

Skilling for Green Jobs

2nd June 2022

Workforce potential in India

- India is one of the youngest nations in the world with more than 62% population in the working age group (15-59 years) and more than 54% in below 25 years of age
- As per Human Development Report, 2020(UNDP), Skilled labour force availability was about 21% out of total workforce in India in between 2010-2019.
- To reap this demographic dividend which is expected to last for next 25 years, India needs to equip its workforce with employable skills and knowledge so that they can contribute substantively to the economic growth of the country.



National Policy for Skill Development & Entrepreneurship 2015

- In order to ensure availability of skilled workforce, Government of India has set up Ministry of Skill Development and Entrepreneurship (MSDE) in Nov, 2014 to coordinate all skill development efforts across the country.
- National Policy for Skill Development and Entrepreneurship 2015 formulated by MSDE outlines the umbrella framework for all skilling activities and entrepreneurship development
- Skill India Mission launched on 15th July 2015 to give direction to key bodies and bring together all stakeholders of the skill ecosystem.



Sector Skill Councils(SSCs)

- National Skill Development Corporation (NSDC) set up Sector Skill Councils(SSCs) for development of sector specific competence of skills.
- SSCs are autonomous industry-led bodies for ensuring that skill development efforts being made by all stakeholders in the system are in accordance with actual needs of industry.
- They create Occupational Standards, develop competency framework, conduct Train & Trainer Programs, affiliate Vocational Training Institute, conduct skill gap studies and most importantly Assess & certify trainees on the curriculum aligned to NOS developed by them.
- At present there are about 38 sector skill councils and Skill Council for Green Jobs (SCGJ) is one of them set up in October 2015.



Skill Ecosystem in India

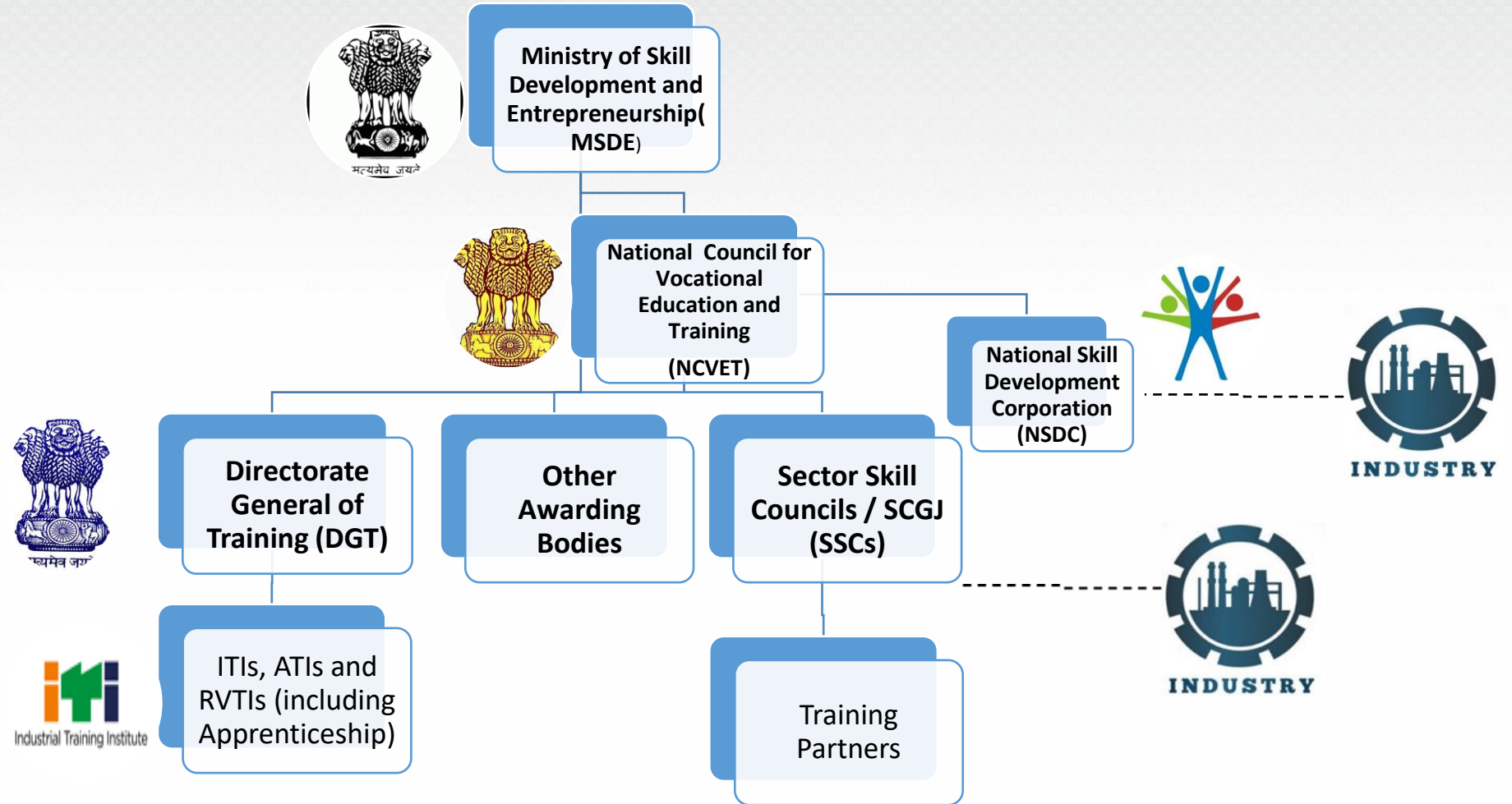


Mission

Policy

Awarding Bodies

Implementation



Sector Skill Councils are Industry lead bodies with strong linkage with domain Industry

About Skill Council for Green Jobs

Skill Council for Green Jobs (SCGJ) is the sector skill council created by the Ministry of Skill Development and Entrepreneurship (MSDE) and is working in the domain of capacity building for green businesses and cutting edge climate friendly technologies. SCGJ has been incorporated as a Society in October, 2015, which is being managed by industry led Governing Council. The SCGJ scope covers the entire gamut of “Green Businesses”, viz Renewable Energy, Sustainable Development, Green Construction, Green Transport, Green Hydrogen, Solid Waste Management, Water Management & e-Waste Management, hence would have pan India impact.

National Council for Vocational Education and Training (NCVET) has recognised SCGJ as its Awarding Body.

The focus of SCGJ has been to establish a strong industry connect in all its areas of work. SCGJ is building on its industry connect with a government-industry interface and partnership with stakeholders from industry, labour 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 Housing and Urban Affairs, Ministry of Jal Shakti and NITI Aayog to cater to the skilled manpower requirements for the changing scenario. Skill council for Green Jobs is working towards introducing environmental friendly and sustainability in existing job roles as well.



OUR MISSION

To capture the skilling needs for both service users and manufacturers/ service providers within the sector and implement a roadmap for a nation-wide, industry led collaborative skills and entrepreneur development initiatives that will enable meet India's potential for “Green Businesses”.



OBJECTIVE

Quality training to meet industry expectation and to promote skill development for Green Business and energy and environment conservation.





At the Glasgow summit, Hon'ble Prime Minister announced that India will attain net zero emissions by 2070, to combat climate change. He also announced that India will raise its non-fossil energy capacity to 500 GW by 2030 while meeting 50% of its energy demand from renewable sources, and cut its carbon emissions by a billion tonnes by the same year.

500 GW RE
by 2030

Key Sectors covered under SCGJ

Key Sectors covered under SCGJ

Renewable Energy

1. Solar PV
2. Solar Thermal
3. Wind
4. Hydro
5. Energy Storage
6. Biomass Power / Cogen + CHP
7. Clean Cook-Stoves
8. Bio fuels & Biogas (compressed biogas/Waste to Energy)

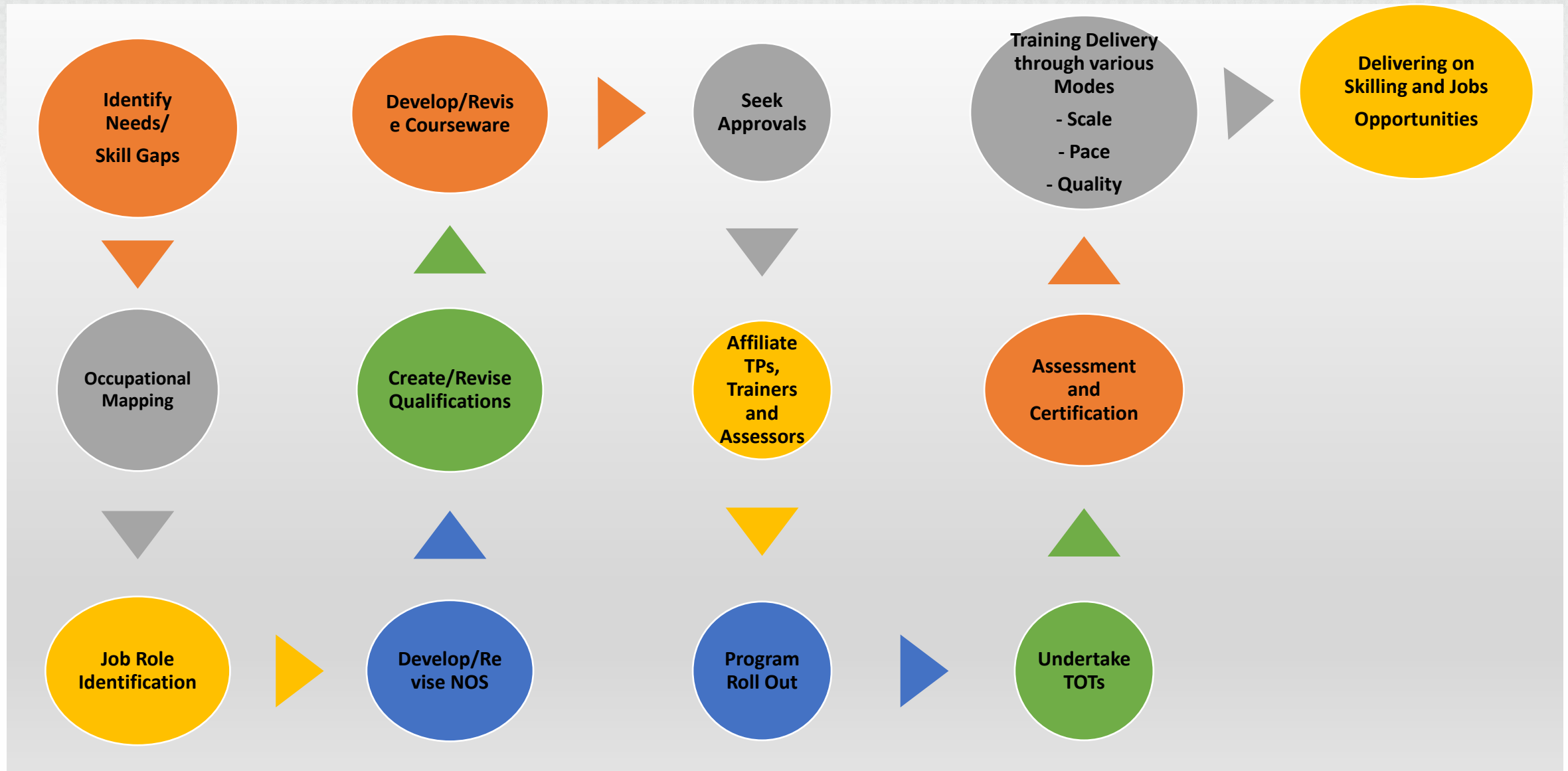
Environment, Forest and Climate Change

9. Solid waste management
 - Municipal
 - Agriculture and animal husbandry
10. Water Management
 - Sewage treatment
 - Rain Water Harvesting and Micro-irrigation
11. E-Waste Management
12. Carbon Sinks
 - TBO-Oil Seeds
 - Agro-Forestry + Plantation

Sustainable Development

13. Green Construction
 - Green Buildings
 - Green Campuses
14. Green Transportation
 - Electric Vehicles
 - Bio-fuels Vehicles
 - Bio-CNG Vehicles
15. Pollution prevention and control
16. Green Hydrogen
17. Energy Storage

Working Strategy of SCGJ



Skill Gap Studies



Skill Gap Studies for the following sub-sectors were completed, Through EY in 2016 and revised in 2018:

- Solar PV (Jobs and skilling studies implemented every year for solar and wind sector)
- Solar Thermal
- Wind Energy
- Small Hydro Energy

Through KPMG in the year 2017:

- Solid Waste Management (Also Being undertaken in FY 21-22)
- Water Management
- Green Construction
- Carbon Sinks
- Clean Cooking

Studies have also been conducted in domestic solar & wind sector; Compressed Biogas/ Waste to Energy Segment and Solar Pumping

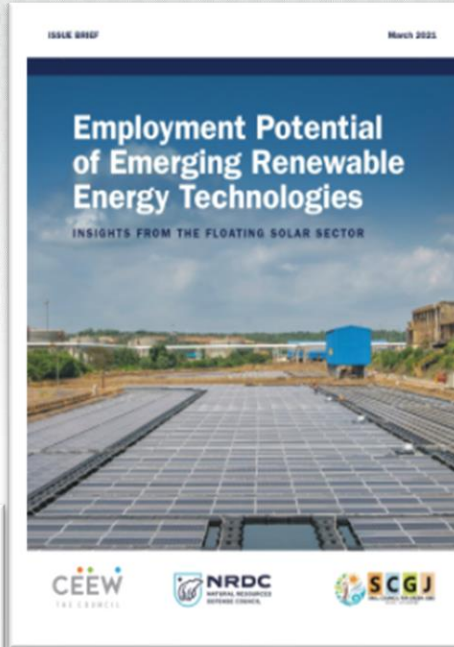
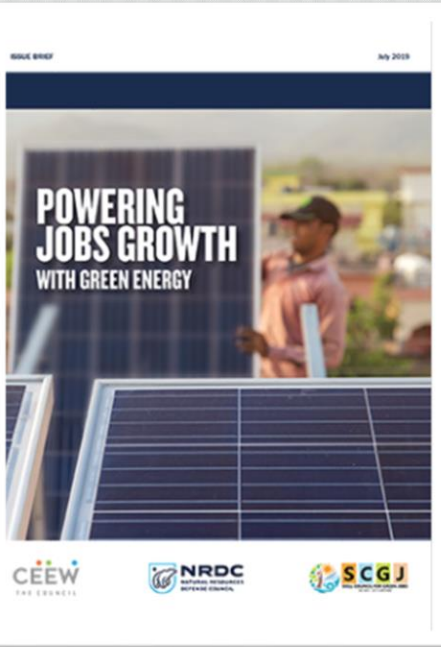
New Skills Gaps studies are proposed to be undertaken in

- Hydrogen Economy
- Battery Storage
- Circular Economy
- Pollution Prevention & Control

Under implementation

- Skill Gap Assessment in solid Waste management in selected Metro cities
- JP Morgan Chase funded Study “ON THE LANDSCAPE OF GREEN JOBS IN INDIA”

Selected Studies on Skilling and Jobs



List of existing NSQF aligned qualifications

S.No	Qualification	Code	NSQF level
1	Solar PV Installer (Suryamitra)	SGJ/Q0101	4
2	Solar PV Installer – Electrical	SGJ/Q0102	4
3	Solar PV Installer – Civil	SGJ/Q0103	4
4	Solar Proposal Evaluation Specialist	SGJ/Q0105	5
5	Rooftop Solar Grid Engineer	SGJ/Q0106	5
6	Solar PV Business Development Executive	SGJ/Q0107	5
7	Solar PV Structural Design Engineer	SGJ/Q0109	5
8	Solar PV Designer	SGJ/Q0110	7
9	Solar PV Project Helper	SGJ/Q0111	2
10	Solar PV Engineer	SGJ/Q0112	5
11	Solar PV Project Manager (E&C)	SGJ/Q0114	7
12	Solar PV Maintenance Technician - Electrical (Ground Mount)	SGJ/Q0115	4
13	Solar Photovoltaic Entrepreneur	SGJ/Q901	5
14	Solar PV Manufacturing Technician/Operator	SGJ/Q0119	4
15	Solar Lighting Assembler (Elective: Home Lighting System/ Street Lights)	SGJ/Q0201	4

✓ SCGJ has 44 QPs which are NSQC approved and have been declared National Qualifications. These Q-Files are available on the portal of National Qualification Register ([NQR](#)).

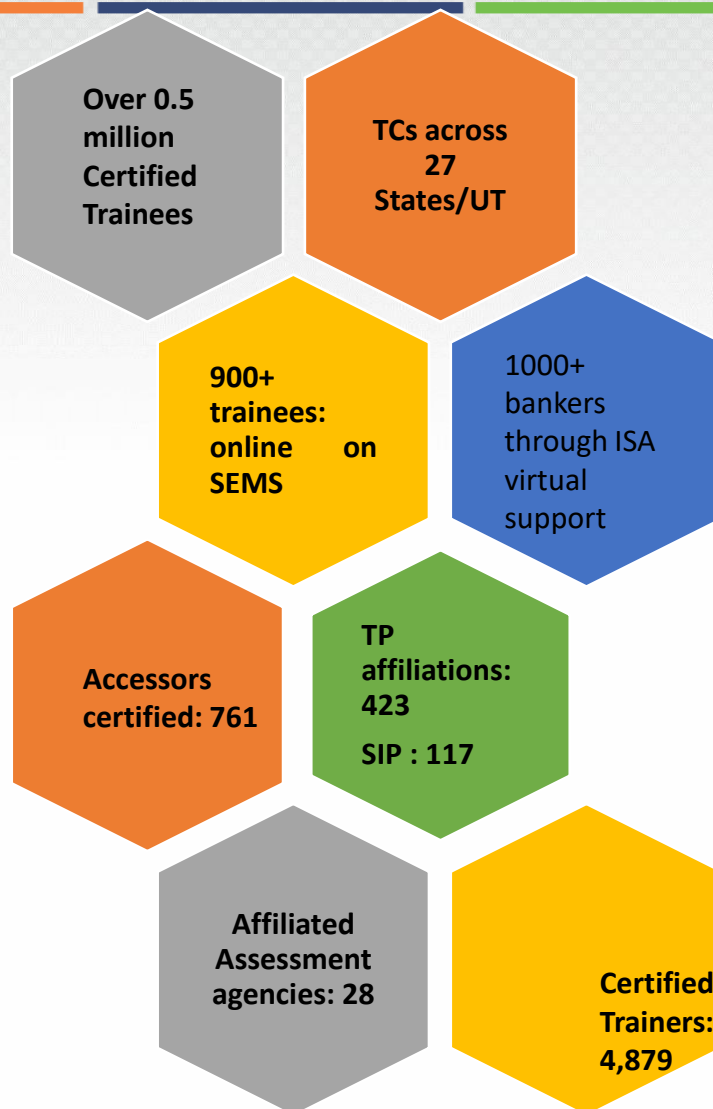
S.No.	Qualification	Code	NSQF level
16	Recyclable Waste Collector and Segregator	SGJ/Q6101	4
17	Safai Karamchari (Elective: Wet Cleaning / Mechanized Cleaning)	SGJ/Q6102	3
18	Waste Picker	SGJ/Q6103	3
19	Wastewater treatment plant technician	SGJ/Q6601	4
20	Wastewater treatment plant Helper	SGJ/Q6602	3
21	Agri-residue Aggregator	SGJ/Q6201	4
22	Animal Waste Manure Aggregator (Option: Biogas Plant Operator/Compost Plant Opt.)	SGJ/Q6302	4
23	Biomass Depot Operator	SGJ/Q6207	4
24	Manager- Waste Management (Ele.: Biomass Depot/Compost Yard/Dry Waste Center)	SGJ/Q6501	6
25	Septic Tank Technician	SGJ/Q6402	4
26	Desludging Operator	SGJ/Q6403	4
27	Fecal Sludge Treatment Plant O&M Technician	SGJ/Q6404	4
28	Improved Cookstove Installer	SGJ/Q2101	5
29	Portable Improved Cookstove Assembler	SGJ/Q2102	3
30	Portable Improved Cookstove Sales Executive	SGJ/Q2104	4
31	Portable Improved Cookstove Distributor	SGJ/Q2105	6
32	Technician-Paper Bag Manufacturing	SGJ/Q8701	3
33	Paper Bag Maker	SGJ/Q8702	5

SCGJ Qualifications

S.N o	Qualification	Code	NSQF level
34	Construction Technician- Wind Power Plant		4
35	O&M Electrical & Instrumentation Technician –Wind Power Plant		4
36	O&M Mechanical Technician - Wind Power Plant		4
37	Wind Resource Assessor and Site Surveyor - Wind Power Plant		5
38	CMS Engineer - Wind Power Plant		5
39	Project Assistant Planner - Wind Power Plant		3
40	Small Hydro Power Plant Technician-(Jal Urja Mitra)		4
41	Feedstock Manager - Procurement and Composition		6
42	Plant Head - Operations (Compressed Biogas/Waste to Energy)		7
43	Technician - Operations and Maintenance (Compressed Biogas/Waste to Energy)		4
44	Supervisor - Operations and Maintenance (Compressed Biogas/Waste to Energy)		5

Sector wise Qualifications			
	NCO	NSQF	No. of QPs
1	Engineering and Design	5	1
2	Designer,	5	1
3	Manufacturing,	4,3	5
4	Installation, (O&M)	4,3,2,5	13
5	Management,	7,6	3
6	Inspection and Commissioning	5	1
7	Business Development,	5	1
8	Supply chain management	4	2
9	Production	4	1
10	Sanitation,	3	1
11	Waste Collection and Segregation	4,3	2
12	Marketing and sales	6.4	2

Impacts



- SCGJ has 44 NSQC approved qualifications in solar PV, wind energy, small hydro, waste and waste-water management, clean cookstove, bioenergy/Waste to energy etc

Qualifications used under Government schemes by

- Ministry of New and Renewable Energy
- Ministry of Social Justice and Empowerment;
- Ministry of Housing and Urban Affairs
- Various State Missions

SCGJ Entrepreneurship Initiative



- ▶ SCGJ received a CSR project on Technical and Vocational Training for 40 Solar Entrepreneurs from “Climate Policy Initiative India”
- ▶ SCGJ qualification on Solar Entrepreneurs was approved by NSQC in its 15th Meeting held on 27th January, 2022.

Solar Entrepreneur qualification has 4 options:

- Solar Rooftop
- Solar Water Pumping
- Solar Ground mount (Civil)
- Solar Ground mount (Electrical)

It is NSQF level 5 course

Under Solar Entrepreneur project of Climate Policy Initiative, the training is being done in two parts:

- 2 days online training on solar and short listing of candidates
- 2 days Physical training at different locations by SCGJ Master trainers.



Skill Council for Green Jobs
Presents

**2 Days Free Virtual Training Program
Solar Rooftop Entrepreneurs**

20th & 21st January 2022

Register & Enrol Now!
Visit: www.sems.training

LIMITED SEATS!
Enrol for the Virtual Training Batch: January 2022

Training Program Highlights

-  **Instructor-led Online Training Sessions**
7 sessions under Solar Rooftop Entrepreneurship.
-  **Training Platform**
SCGJ e-Learning Management System (www.sems.training).
-  **Training Duration**
2 Days - 6 Hours of Total Training.
-  **Assessment**
Online MCQ based Assessment.
-  **Rewards**
Training Certificate.
-  **Sponsored Physical Trainings for Top 40 Candidates**
Top 40 candidates would be shortlisted from the virtual training batches to attend sponsored physical trainings to be organized in Feb - March 2022 at Gurugram, Hyderabad and Ahmedabad.



SCAN THE QR CODE
TO REGISTER & ENROLL

Skill Council for Green Jobs | www.sscgj.in

Follow us on     

SCGJ Rozgar Portal | www.scgjrozgar.in

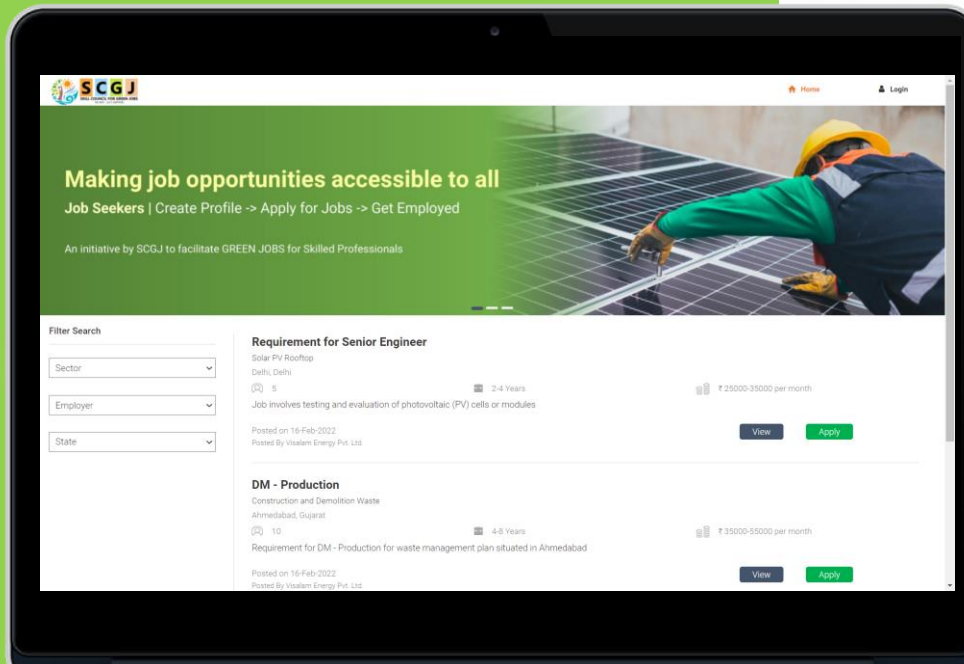
Skill Council for Green Job's Rozgar Portal is a unique technology intervention which makes job opportunities for skilled professional in green energy sector accessible by connecting them with coveted employers across India.

This technologically advanced solution is the brainchild of Skill Council for Green Jobs, which automates the entire talent acquisition process for employers, provides job opportunities to skilled workforce and help SCGJ make necessary interventions in Skill development activities to meet industry needs.



*Rozgar Portal will support
SCGJ mission to provide
**10 Lakhs Jobs by
2030***

Scan QR Code
to visit Rozgar Portal



EMPLOYER

Automates talent acquisition process for employers



CANDIDATE

Provides job opportunities to skilled workforce in green energy sector



SCGJ ADMIN

Interventions in skill development activities to meet industry needs



SCGJ e-learning Management System (SEMS) | www.sems.training

An initiative of Skill Council for Green Jobs to facilitate online skill activities in the Green Jobs sector by aggregating all its partners on a single digital platform and then making learning activities accessible to all candidates across India.

Build skills with online training & certificates from experts in green energy sector.

Scan QR Code
to learn from
SEMS

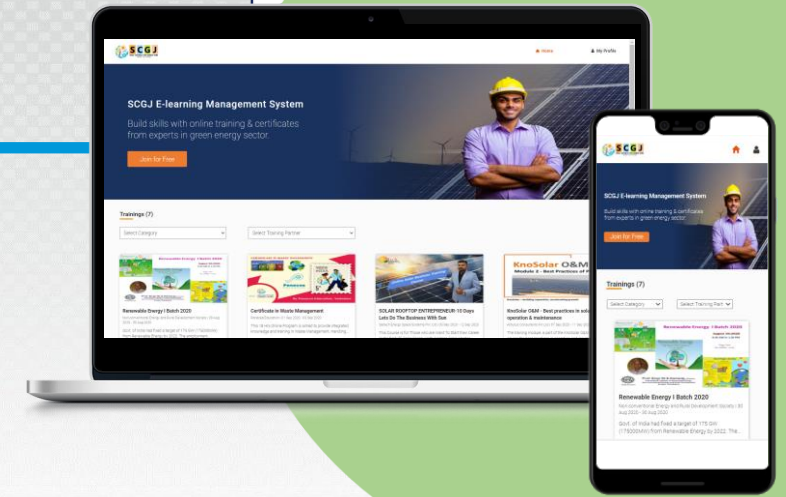


Learn from content on
SCGJ YouTube



Key Highlights

- 0 Online Trainings**
Dedicated portal to put information about your online trainings supported by SCGJ. TPs can spread awareness about innovative e-learning initiatives (webinars etc.)
- 0 Candidate Mobilization**
Option for candidates to register in your e-learning activities from SEMS portal. Candidates can view Training partner details (website) before registering.
- 0 MCQ Tests**
Feature for TPs to create online MCQ test for each e-learning activity. Option for candidates to attempt assessment test and view their result.
- 0 Online Training Certificate**
Instant certification generation for candidates who clear assessment. Study resources related to e-training can be made accessible to students.
- 0 Communication Interface**
Interface to interact with SCGJ for all TOT programs conducted online. Personalized TP Dashboard to monitor self performance.



Implementation of skill and Entrepreneurship development related Project

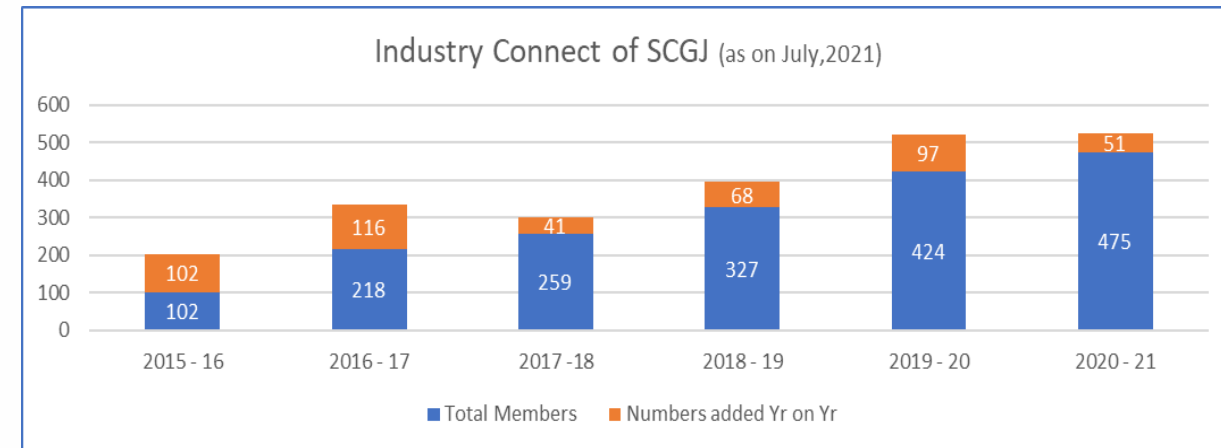


- Simultaneous intervention of renewable energy systems and skilling for smart model villages of Haryana adopted by Hon'ble President of India (completed) funded by IREDA and REC foundation
- Short term training of dependents of Safai Karamcharis supported by NSKFDC (completed)
- Upskilling Waste Pickers under RPL program me supported by NSKFDC (completed)
- 132 workshops on “Prevention of Hazardous Cleaning of Sewers and Septic Tanks” special assignment from NSKFDC. (completed)
- Capacity building and skill development partner under the World Bank Grid connected Rooftop Solar PV Technical Assistance Program. (completed)
- RPL training of 3225 Safai Karamcharis of NOIDA supported by HCL foundation, Noida. (completed)
- Skill training for 118 Wastewater Treatment Plant Technicians (completed)
- JP Morgan has sanctioned an in-depth study to map the green jobs landscape in India, with the objective to advance green jobs in the country.
- CSR project from SBI Cards to install 130 kW Solar PV power at Madan Mohan Malviya Hospital in Delhi.
- Association with more than 15 States/UTs for Skill related activities

- There is a regular interaction with industry and Industry Associations in various meetings and committees.
- SCGJ marketing Team interacts with the HR division of the industries for Demand Aggregation
- Industry is invited in various Job Melas for placement
- SCGJ facilitates Industry – TP interaction for long term placements
- Industry is member of the subject matter sub-committees for drawing Occupational Maps, QP development & review and obtaining industry validations
- Industry is also member of GC and Advisory Boards

Road map

- **SCGJ currently has 475 industries as members.**
- **It is proposed to add about 75 industries as members every year taking total number to 1250 by the year 2030.**
- **A placement target of 5 lakh candidates during 2021-2030 is planned**



About 1.04 lakh candidates have been trained in Short term trainings on the norms and standards prepared by SCGJ.

Among the major employers are:

- Renew Power,
- Adani Solar,
- Tata Solar Power,
- Waaree Energies,
- Goldi solar
- Patanjali Renewables,
- Vestas ,
- Suzlon,
- Hero Future Energies,
- Jakson Group,
- Small EPC contractors ,
- Solar installation contractors.

Average emoluments: Ranging from Rs.10,000 to Rs.18,000 PM



Specialized training conducted for Vestas
Wind Turbine Blades Manufacturing Facility

International Linkages

- ▶ SCGJ is working with GIZ, UNDP, FCDO and USAID to strengthen its quality of training and developing new qualifications on Green Hydrogen, Solar charging stations, Solar wind hybrid with Storage , Circular Economy and Pollution Prevention & Control etc.
- ▶ SCGJ had ventured into 'online courses', delivering trainings in multiple languages to 1074 trainees including bankers, solar entrepreneurs and others across 72 ISA member countries.
- ▶ Over 1500 trainees including utility staff, SBI bankers and entrepreneurs have been trained with the support from the WorldBank in Suprabha Technical Assistance program.
- ▶ GIZ has also supported SCGJ to develop an online training module/ E learning platform for technicians of waste water treatment plants and for solar grid engineers.
- ▶ Upskilling trainings of 1950 certified suryamitra candidates with support from GIZ. Out of this 1430 have been upskilled till Dec 2021 and remaining shall be trained by Apr 2022. TOT for 70 trainers has also been conducted.



Greening of Job roles

- ▶ As per ILO, Green jobs are decent jobs that contribute to or restore the environment
- ▶ Considering that sustainability is a cross cutting thematic area across operations (manufacturing, services etc.), SCGJ has prepared two exclusive greening NOS for NSQF level 3 and 5, which are being fully integrated across all other job roles of other SSCs. Those greening NOS are utilized across all other job roles/sector to ensure that environment and resource conservation are fully mainstreamed.
- ▶ The focus of NOS are best practices for conservation of water, material, electricity and waste management. One NOS is applicable at a lower NSQF level who is performing tasks as per greening principle adopted by higher management. Second NOS is applicable at higher NSQF levels who adopt the greening principle to frame policy or guideline for greening a job role as per their sector industry requirements.



A run for WorldSkills Shanghai 2022 |



- ▶ With the feather of India's first ever Gold medal at World Skills 2019 in SCGJ's cap, SCGJ has taken several initiatives, engaged with Industry partners and consulted world skills experts to refine and define our strategies to be adopted for WorldSkills Shanghai 2022.
- ▶ Considering that Renewable Energy has been introduced for the first time in WorldSkills, our Skill Council has taken a unique initiative named "Foundation Programme on Renewable Energy for India Skills 2021" to train and prepare interested registered candidates for India Skills 2021 and World Skills 2022 under the guidance of our WorldSkills experts and RE master trainers.
- ▶ After organizing regional competitions in Punjab and Andhra Pradesh, National Skill Competition was organized in Delhi on Renewable Energy and Water technology.
- ▶ 5 medal holder candidates from National Competition in both sectors are now being trained to participate in the WorldSkills Shanghai 2022.



Future Outlook of SCGJ

Skilling & Entrepreneurs Development

SCGJ intends to continuously align all its skilling interventions with the key missions and schemes of the Government including Atmanirbhar Bharat, Make in India, National Solar Mission, National Hydrogen Mission, Clean India Mission, Clean Ganga Mission, National Climate Change Action Plan etc.

Training on Carbon Neutral Processes

Introduce customized training modules on Carbon Neutral processes for every manufacturing job role.

Partnerships to Upskill Existing Workforce

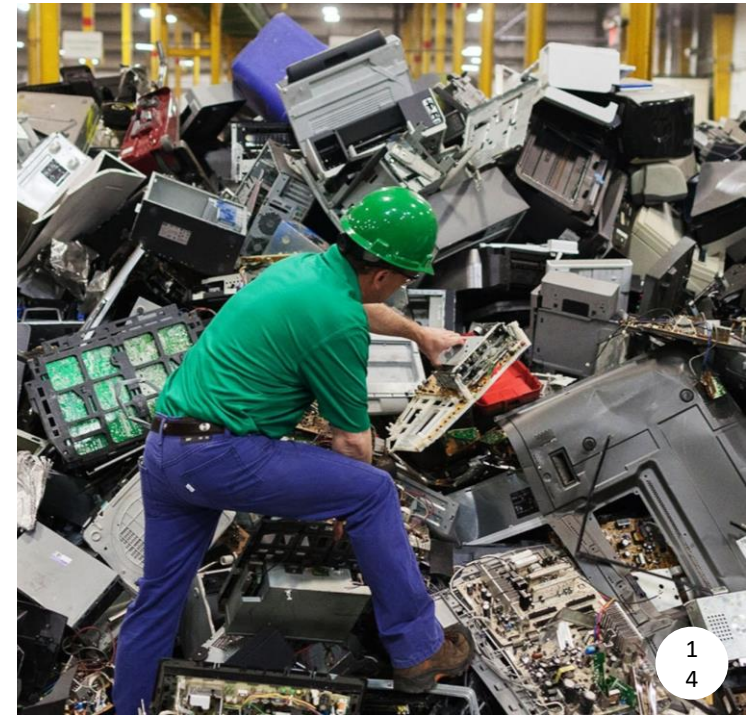
SCGJ to work more closely with Industry for upskilling of existing workforce including on greening the jobs by introducing energy and material efficiency and waste management.

Partnerships with Educational Institutions

Enhancing Partnership with Educational institutions including schools for integrating vocational learning with the implementation of New Education Policy

Adopt Global Best Practices

Identify globally adopted best practices on zero emission processes for large scale production units, SMEs, Industrial clusters, farm practices, etc.; develop training modules & delivery platforms.





Thank You



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