



Bridging gaps in human skills and capacity in key adaptation and mitigation sectors

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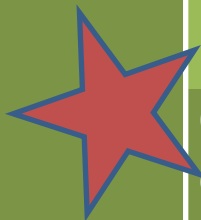
Climate policies and employment: Overview

- Climate and low-carbon development policies can affect employment through:
 - Shifts in the volume, composition and quality of employment across sectors,
 - Changes in the level and distribution of income.
- Most studies point to **net gains in employment**. However, such gains are not achieved by default, but **by design**. Climate and employment policies are needed in order to:
 - Stimulate job creation as an objective in itself;
 - Ensure that jobs created meet decent work criteria - Addressing issues specific to the informal sector;
 - Advance social inclusion with dedicated social protection policies, skills building and upgrading for enterprises and workers.



Changing and Emerging Occupations

Degree of skill change	Occupational change	Typical skills response	Examples
None	None or only quantitative	None or increased training in existing occupations	National park ranger, bus driver
Low	Changing Occupation	On-the-job learning or short training courses	Organic farmer, Tourist guide in eco-tourism
Medium	Changing or emerging occupation	Short courses or longer continuous training	Plumber installing solar water heaters, Bricklayer building biogas digesters
High	Emerging occupation	Initial training, university degree or longer continuous training	Solar Energy Technician, Carbon consultant, Architects, and Agricultural engineers

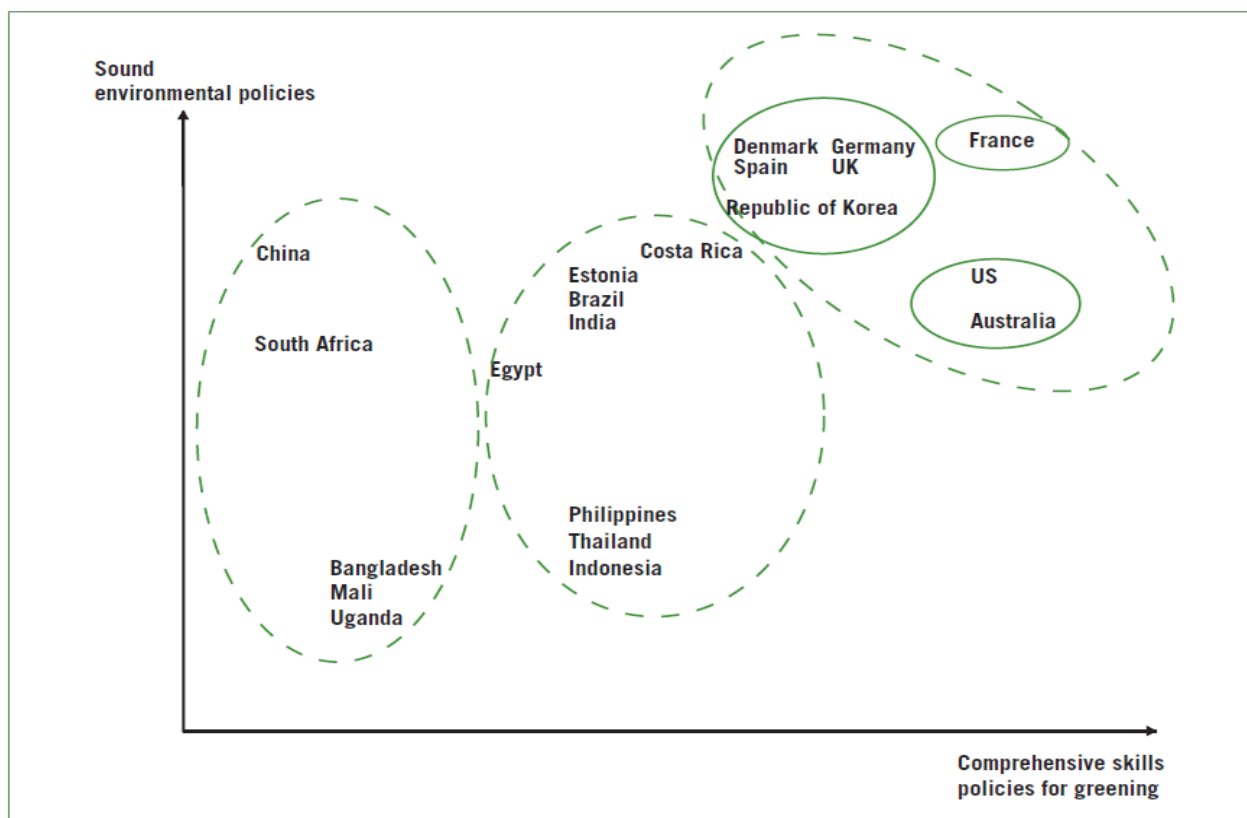
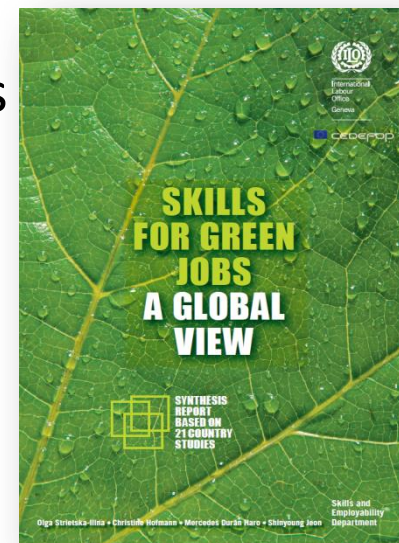




Bridging skills gaps to enable climate action

Review of 21 country studies:


- ☐ Countries underestimated the growth of green sectors
- ☐ General lack of scientists and engineers
- ☐ National skill structure does not meet skills demand



- ☐ In many countries, there is a weak coordination between environmental policies and skills needs and requirements



Gaps in skilled workers in energy: Case of China

- Project on Green Jobs Creation and Promotion (Hunan and Fujian provinces)
–Asian Development Bank/ILO
 - A survey of 389 enterprises
 - Survey shows significant shortages of workers with green skills (40% of enterprises lack green technical workers)
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- A photograph showing a long, brightly lit industrial factory floor. Several workers, mostly women, are seated at long workstations, focused on their tasks. They are wearing casual clothing. The floor is marked with yellow lines, and the overall environment appears organized and busy.
- **Shortage of skilled workers** in renewables, energy efficiency and environmental protection industries.
 - Solar PV - annual skills shortage of 200,000
 - Only 30 out of 1,200 vocational colleges have PV related programs
 - Implications for TVET – on-the-job training, online training



Greening educational and training systems

- Institutionalizing green building into curricula at different levels
 - Academic (CBU-architecture)
 - Technical and vocational training



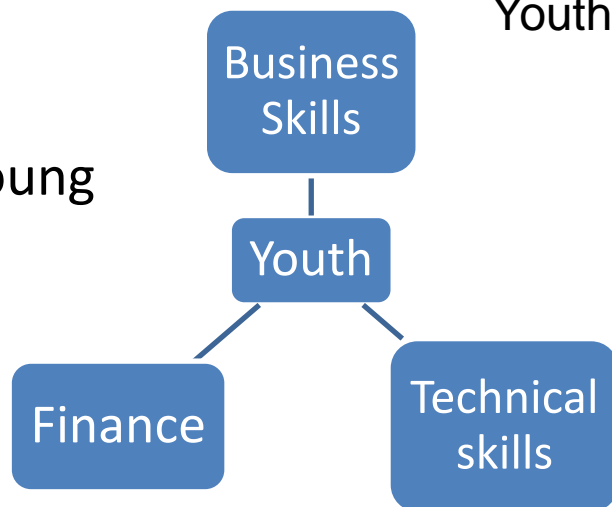
In the **Dominican Republic**, within the framework of the [FOIL project](#), learning standards and curricula for eight green occupations have been developed and included into the vocational training portfolio of all countries in central America.





Promoting skills for green entrepreneurship

Challenges to young entrepreneurs



Youth Entrepreneurship Facility in East Africa



Start Your Green Business

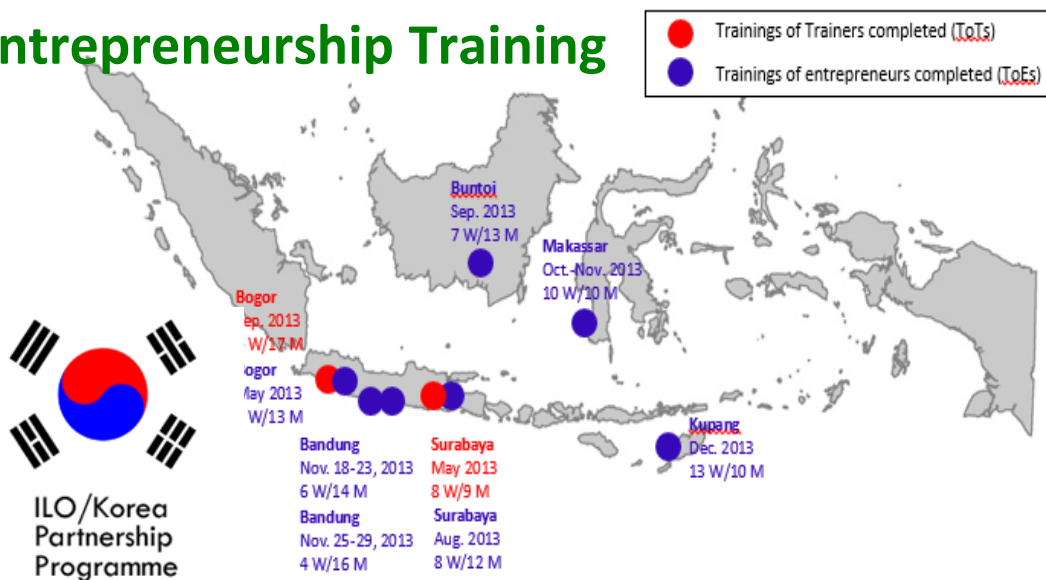
Dynamic and Integrated Green Entrepreneurship Training

Indonesia:

40 Trainers

149 Green Entrepreneurs trained/
operating green businesses

Sectors: Creative industries,
food/agriculture, renewable energy,
tourism, waste management





Collaborative approaches for better impact



United Nations
ZAMBIA



Thank you

- International Labour Organisation:
<http://www.ilo.org/global/lang--en/index.htm>
- Green Jobs Programme of the ILO:
www.ilo.org/greenjobs
- International Training Centre of the ILO:
<http://www.itcilo.org/en>