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UNICEF-ILO Regional Webinar on

Skills for Green Jobs :

Empowering Adolescents and Young People in South Asia

30 April 2025



Agenda

5 minutes	Safeguarding
10 minutes	Welcome note
10 minutes	Concepts on Skills for Green Jobs
10 Minutes	Regional Overview on the drive towards a greener economy and skills for green jobs
45 minutes	Panel Discussion on sharing of selective initiatives on skills for green jobs
10 minutes	Q&A and Closing

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By proceeding to participate in this webinar, you commit to abide by the following safeguarding standards:

Ensure the webinar is a safe space for open communication, respecting privacy.	All stakeholders are prohibited from privately contacting adolescents and young people via personal social media or email during and after the webinar
Treat everyone with respect and dignity regardless of the differences e.g., age, gender, race, religion. Do not cause any form of harm to others.	Those over 18 should not ask for contacts from participants aged below 18 and vice versa
Harassment, intimidation, bullying, and making any offensive remarks will not be tolerated	Anyone who has a safeguarding concern in relation to this event (during, before and after) must report immediately to one of the Safeguarding Focal Points.
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Maintain personal, professional, and age boundaries during all interactions	You can find more details in the safeguarding protocol that has already been shared with you all.



Safeguarding focal points during the webinar

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Please feel free to reach out if anything makes you feel uncomfortable at any point.



Welcome address

Mr. Satoshi Sasaki

Deputy Director, Decent Work Technical Support
Team for South Asia and Country Office for India,
International Labour Organization (ILO)

Welcome address

Ms. Samantha Mort

Chief, Communication and Advocacy
UNICEF ROSA



Concepts on Skills for Green Jobs

Pragya Gurung

Adolescent Development Specialist, Skills and Employability

UNICEF ROSA



Yukari Kanamori

Technical Officer

ILO Decent Work Technical Support Team for
South Asia and Country Office for India



Skills for Green Jobs are skills that are necessary to successfully perform tasks for green jobs and to make any job greener.

The term includes both **core and technical skills** and covers all types of occupations that contribute to the process of greening products, services and processes, not only in environmental activities but also in other sectors.

Green skills are the **knowledge, abilities, values and attitudes** needed to live in, develop and support a **sustainable and resource-efficient society**.

- **Occupational and technical skills** used more intensively in green occupations. Skills “require adaptation to environmental phenomena and technologies.
- **Core skills or Green Life skills** used in many occupations which include decision-making, teamwork, leadership, risk management, design, problem solving etc.
- **Transformative capacities or ‘skills for just transition/green transformation’** needed to drive the systems change demanded by the 1.5°C target



Green jobs are decent jobs that contribute to **preserving or restoring the environment**, be they in traditional sectors such as manufacturing and construction, or in new green sectors such as renewable energy.

Green Jobs help:

- Improve energy and raw materials efficiency
- Limit greenhouse gas emissions
- Minimize waste and pollution
- Protect and restore ecosystems
- Support adaptation to the effects of climate change



Green Transition & Just Transition

Green transition - “the process of moving towards a green and resource-efficient economy, aimed at enhancing human well-being by reducing greenhouse gases”

Just transition - “greening the economy in a way that is as **fair** and **inclusive** as possible to everyone concerned, creating **decent work** opportunities and leaving no one behind”.

A just transition involves maximizing the social and economic opportunities of climate action, while minimizing and carefully managing any challenges – including through effective social dialogue among all groups impacted, and respect for fundamental labor principles and rights.



Why skills matters for a just transition

- Skills serve as both an **enabler for growth** and as a **buffer against negative impact** from climate and environmental change
- **Access to training** is important for **new entrants** to the labor market and **existing workers** negatively impacted by the climate transition to access new jobs
- Availability of relevant skills supports equal opportunities for **economic growth, employment and enterprises polices, and industrial and structural transformation**
- Skilled workforce is essential to implementing **effective mitigation and adaptation measures**
- Support to skills acquisition creates a '**level playing field**', fostering social inclusion and equal opportunities
- To **create an enabling environment** to promote research, innovation and capacity building



Regional Overview on the drive towards a greener economy and skills for green jobs



Dr. Mushtaq Ahmed Memon

Regional Coordinator for Chemicals and Pollution Action Subprogramme
United Nations Environment Programme, Regional Office for Asia and the Pacific

Sharing of selective initiatives on Skills for Green Jobs



Mr. Md. Mostafa Kamal
Education Officer
UNICEF Bangladesh



Mr. Arpit Sharma
CEO, Skill Council for
Green Jobs (SCGJ), India



Mr. Sonam Wangchuk
Youth and Adolescent
Development Specialist
UNICEF Bhutan



Mr. A.N.M. Tanjel Ahsan
National Programme Officer
ILO Country Office for Bangladesh

Moderator:
Yukari Kanamori, ILO





UPSHIFT IN BHUTAN

Activating Skills for Young People

Context of young people

- The youth unemployment rate in the last quarter of 2024 was 17.7%
- Of the total 484,965 working-age population, the share of youth unemployed to the total unemployment is 46.7 percent, indicating that for every 100 unemployed persons, there are about 47 unemployed youth.
- Decreasing labour force participation rate (63.1%)
- Young people not adequately prepared for the job market
- Migration of young people to urban centers and abroad
- Increasing case of mental health among adolescents and young people



What children and young people learn through UPSHIFT?

21 Century Skills

- Problem-solving skills, teambuilding, decision-making, communication skills, building confidence, among others.

The UPSHIFT module/ UPSHIFT Digital is contextualized to Bhutan focusing on design thinking, creativity, innovation, problem solving, critical thinking, pitching ideas.

Experiential learning:

- Develop social innovative projects to apply what they have learnt in UPSHIFT programme.
- Opportunity to work with local leaders, community representative and school management

Confidence building:

- Most say the programme is engaging and a platform to amplify their voice and develop confidence.



Our Achievements

High level
launch of
UPSHIFT on
20th May 2022

To provide 21st
century skills,
leadership
skills &
employability
skills

292 schools

25,000 young
people

35,000 Reached

199
implemented

1500 project
ideas

1.3 M learning
hours

Spotlight: Marketable Skills developed by Young People

SOLF (Sustainable and Organic Liquid Fertilizer) transforms kitchen waste into nutrient-rich fertilizer.

Vermi Compost enhances soil health while reducing methane emissions.

Smart Waste Bin, harnessing AI for automated waste segregation.

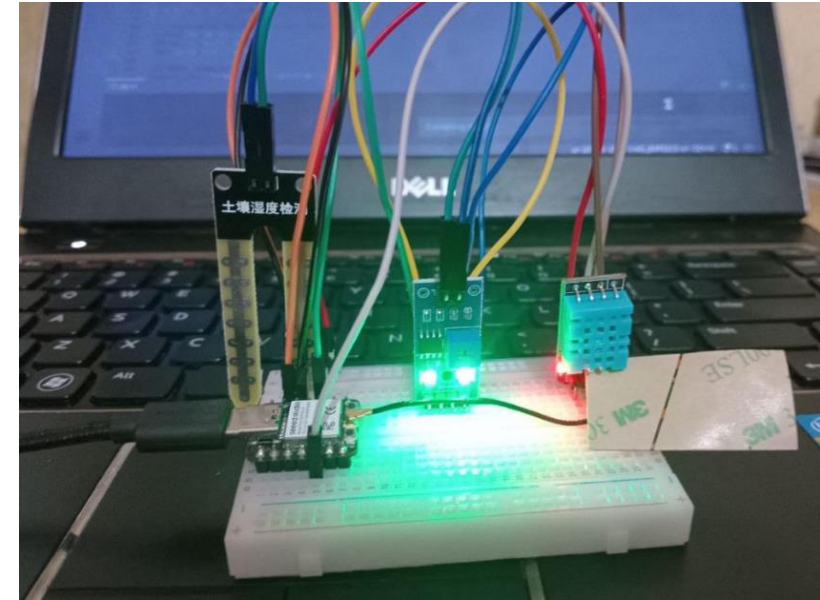
Bashika Soap, promoting hygiene with organic soap made from local herbs.

BinBetter App: Waste Management App

Eco Pulp: Small Scale Paper Recycling Unit



Marketable Skills developed by Young People





Thank you



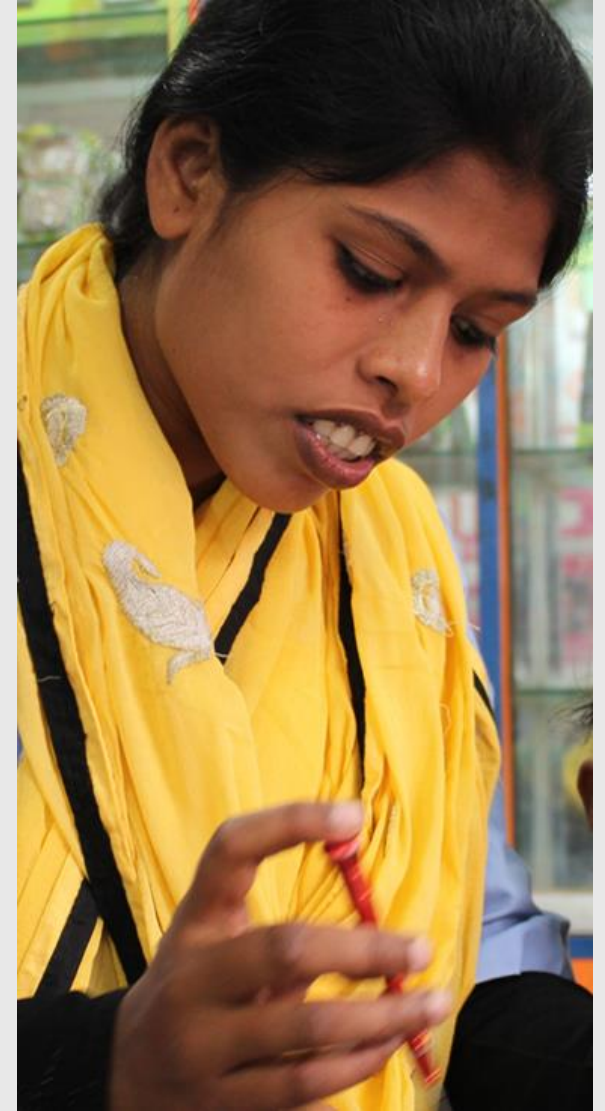
Alternative Learning Program (ALP) for the most vulnerable
NEET adolescent and young people

Bangladesh

- Ranks 7th among countries most affected by climate-related extreme weather.
- ranks 15th out of 163 countries where children are most at risk from climate change
- 20 million children are seriously exposed to climate hazards.



- 40% of secondary school-age adolescents are out of school
- Only 36.6% of women participate in the labor force
- Approximately 10.2 million youth aged 15–24 are NEET (62% women)



Solution

The Alternative Learning Pathway (ALP) is designed to support the out-of-school adolescents and young people by equipping them with market-driven occupational and transferable skills, with a special focus on green entrepreneurship and green job.



Contextualized and evidence-based skills interventions are being delivered through:

- ✓ **Informal Apprenticeship**
- ✓ **Entrepreneurship Skills Training**
- ✓ **Center-Based Occupational Skills Training**

Sonia Khatun:

The Green Entrepreneur from One of Bangladesh's Most Climate-Vulnerable Districts

- Received entrepreneurship skills training with a focus on green business concepts.
- Mentor encourages sustainable, climate-resilient startups.
- Business plan finalization for eco-friendly alternatives to plastic products
- Secured loan from MFI for her Green Business 'Sonia Handicrafts'
- Created Job Opportunities for Three Vulnerable Women and Enhanced Their Green Job Skills.
- Contributing to Waste Management through the Effective Use of Palm Leaves, Straw, Cane, and Bamboo.
- Proven as a Change Agent for climate-resilient Initiatives, inspiring Youth Action.
- Contributing to a Green World While Achieving a Yearly Net Profit of USD 1,600.



Solar Panel Repair and Maintenance: Youth in Action at Rohingya Refugee Camps, Cox's Bazar

- Cox's Bazar camps face limited power supply, relying mainly on solar energy.
- Youth received transferable skills training focused on green action.
- High demand emerged for solar repair and maintenance skills among the youth.
- In 2024, 2,586 youth (including 155 women) trained and equipped with startup kits (UNICEF-supported)
- Trained youth now play a key role in maintaining power supply in the camps.
- They have become ambassadors of renewable energy.
- Many youth are now self-employed in green energy sectors with the 'startup kit'.
- Safe mobility for adolescent girls and young women has improved after sunset.





Thank You

► Skills for Green jobs: Empowering Adolescent and Young People in South Asia

Overview of ILO's work in Green Jobs in Bangladesh

Tanjel Ahsan
Programme Officer, ILO Skills Programme, ILO Dhaka



Contextual conditions for green jobs in Bangladesh

- 1. Response to climate change:** High saline water in the coastal belt, supply drinking water to the vulnerable areas
- 2. Ensure food Security:** supply water for irrigation, protect social condition, Produce organic food
- 3. Sourcing alternative Energy:** Bangladesh goals for electricity from renewable energy (Currently 4.5%, By 2030 15%, By 2040 40% and By 2050 50%)
- 4. Management of rapid urbanizations :** Green construction and urban planning, management of huge urban waste and recycling
- 5. Increasing environment responsive consumers:** Promoting green Manufacturing and LEED-Certified Factories

Investment in green business in Bangladesh

Renewable Energy and Solar Initiatives:

- Industrial Solar Adoption by private sector: investment over BDT 100 crore in installing 30 MW of solar power
- Large-Scale Solar Projects: A joint venture plans to establish a 300MW solar power plant, with an investment of \$430 million. Local business Group has launched a 200MW solar plant.

Green Manufacturing and LEED-Certified Factories

- leading by garment sector under sustainable manufacturing
- LEED-Certified Factories: over 200 green factories, including 73 with LEED Platinum certification. One became the world's first LEED Platinum-certified spinning factory

International Investments:

- The British International Investment (**BII**) provided \$52 million credit facility in textile sector
- **World Bank** allocated \$42.6 billion for projects in renewable energy, water security, and climate resilience under climate finance.
- The **EIB** plans to double its financing to Bangladesh to €2 billion, focusing on green infrastructure projects. **Longi**, the largest solar panel manufacturer in the world will invest in renewable energy.



ILO Green Jobs Programme integrated approach



The constituents and partners in Bangladesh collaborated on Green Jobs initiatives to promote environmentally sustainable jobs in a world facing climate challenges since 2008.

This collaborative involves

- a) Policy advisory
- b) Research
- c) Capacity building of institutions
- d) Development of guideline and tools
- e) Implement pilot projects
- f) Knowledge sharing

Decent Work Country Programme for Bangladesh 2022-2026: Output 1.2 : Improved opportunities for people of Bangladesh from all gender, ethnicity, and socio-economic backgrounds to obtain decent, sustainable and productive employment, **including in green jobs**, through employment and labour market policies, regulations and programmes.

ILO's work in Green Jobs in Bangladesh

- ❑ 'Green Jobs Initiative' in Bangladesh, China and India pilot initiative started from 2008
- ❑ Conducted series of studies to assess potential Green Jobs and future trends, identify key stakeholders, and policy environment
- ❑ Engaged tripartite constituents and partners for awareness, advocacy events and improved access to ILO's data and information source on green jobs
- ❑ *Promoted green livelihoods options in ecologically fragile areas* :A joint project with UNDP and WFP
- ❑ Initiated community level advocacy on alternative livelihoods promotion for disadvantaged people in ecologically Critical areas

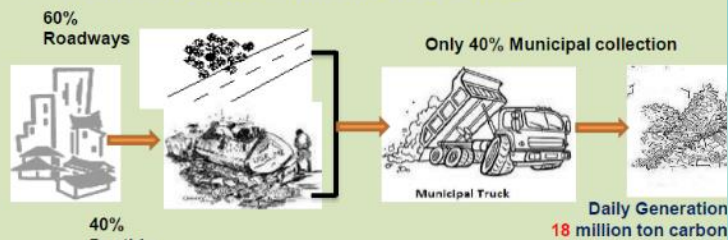


ILO's work in Green Jobs in Bangladesh

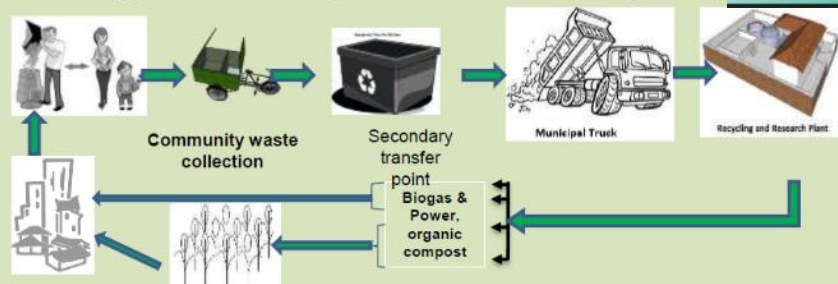
- ❑ Support Bangladesh Technical Education Board to develop Competency Standard on the selected occupations
- ❑ Piloted skills training programme in the selected institutes and linked them with Grameen Shakti for employment
- ❑ Support to develop model of Green Enterprise in urban waste management safe food production to
- ❑ Support to partners to establish business on green products (organic fertilizer, organic food and seeds), linking with waste management green supply chain, advocacy for trade license and other formalizations process etc.
- ❑ Develop “Green Business Booklet” and capacity development programme under SIYB programme in Bangladesh.



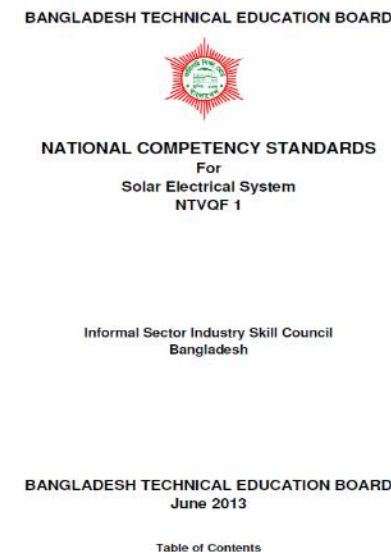
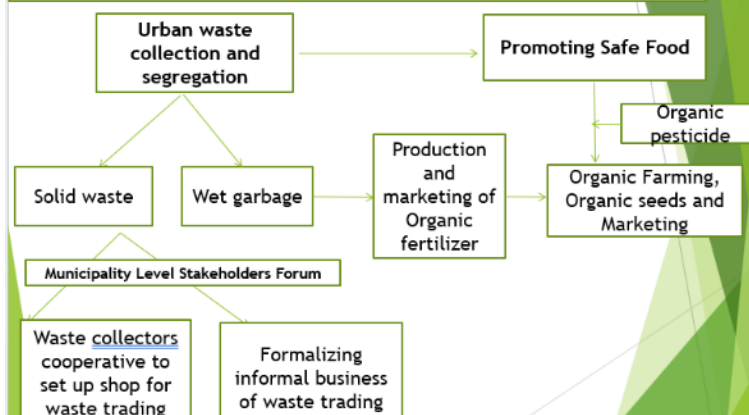
❖ Municipal Waste Management: Current practice



❖ Our approach – ISMW - Integrated Sustainable Waste Management System



Improving Urban Environment and Greening Supply Chain of Safe Food Production An Integrated Approach to Green Jobs Promotion



Business Options and Scale

Total: 900 including 137 persons with disabilities

M 58 F 96	M 67 F 67	M 15 F 15	M 60 F 140	M 135 F 132	M 40 F 33
Waste collection	Compost marketing	Eco tourism	Mushroom Production	Organic farming	Scrap business

District Level dialogue on "Promotion of green enterprise from waste value chain: Issues and Action"



District level dialogue in Gaibandha



District level dialogue in Jessore



key achievements

- Conducted researches and studies on green jobs
- Engaged relevant stakeholders in the policy advocacy events
- Increased private sector engagement in designing programme
- Develop capacity of government and other partners to institutionalize green jobs related interventions
- Improve capacity of the skills system for promoting green jobs and employability

Operational Challenges

- Lack of awareness, information, exposure and incentives for green jobs
- Lack of coherent policy, policy gaps in terms of adequate incentive for greening industries (tax subsidies), greening skills system and creating green enterprise
- Lack of systems to (a) certify and regulate Green products, (b) measure carbon footprints to determine incentive
- Lack of market opportunities for green entrepreneurs
- Social-cultural barriers restrict women's participation in certain green occupations

Thank you



Skill Council for Green Jobs - SCGJ

Since October 2015



About SCGJ

Skill Council for Green Jobs is one of the most recently launched initiatives of the Government of India aligned to the National Skill Development Mission. It is promoted by the Ministry of New and Renewable Energy (MNRE) and Confederation of Indian Industry (CII). The creation of the SCGJ was approved in the 10th meeting of National Skill Qualifications Committee held on 28th September 2015. Established as a not-for-profit, autonomous, industry-led society, the SCGJ was incorporated under the Societies Registration Act XXI, 1860 on 1st October, 2015.



SCGJ Mission

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 meet India's potential for "Green Businesses".



Key Sectors Covered by SCGJ

Renewable Energy



1. Solar (PhotoVoltaic)



2. Wind



3. Small Hydro



4. Energy Storage



5. Bioenergy: Biomass Power Generations, Biofuels, Biogas & Bio CNG



6. Clean Cook-Stoves

Environment, Forest & Climate Change



7. Solid Waste Management

- Municipal
- Agricultural & Animal Husbandry



8. Waste Water & Water Management

- Sewage Treatment
- Rain Water Harvesting & Micro - irrigation



9. E-waste Management



10. Carbon Sinks

- TBO Oil-seeds
- Under Agro - Forest + Plantation



11. Eco-Tourism

Sustainable Development



12. Green Hydrogen



13. Green Construction

- Green Buildings
- Green Campuses



14. Green Transportation

- Electric Vehicles
- Bio-Fuels Vehicles
- Bio-CNG Vehicles



15. Pollution Prevention & Control

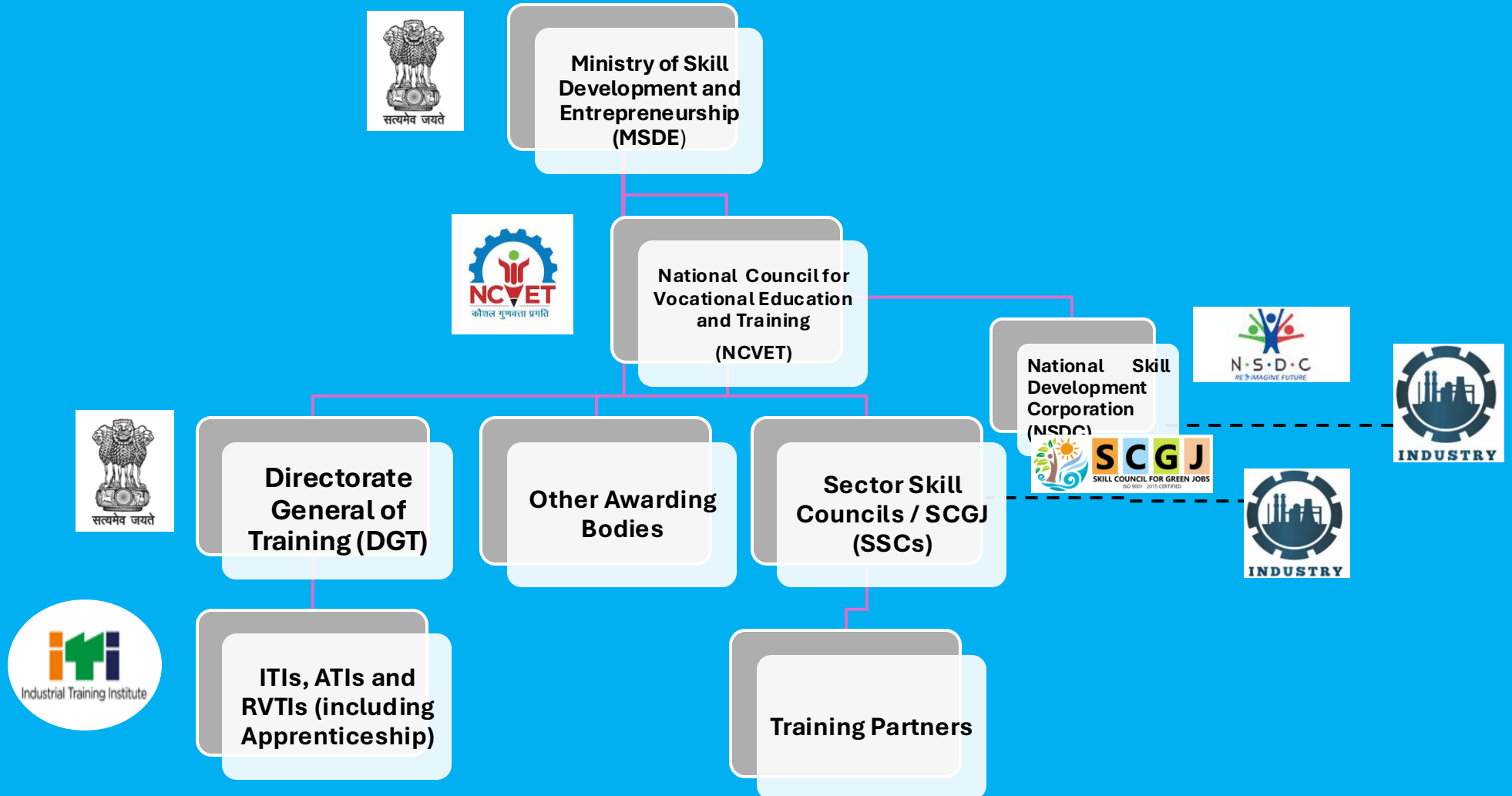
Skill Economy in India

Mission

Policy

Awarding Bodies

Implementation



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



Impact of SCGJ

Empowering India's Green Workforce through Skill,
Sustainability and Inclusion



Overall Achievement



11
Skill Gap Studies
Undertaken by SCGJ

67
Qualifications
Developed by SCGJ

5000+
Trainers
Certified by SCGJ

900+
Assessors
Certified by SCGJ

5.89 lakh+
Candidates Trained
& Certified by SCGJ

**1 Gold, 1 Silver & 1 Medallion of
Excellence in Water Technology
and 1 Bronze in RE at World
Skills.**

Extensive Workforce Training in the Green Sector

The Skill Council for Green Jobs (SCGJ) has played a pivotal role in shaping India's green economy by focusing on skill development tailored to environmentally sustainable sectors. One of its most significant on-ground impacts is the large-scale training and certification of approximately **one million individuals** across various green job domains. These include renewable energy (solar, wind, bioenergy), energy efficiency, sustainable agriculture, waste management, water conservation, and green construction. This mass skilling effort has been facilitated through close collaboration with central and state government programs such as the **Green Skill Development Programme (GSDP)** under the Ministry of Environment, Forest and Climate Change (MoEF&CC), and flagship missions like the **Skill India Mission** and **National Solar Mission**. By developing more than **50+ National Occupational Standards (NOS)** and Qualification Packs (QPs), SCGJ has enabled training providers and industries to offer standardized, industry-relevant courses. Through this initiative, SCGJ has not only enhanced employability among the youth—especially in rural and semi-urban areas—but also helped create a skilled workforce that supports India's transition to a green and low-carbon economy. These efforts have strengthened grassroots-level livelihoods, contributed to energy security, and promoted environmental sustainability at scale.



Promotion of Gender Diversity in the Green Workforce

SCGJ has been a strong advocate for inclusive growth within the green sector, placing special emphasis on **gender diversity** and the empowerment of women through skill development. Recognizing the traditionally low participation of women in technical and energy-related roles, SCGJ launched and supported initiatives aimed at breaking gender barriers—most notably through the **WePower initiative** in collaboration with the **World Bank** and **International Solar Alliance (ISA)**.

The council has developed and delivered targeted training programs that encourage and enable women to join the renewable energy workforce, especially in roles related to **solar installation, operations and maintenance, energy auditing, and sustainable farming practices**. By integrating gender-sensitive content in its training modules and promoting safe and enabling learning environments, SCGJ has ensured that more women not only access these opportunities but also succeed in them.

Furthermore, women trained through these programs are increasingly becoming entrepreneurs and technicians in their communities—especially in remote and rural areas—thus challenging stereotypes and acting as catalysts for change. Their contributions are enhancing household incomes, fostering local employment, and serving as powerful examples of how green skilling can be a tool for **women-led development**.



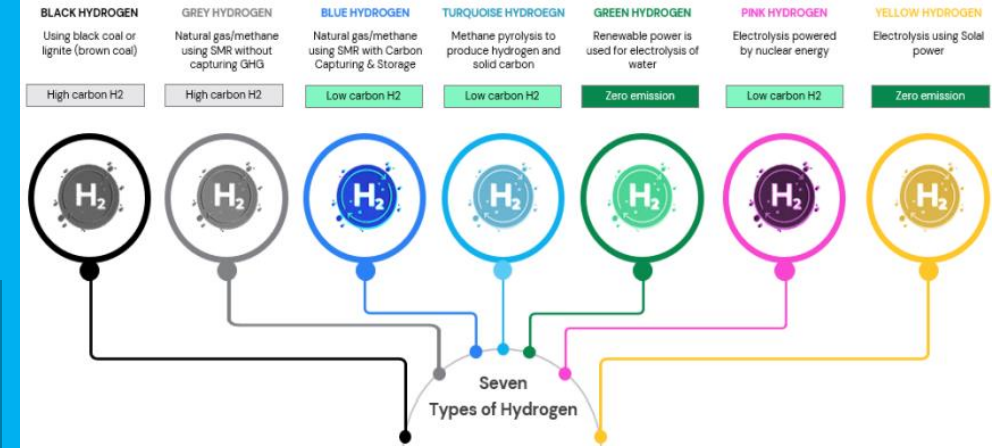
Pioneering Skill Development in the Green Hydrogen Sector

With India setting ambitious targets to become a global hub for green hydrogen production and export, SCGJ has taken a proactive role in aligning workforce capabilities with the emerging demands of this sector. As part of this effort, SCGJ conducted a **comprehensive Skill Gap Assessment** across the green hydrogen value chain—ranging from production and storage to transportation and application.

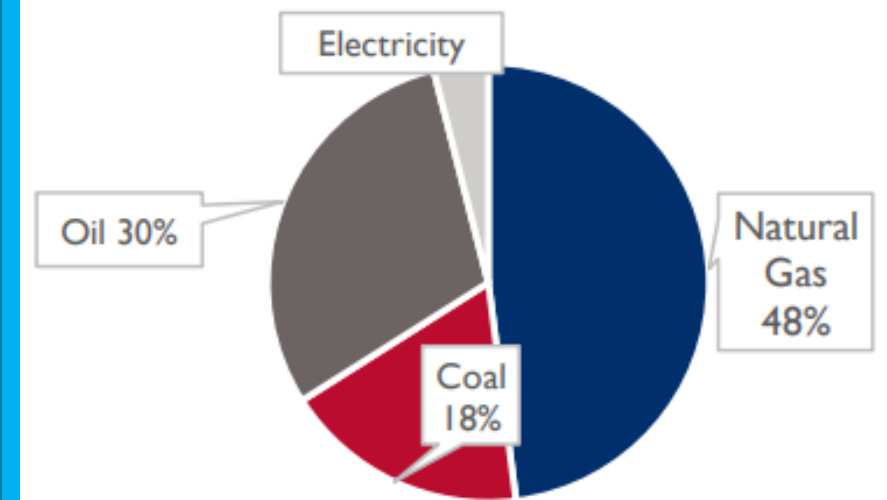
This landmark study, conducted in collaboration with the Ministry of Skill Development and Entrepreneurship (MSDE), industry stakeholders, and subject matter experts, mapped the future skill requirements and identified critical roles, competencies, and training gaps. The report provides actionable insights into workforce planning, curriculum design, and job role creation—essential for building a talent pipeline capable of supporting the growth of green hydrogen technologies in India.

Based on the findings, SCGJ is now spearheading the development of **National Occupational Standards (NOS)** and **Qualification Packs (QPs)** for green hydrogen job roles, including **electrolyzer technicians, hydrogen plant operators, safety specialists, and supply chain managers**. These efforts ensure that India's workforce is not only future-ready but also globally competitive in this high-potential segment of the clean energy sector.

This initiative showcases SCGJ's forward-looking vision and its commitment to supporting national priorities such as the **National Green Hydrogen Mission, energy security, and decarbonization goals**, while opening up new livelihood opportunities across the green energy spectrum.



Sources of Hydrogen Production- 2022



Driving Rural Electrification through Community-Based Solar Training

One of SCGJ's most impactful contributions to sustainable development has been its role in enabling **rural electrification** through the skilling of local communities, particularly under programs like **Suryamitra**. This flagship initiative, supported by the **Ministry of New and Renewable Energy (MNRE)** and implemented in collaboration with SCGJ, aims to train youth—especially from rural and underserved regions—in the installation, operation, and maintenance of **solar photovoltaic (PV) systems**.

By providing hands-on, industry-relevant training, SCGJ has empowered thousands of individuals to become **solar technicians**, who can support the deployment of solar infrastructure in villages and remote areas where grid connectivity is limited or unreliable. These trained professionals play a key role in installing rooftop solar units, solar-powered streetlights, water pumps, and microgrids—directly contributing to **energy access, livelihood generation, and decentralized clean power solutions**.

Beyond technical skills, SCGJ ensures that trainees are also equipped with knowledge on **entrepreneurship, safety protocols, and maintenance practices**, enabling many to launch their own service ventures or work with solar EPC (Engineering, Procurement, and Construction) companies. This holistic approach not only supports **India's renewable energy goals** but also uplifts rural economies by creating jobs, reducing migration, and encouraging local enterprise development.

SCGJ's contribution to rural electrification exemplifies how **green skilling can bridge the energy divide**, foster inclusive growth, and promote sustainability from the grassroots level.



International Collaboration and Global Recognition

SCGJ's influence and impact extend beyond national borders, positioning it as a key contributor to the global dialogue on green jobs and sustainable workforce development. Its active participation in **international platforms and climate-focused forums**, such as **COP28**, **COP29**, and global roundtables hosted by institutions like the **International Labour Organization (ILO)** and the **United Nations Environment Programme (UNEP)**, highlights its commitment to aligning India's green skilling efforts with global climate and sustainability agendas.

Through these engagements, SCGJ has shared India's success stories, challenges, and best practices in green workforce development—particularly in areas such as **renewable energy, green construction, circular economy, and energy efficiency**. These platforms have provided SCGJ the opportunity to advocate for the **integration of skill development as a core strategy** in climate action and sustainable development planning.

Additionally, SCGJ's collaborations with international organizations—such as **GIZ (Germany)**, the **European Union**, and **World Bank initiatives like WePOWER**—have resulted in the co-development of training frameworks, knowledge exchange, and pilot programs in gender inclusion, green hydrogen, and sustainable transport. These partnerships have not only brought global expertise to India but also enhanced SCGJ's visibility and credibility on the world stage.

Such global recognition reaffirms SCGJ's role as a **thought leader and strategic partner** in the green transition. It underscores the council's ability to shape policy discussions, influence international frameworks on green jobs, and ensure that India's workforce is well-prepared to thrive in a low-carbon, climate-resilient future.

Sharing of selective initiatives on Skills for Green Jobs



Mr. Md. Mostafa Kamal
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CEO, Skill Council for
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Q&A



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Thank You