

Mapping of TVET interventions contributing to climate change mitigation

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Background of the study

This study contributes to a wider mid-term review of Norad's TVET portfolio, led by Erlend Sigvaldsen with inputs from Ruth Naylor. The Terms of Reference for this study are to:

1. Provide an overview of GIZ's work in the area of greening TVET (defined primarily as climate mitigation and promotion of biodiversity) and description of elements related to greening TVET in Norwegian GIZ portfolio.
2. Provide an overview of ILOs work in the area of greening TVET (use information from previous mapping) and description of elements related to greening TVET in Norwegian ILO portfolio.
3. Provide recommendations relation to how greening TVET elements can be further integrated into a) GIZ and b) ILO TVET portfolio.

This slide deck is accompanied by an excel workbook that maps GIZ and ILO's Norad-funded work in greening TVET.

Methodology

The study adopted a similar methodology to the review into the broader study on Norad's partners and their work on education and climate change, through:

1. A review of ILO and GIZ programme reports and documents
2. Semi-structured interviews with programme teams (45 minutes to 1 hour)

Topics of discussion

The following topics were used to structure interviews and discussions with partners:

- Practices to reduce carbon emissions, including climate-friendly TVET programming (supply logistics, low-carbon infrastructure, procurement guidelines) – objective 1
- TVET programmes that seek to build skills to mitigate climate and reduce carbon emissions – objective 2
- Key challenges to advance greening agenda
- Gaps in practice

High-level reflections (1)

TVET programming to build skills to mitigate climate change:

1. Both GIZ and the ILO are advancing their activity in green skills and skills for green jobs with innovative solutions to reduce the impact of the effects of climate change and mitigate the causes of climate change, especially in agriculture and food systems.
2. However, this activity is relatively small scale and would therefore benefit from scaling up interventions in beneficiary countries, and elsewhere. For example:
 - The ILO's work in Ghana support approximately 50 TVET staff and 100 TVET students.
 - E4D target outcomes include 20 per cent of new jobs to be 'green,' other green initiatives are small (no more than 3,000 beneficiaries per project).
3. There is considerable activity in job matching and skill development for oil and gas sectors.
4. There is varying demand and political buy in for green skills and green jobs, of which Norway has a comparative advantage to influence.

High-level reflections (2)

4. There seems to be a stronger focus on the development of green skills to mitigate climate change and limit its impacts, rather than promoting biodiversity.
5. As identified in the January 2021 review, the ILO's green strategy, advocacy and activity is advanced compared to other organisations, with very explicit links from their strategy to operations.
5. Similar to other organisations from the January 2021 review, GIZ seem to be in the process of finalising their strategy on greening TVET, and how the strategy can be operationalised.
6. Both the ILO and GIZ requested more information on Norway's ambitions and targets for greening TVET.

Recommendations

- Support the dissemination and implementation of the ILO's upcoming guidance on Greening TVET, including across Norad's TVET portfolio.
- Use Norway's comparative advantage as a natural resource rich country that is implementing greening strategies to influence political buy-in and encourage demand for green jobs and green skills.
- Convene partners working across green TVET to share knowledge on what works and lessons learned in different sectors. This could be supported through a 'learning journey' that shares research and facilitates discussions.
- Ensure a sustainable phasing out of Norad's support to oil and gas sectors, which could include targeted support to those needing to re-skill.
- Consider initiatives to increase demand for green skills and scale innovative solutions with specific 'green' criteria. This could include strategic partnerships or challenge funds open to national and international organisations.

Elena Lau and Svenja Brachmann, Portfolio Advisors for Green Jobs, GIZ (1)

- Noted increasing calls for the greening of E4D's portfolio and to move away from oil and gas sectors from numerous donors
- The next phase of the E4D programme from 2023 will not include a focus on the oil and gas sectors, which will mostly be enabled through E4D's focus on the development of transferable skills
- Noted challenges with buy in, interest and demand for the advancement of green agenda amongst political partners and the private sector
- E4D are currently convening a taskforce in their Africa regional department to understand the implications of a green transformation of local economies, and what skills demands, training needs and opportunities are for each country
- Highlighted that training modules in their programming include health, safety and environmental issues, which include saving energy, and waste management

Elena Lau and Svenja Brachmann, Portfolio Advisors for Green Jobs, GIZ (2)

- E4D are guided by and encourage their partners to procure services and equipment as local as possible, and they also where possible try to select partners that can work in green sectors
- An important argument to drive buy-in of biodiversity promotion is that the use of environmental standards make private sector organisations more economical and competitive
- Highlighted challenges in developing an umbrella framework to monitor progress in greening across the E4D portfolio
- Also noted risks/challenges with youth engagement in green agricultural professions (compared to renewable energy sectors)

Elena Lau and Svenja Brachmann, Portfolio Advisors for Green Jobs, GIZ (3)

Gaps:

- Coordinated definition of green jobs or green skills
- Research and knowledge on what sectors, and what skills make the most impact in reducing carbon emissions, mitigating climate change and promoting biodiversity

Recommendations:

- Convene stakeholders within green jobs to share lessons on what works
- To consider Norway's comparative advantage as a positive example on its green transition and advocate political buy in in partner countries

E4D's definition of 'green jobs'

Agricultural value chains	Skills and enterprise development
<p>A green job in agricultural value chains is given, if 4 out of the following 6 criteria are fulfilled:</p> <ul style="list-style-type: none">• Significant reduction of post-harvest loss• Significant reduction of negative externalities (e.g. responsible and target-aimed use of fertilizers and pesticides, nutrition management by micro-dosing, adjusted application rate)• (Smart) Water management system (irrigation and drainage)• Investing in maintaining and building soil organic matter/ soil protection (e.g. conservation and minimum tillage, soil cover, vegetated filter strips)• Protection of biodiversity and natural habitats• Crop/ livestock diversification (e.g. crop rotation, intercropping (crop serving as soil coverage too))	<p>A green job as a result from a skills or enterprise development measure is given, if a person has been trained to get employment in one of the following sectors:</p> <ul style="list-style-type: none">• Renewable energies• Energy efficient construction of buildings• Environmentally friendly transport / electromobility• Organic agriculture / sustainable agriculture or fisheries• Sustainable forestry• Recycling• Energy-saving technology• Eco-tourism

Olga Stietska-Ilina, Skills Strategies for Future Labour Markets, ILO (1)

- The ILO does not separate climate mitigation, resilience and adaptation, as they believe that green skills contributes to all of these factors
- The Green Jobs initiative includes a capacity building workstream, that extends to TVET, including through skills development and updating assessments and certification
- The ILO are planning to launch a new guidance document on greening TVET institutions, as well as a repository of initiatives that mainstream and integrate climate considerations into programming

Olga Stietska-Ilina, Skills Strategies for Future Labour Markets, ILO (2)

Gaps and opportunities for impact:

- Raising awareness of the scale of the task ahead to mainstream climate considerations across TVET programming, including for example the need to revise qualifications to reflect new green skills
 - This should go beyond education and climate ministries
- To support those that may be 'left behind' during the transition to a green economy, which could result in inequalities and loss of livelihoods
 - There is therefore a need to understand the implications of this transition, and reskill workforces

Skills and Employability Branch, Green Jobs Programme and Partnerships and Field Support, ILO (1)

Skills and Employability Branch (SKILLS)	Green Jobs Programme (GREEN)	Partnerships and Field Support (PARDEV)
<ul style="list-style-type: none">• Srinivas B Reddy (Chief)• Patrick Daru• Olga Strietska-Ilina• Sergio Iriarte Quezada• Hae Kyeong Chun	<ul style="list-style-type: none">• Moustapha Kamal Gueye (Chief)• Camilla Roman	<ul style="list-style-type: none">• Gen Nakatomi

- The ILO shared their recognition and appreciation of Norad's timely and important interest in advancing green skills and green jobs
- Highlighted the wider need to shift from policy rhetoric to concrete actions on the ground
- Recognised the research and investment on infrastructure to advance the greening TVET agenda, however emphasised the importance of increased investment in people and institutions

Skills and Employability Branch, Green Jobs Programme and Partnerships and Field Support, ILO (2)

- The ILO are investing in research to better understand what is required for the transition to sustainable practice in agriculture and food systems, to complement their expertise on the energy transition
- Highlighted the need to ensure a sustainable transition to a green economy, for example, how to offset employment losses in non-renewable energy sectors, the wider impacts on the labour market, and demand for skills
- Participating in advocacy and capacity building initiatives, especially in the run up to COP26 and re-submission of country NDCs, including developing green jobs strategies in Burkina Faso, Ghana, Senegal, and Cote D'Ivoire
- Supporting policy implementation through public and private financing
- Increasing requests from beneficiary countries for capacity building support

Skills and Employability Branch, Green Jobs Programme and Partnerships and Field Support, ILO (3)

Recommended the following strategies to increase the demand for green jobs:

- Advocate for national policies and targets to combine environmental and climate goals with job and financial goals
- Support the development of evidence on the comparative advantages to transition to a green economy, which can be used in advocacy with local trade unions and private sector organisations
- Support the development of fiscal and industrial policies that support and incentivise green entrepreneurship and growth
- Champion social dialogue and outreach with key stakeholders, including through facilitating cross-learning
- Replicate and scale innovative solutions
- Consider how Norway's political commitments can be used to champion the green transition, for example by joining the ILO's Just Transition Commitment

Greening TVET and Skills Development

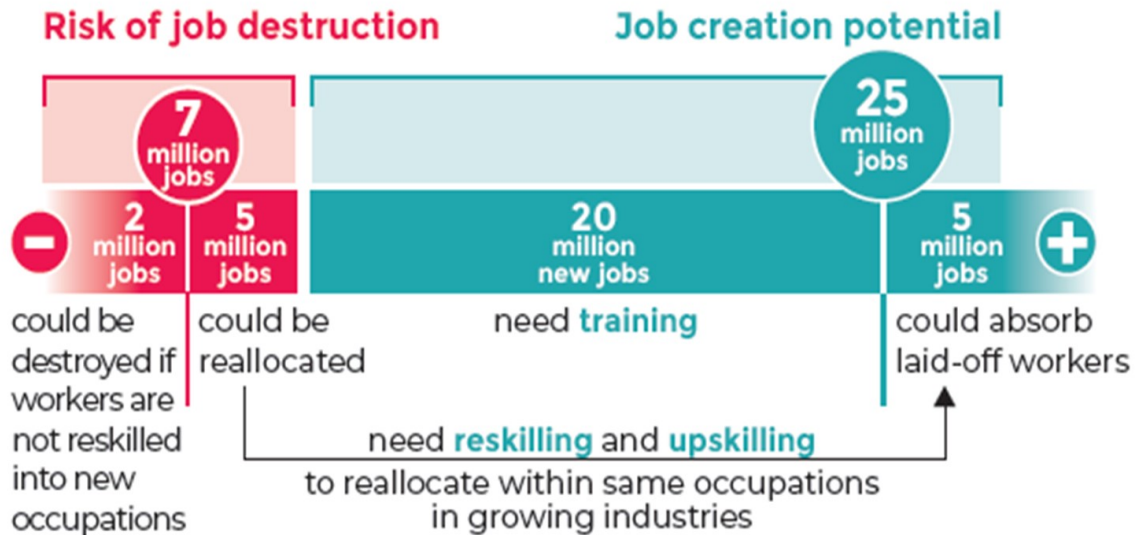


Investment in reskilling and upskilling is crucial for green transition



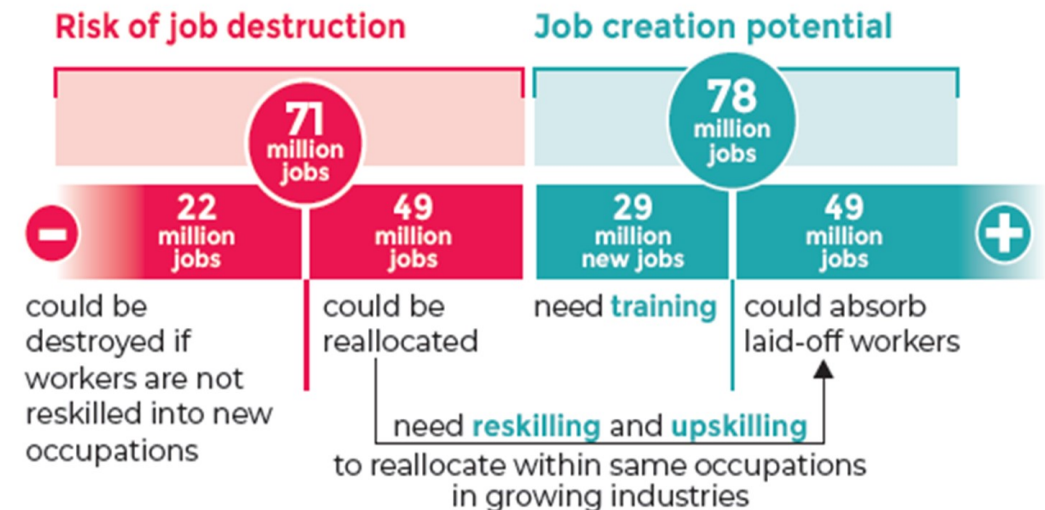
▶ Energy sustainability scenario, 2030

Potential job growth

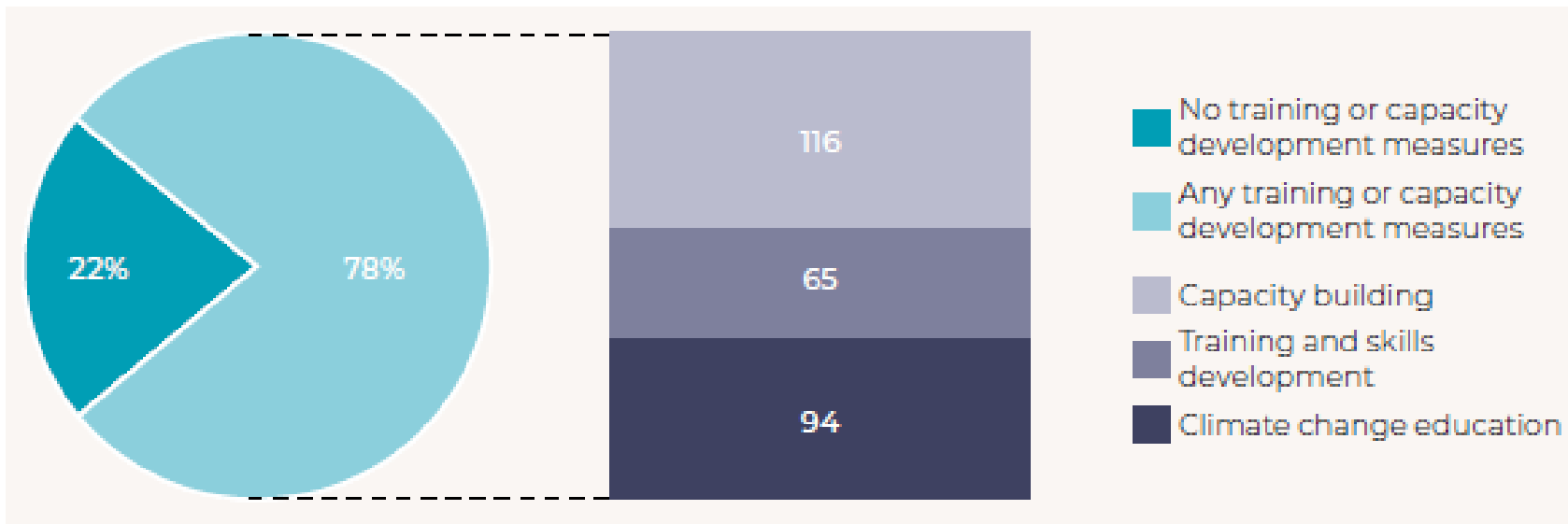


▶ Circular economy scenario, 2030

Potential job growth



Share of countries that mention capacity development and skills training in their NDCs, and types of measure specified



Note: Sample =169 countries

Source: ILO (2019) Skills for a Greener Future. Data computed from NDC Explorer, Jan. 2019

- ▶ less than 40 % of NDCs globally include any plans for **skills training** to support their implementation.
- ▶ over 20 % do not plan any human capital related activities at all...

Ambitious national commitments and sectoral priorities to implement the Paris Agreement **underestimate the role of skills development measures**

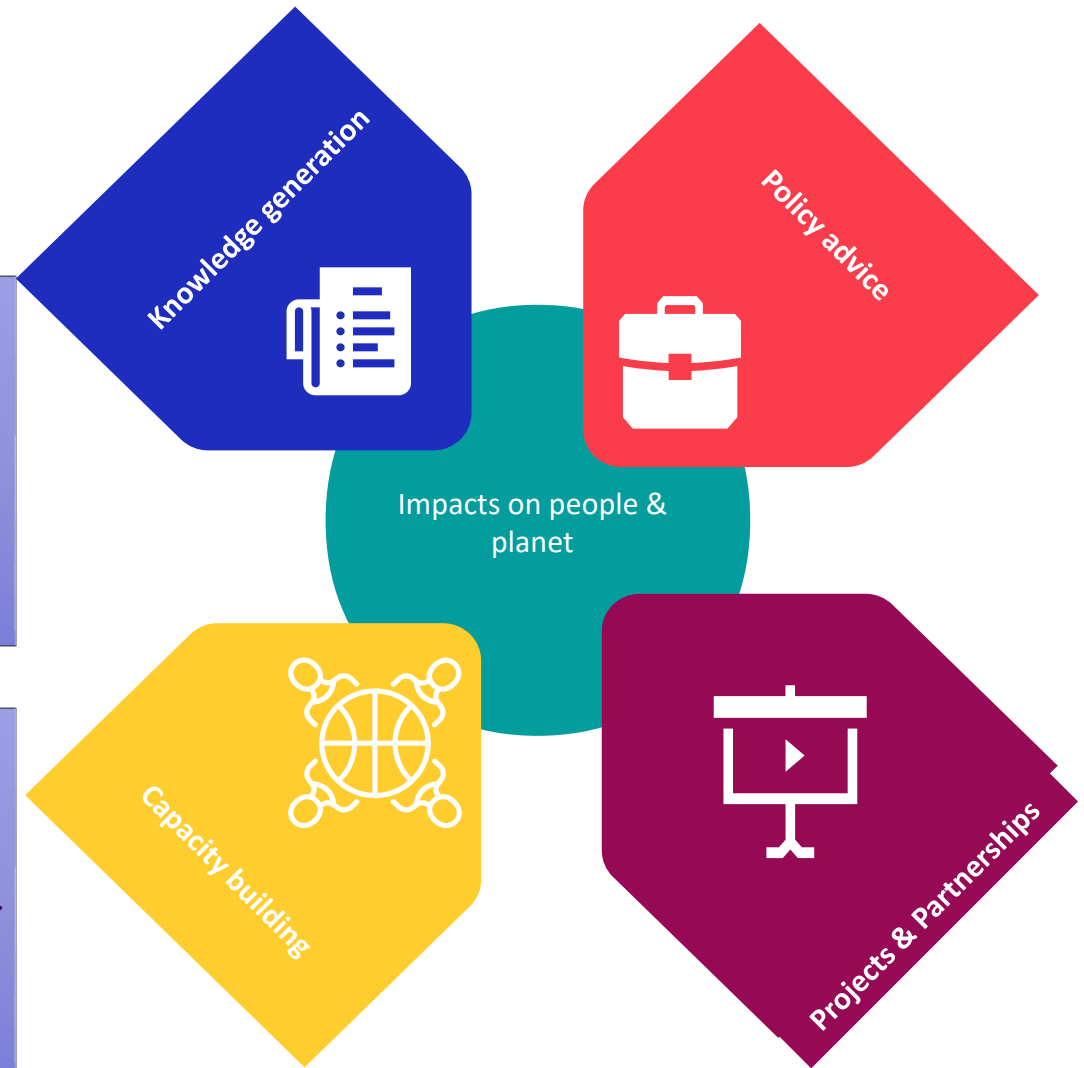
TVET support to Climate Measures

Climate action cuts across disciplines and therefore a multidisciplinary approach also required to change TVET system.

Digital solutions are key to climate change mitigation and therefore digital transition to be systematically embedded in green TVET.

A good combination of technical and core work skills need to be imbedded in all TVET programmes and “greened”

Revisions of competency standards and curricula, teacher training programmes etc through projects and their mainstreaming through the TVET system



Ongoing projects and partnerships on skills for a greener future

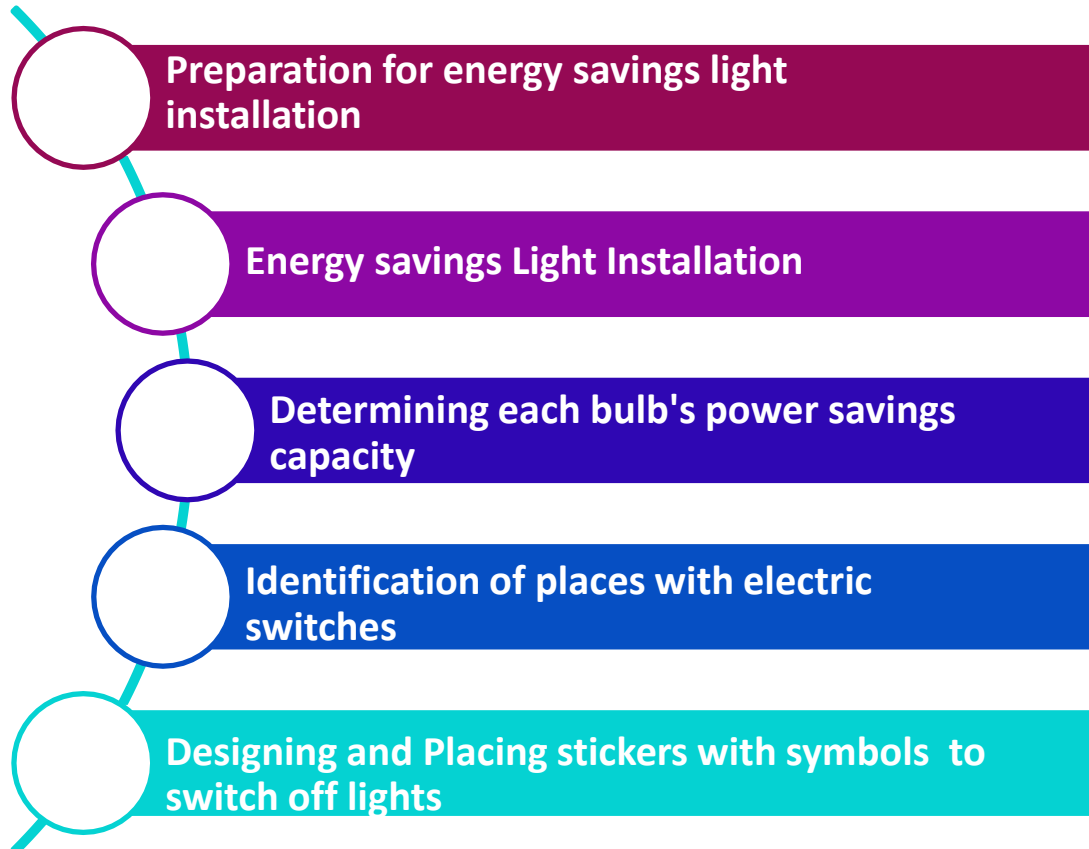
Projects	Countries	Partners	Activities
SKILL-UP Ghana	Ghana	NORAD	Situation analysis on greening TVET institutions; Strategic action plans to integrate greening into TVET; Capacity development for TVET stakeholders on greener training practices, Greening of training curricula
Responding to future skills needs in high growth economic sectors: Evidence based skills policy for a greener future [upcoming]	Indonesia, Vietnam	GIZ	Conduct skills needs analysis and develop sector skills recommendations for two target sectors (renewable energy and electric vehicles) in each country (as part of LMIS project)
Skills for Energy in Southern Africa (SESA)	SADC	SIDA	Public-Private Development Partnership (PPDP) on renewable energy sector; Centre of Excellence for energy training
Skills Development for Increased Employability of Labour Force	Zambia	EU	Strengthening governance, upgrading training facilities, private sector engagement for curriculum development and Work-Based Learning; mainstreaming of skills for a green economy across all components
Green enterPRIZE Innovation & Development	Zimbabwe	SIDA	Competency-based curricula and Training of Trainers for green economy
Skills Roadmap for Green Transition and Advancing Human Capital	Mauritius	PAGE	Development of policy-guidance document for further implementation at sectoral and national levels to contribute to Climate Agenda by 2030
Skills 21 – Empowering citizens for inclusive and sustainable growth	Bangladesh	EU	Implementation of action plans for green practices, Piloting specific greening initiatives in seven model TVET institutes, Revision of competency standards and learning materials

How to Green TVET: A practical guidance tool

- ▶ A practical guidance tool for greening TVET, competency standards, curricula, training and assessment to be piloted in six countries this year and further implemented in more countries from 2022
- ▶ **Piloting countries (2021):** Cambodia, Ghana, Zimbabwe, Zambia, Thailand and the Philippines



Bangladesh example on greening TVET institutions: Implementation Green Initiatives (Energy Efficiency)



Current and Proposed Interventions for Climate Mitigation and Adaptation

Current Green Skills Interventions

Global

- Global repository of green training materials

Ghana

- Situation analysis on greening TVET institutions;
- Strategic action plans to integrate greening into TVET;
- Capacity development for TVET stakeholders on greener training practices;
- Greening of training curricula

Tanzania

- Demonstration models linking skills and greenhouse interventions in sustainable agriculture will be developed.

Possibilities for expansion

- Skills Innovation challenge call on Just Transition
- Develop a repository of green competency standards, curricula and training tools
- Further support to Ghana Action Plan on Greening TVET, and soon to be launched Green Jobs Strategy
- Implement recommendations of the skills anticipation analysis on potential for green job creation
- Increase contribution to Government programme building greenhouses for youth livelihoods in each district in Tanzania.

▶ Opportunities for further engagement

Sectoral Approach

- Identifying sectors with greening potential and supporting skills anticipation and matching at sectoral level

Capacity Building

- Strengthening capacities of key national/sectoral stakeholders to anticipate and monitor skills needs in a systematic way, and design, and implement inclusive skills strategies for green transition

Policy Coherence & Coordination

- Supporting to enhance policy coherence and coordination in planning, design and implementation of skills development and green/climate change policies, regulations and targets
- Facilitating social dialogue and collaboration among stakeholders

Greening TVET

- Strengthening governance and management structures required to mainstream green transition in TVET systems
- Mainstreaming green transition in competency standards, qualifications, curricula and assessment (**Upcoming ILO Greening TVET guidance tool**)

SKILLS products for a Greener Future

Skills for a Greener
Future: A global
view



Anticipating skill needs
for green jobs: A practical
guide

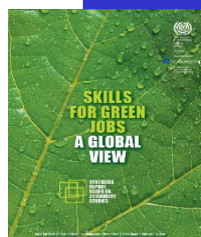


Skills and Occupation Needs
in Renewable Energy

Skills and Occupation Needs
in Green Building



Skills for Green
Jobs: A global view



Policy Brief: Challenges
and enabling factors to
achieve a just transition



Comparative analysis of
methods of identification of
skills needs on the labour
market in transition to the low
carbon economy



[ILO SKILLS - https://www.ilo.org/skills](https://www.ilo.org/skills)

[Global KSP - https://www.skillsforemployment.org/skpEng](https://www.skillsforemployment.org/skpEng)

skills@ilo.org

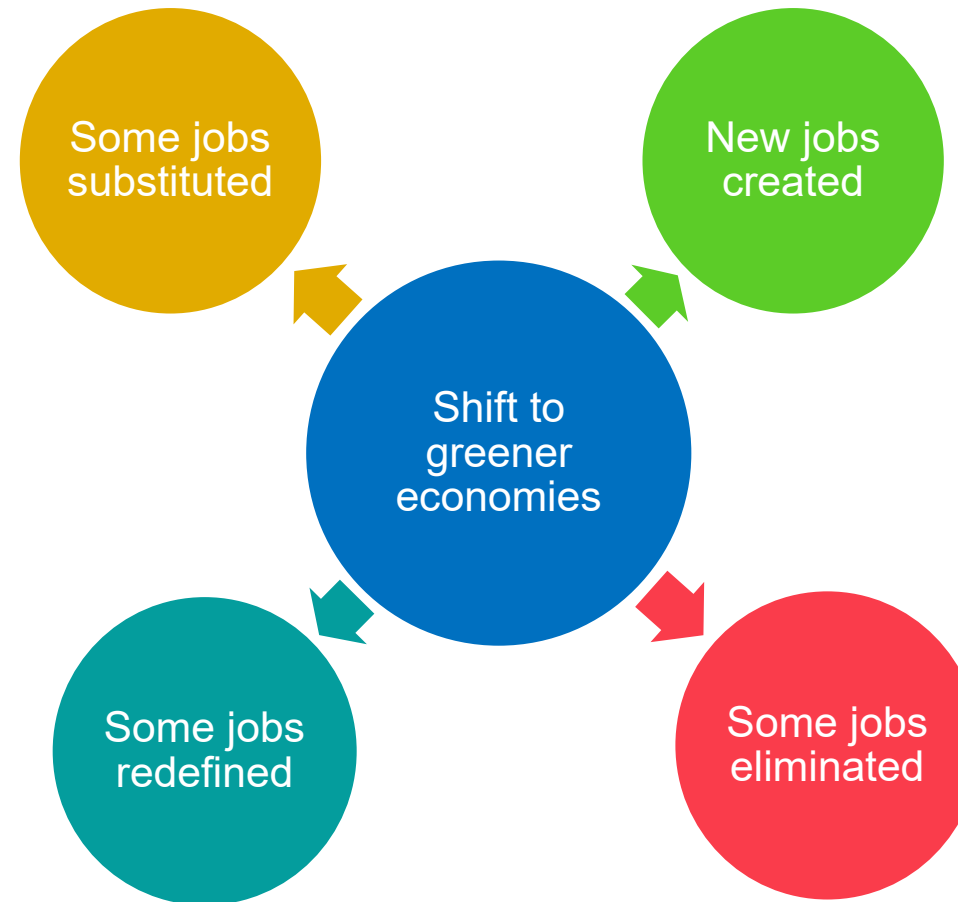
For more information:



Embedding environmental sustainability in the advancement of decent work

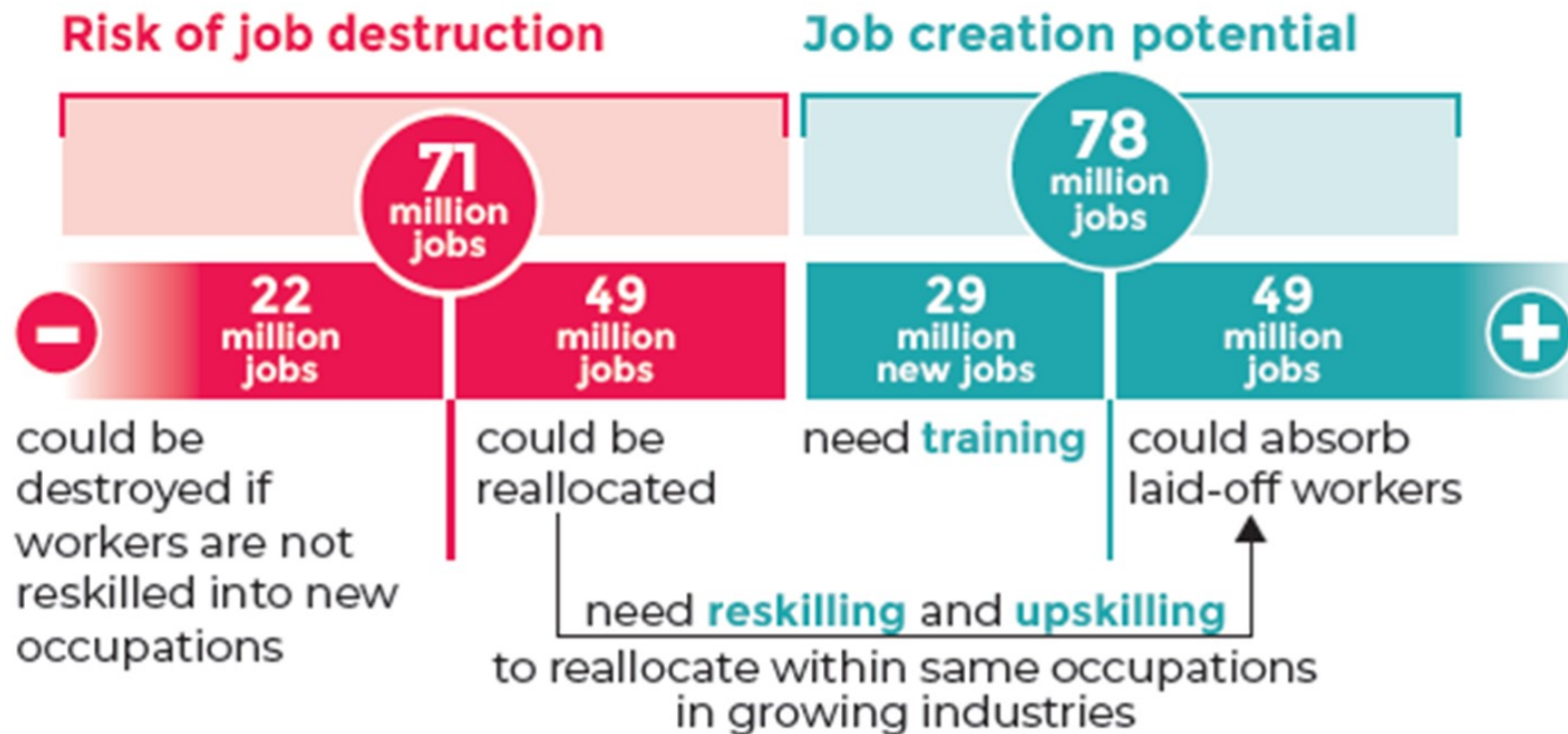
Climate change impacts on jobs and productivity

- ▶ **Baseline:** 1.2 billion jobs are closely linked to eco-system services.
- ▶ **Inaction:** By 2030, 2% of working hours can be lost, with decline to labour productivity.
- ▶ **Action:** Achieving the 2-degree target brings net employment gains of 18 million new jobs by 2030.



Circular economy scenario, 2030

Potential job growth



▶ **Just Transition to environmentally sustainable economies and societies for all**

A Just transition aims to maximize climate action and minimize negative social impacts of a green transition, while maximising opportunities.

Planning for a just transition has clear positive impact on the labour market including

- ▶ Job and income gains are maximized
- ▶ Risks of job and income losses are minimised and addressed
- ▶ The vulnerable are protected and included

Economies have **lower emissions** and climate change vulnerability



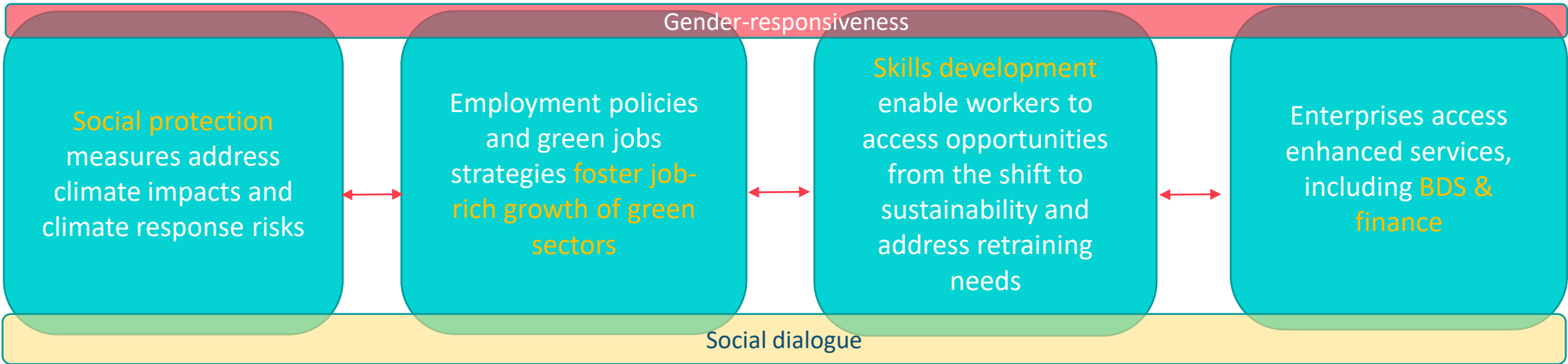
Quality jobs increase and social justice advanced





Reduced job and income vulnerability to climate change and climate responses

Green jobs for women and men materialized



Climate- employment and skill assessments to inform decision-making and policies

Technical assistance on policy development and implementation including through the Just Transition Innovation Hub

Institutional and capacity-building of governments, employers' and workers' organisations

Guidance on financing for a just transition (start-up phase)

▶ Integrating decent work in the Nationally Determined Contributions to the Paris Agreement

Social and employment dimensions largely missing from the first round of NDCs

Impact analysis, diagnostics and policy support provided to countries in NDC revisions

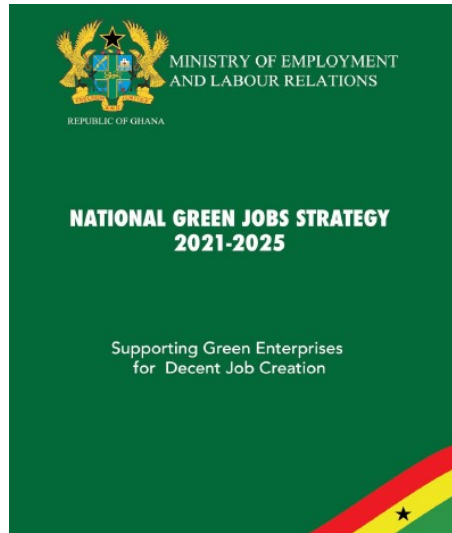
Several countries included /plan to include just transition and decent work elements in the new submissions, including Argentina, Chile, Colombia, Costa Rica, Cote d'Ivoire, Ghana, Nigeria, Zimbabwe

National Green Jobs strategies – comprehensive national frameworks linking decent work and the environment



L'Industrie Verte au Burkina Faso: Évaluation et perspectives de développement

Ghana: National Green Jobs Strategy



Senegal's National Strategy for the Promotion of Green Jobs (2015–2020)

Côte d'Ivoire : Le document de stratégie nationale validé pour la promotion des emplois verts – 16 octobre 2020



Scaling up: The Climate Action for Jobs

Launched by the UN Secretary-General and ILO Director-General at COP25

Mission and Vision: boost climate action by ensuring that people's jobs and well-being are at the centre of the transition to a carbon-neutral and climate-resilient economy.

A Multistakeholder Alliance for a Decade of Action

Enable ambitious **climate action** that delivers **decent jobs** and advances **social justice**.

Support countries on **bold solutions** for a transition towards a **sustainable future** that is just and enjoys broad-based support.

Facilitate an inclusive and sustainable **recovery** from the **COVID-19 crisis**.



▶ Challenges, gaps and strategic directions

- **From design to implementation – giving effect to decent work elements of NDCs and Green Jobs strategies (skills and enterprises policies and programmatic instruments)**
- **Financing for green jobs and a just transition – backing goals and policies with investment**
- **Just Transition Innovation Hub- identifying, mentoring and sharing high-potential approaches that break with business-as-usual**

ILO Just Transition Guidelines https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_432859.pdf

ILO Greening with jobs report World Employment and Social Outlook
<https://www.ilo.org/global/research/global-reports/weso/greening-with-jobs/lang--en/index.htm>

Climate Action 4 Jobs <https://www.climateaction4jobs.org/>

The Green Jobs Assessment Institutions Network https://www.ilo.org/global/topics/green-jobs/areas-of-work/gain/WCMS_565193/lang--en/index.htm

Ghana National Green Jobs Strategy https://www.ilo.org/wcmsp5/groups/public/---africa/---ro-abidjan/--ilo-abuja/documents/publication/wcms_776631.pdf