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EXECUTIVE SUMMARY

Accelerating Skills for a Green Future:

A Case Study of the Philippines

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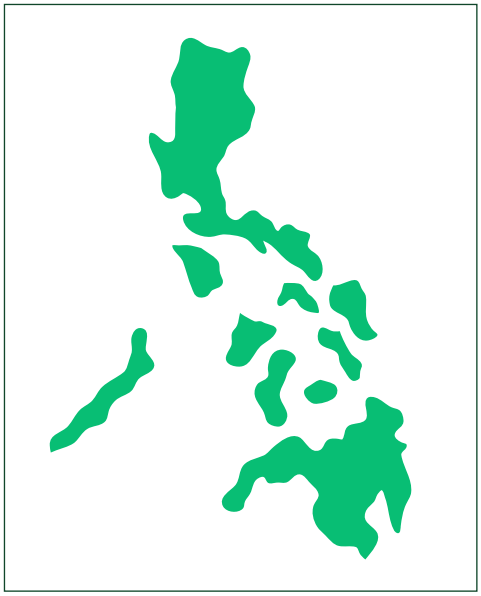
As countries work to achieve their nationally determined contributions (NDCs) to address the rapidly advancing climate crisis, there is little discussion regarding how an unqualified workforce could delay the implementation of climate-related projects and investments in low-carbon technologies and processes. A delay in climate and energy projects due to skills shortages could lead to additional global warming while also increasing the costs of project implementation as demand for workers with technical and green skills outstrips supply.



The **Jobs and Skills for the New Economy Initiative** seeks to address this challenge by accelerating investments in the workforce for the green economy by elevating green skills in global climate discussions and national climate and education policies, while identifying financing to support national governments to swiftly advance green skilling efforts across sectors and levels of education.

The urgency of the transition to a low-carbon economy has spurred initial investments to build new industries and to adopt new technologies and more sustainable practices. In the Philippines, the highest growth and job creation is expected in six key sectors, according to the country's National Green Jobs Human Resource Development Plan (2020-2030): **(1) construction, (2) manufacturing (food and advanced manufacturing),[1] (3) transport, (4) renewable energy, (5) sustainable agriculture, and (6) ecotourism.**

The Philippine government has been a global leader in supporting and fostering this transition through national plans, laws, and policies on climate mitigation, adaptation, green skills, and green jobs. Examples include its ambitious NDC to reduce greenhouse gas emissions and its National Adaptation Plan (NAP). Additionally, the country's Green Jobs Act of 2016 (Rep. Act

[1] The Philippine government has chosen a focus on food manufacturing and advanced manufacturing as the most strategic forms of manufacturing in terms pf employment per the most recent Trabaho Para sa Bayan Plan (2025–34) (Department of Economy, Planning, and Development, 2025).

No.10771) is the law that mandated creation of the National Green Jobs Human Resource Development Plan (NGJHRDP). The NGJHRDP is a green skills development road map for implementing the law, co-created by the Department of Labor and Employment (DOLE), the Technical Education and Skills Development Authority (TESDA), and the Professional Regulation Commission (PRC). It identifies needed skills, training programs, and remaining gaps and sets out five goals and numerous actions to achieve them. This case study is aligned and informed by the key elements and provisions of the NGJHRDP as well as the Philippines' many other policy frameworks supporting climate mitigation and adaptation.

While the Philippines is a pioneer globally for its swift creation of bold policies and frameworks to support a just transition to a low-carbon economy and climate adaptation, implementation has been challenging in some areas, particularly at the subnational level. This level is particularly important in the Philippines due to its devolved governance structure in which cities and municipalities led by local government units (LGUs) play an outsized role in implementing national policies; designing education and training programs; incentivizing business creation and investment; and providing social support, including scholarships. While training and educational institutions at the secondary, technical, and university levels have begun to adapt curricula and facilities to meet demand in emerging and transitioning sectors, opportunities remain to close skills gaps and accelerate the transition by meeting employer demand.

Skills demanded in the Philippines' six priority sectors include a variety of technical, professional, and cross-cutting skills needed to support transition to a low-carbon economy. Examples of these skills are listed below.

Technical skills gaps:

- Industry-specific skills for new technologies: Renewable energy, electric vehicles (EVs), modern railways, green building, smart agriculture, and sustainable logistics
- Digital skills: Data analytics, data security, artificial intelligence (AI), cloud computing, digital supply chain management, robotic engineering, digital communication, and marketing
- Technology integration: Construction, energy, agriculture, and manufacturing

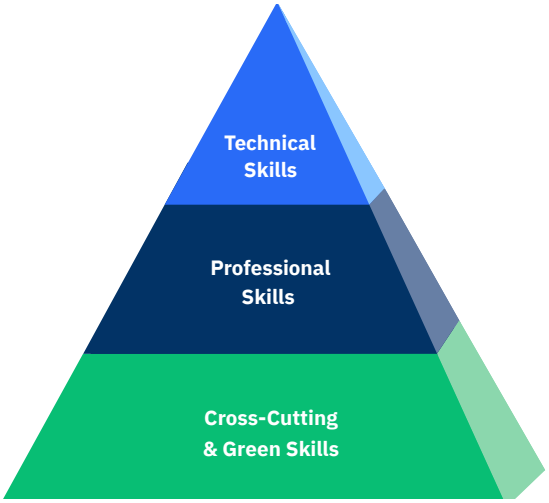
Professional skills gaps in project management or implementation:

- Project management for large and/or complex projects
- Green standards and certification systems for specific industries
- Regulatory compliance in waste management, energy, and building
- Sustainable business practices in traditional sectors
- Deep knowledge of climate change adaptation, mitigation, and circular economy

Cross-cutting and green skills gaps:

- Communication, problem-solving, resilience, teamwork, and adaptability
- Environmental awareness, entrepreneurial skills, and an understanding of sustainability

As shown in our analysis below, and various estimates by Philippines agencies and industry analysts, some 4 to 8 million green jobs could be created by 2030 in fast growing, low-carbon, and transitioning sectors if skills needs are met. As the Philippines transitions away from fossil fuels, some jobs will be lost even as others are created. A degree of internal migration may occur as workers move to access new jobs. As the transition is still in the early phases, data and projections are not available regarding the scale of potential job losses.



Clearly, the transition will increase demand for the reskilling and upskilling of existing workers, as well as for social safety nets to address social risks of the transition and support workers not able to transition to other jobs.

The disconnect that exists between the current workforce's capabilities and the emerging labor force and skill requirements of these green and transitioning sectors threatens to slow the Philippines' momentum. **To address this skills gap, further investment in technical green skills, professional skills training, and cross-cutting green skills is essential, particularly for workers in transitioning industries, marginalized groups, youth, and workers in the informal sector.** Informal sector workers alone make up over one-third of all workers, yet are not typically reached by formal training programs and institutions. Much greater attention must be paid to how skilling efforts can advance a just transition by prioritizing marginalized groups (e.g., women, out-of-school youth, persons with disabilities, informally employed and displaced workers) and providing flexible pathways and equitable access to skilling opportunities. Training should be offered in multiple formats, including a blended online and in-person version as well as in-person options at times suitable for those who are currently employed or engaged in household responsibilities. Current workers may not be able to access skilling opportunities if programs are only offered at times that conflict with their ability to generate income or with other responsibilities.

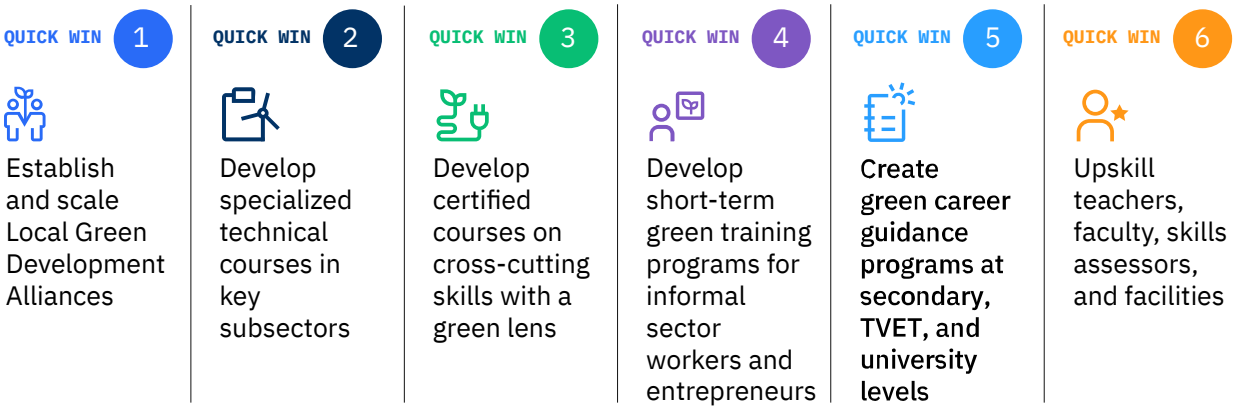
Given the Philippines position as a pioneer in climate and green jobs policies, this case study does not propose new policies or frameworks to address demand for green skills in rapidly growing and transitioning sectors. Rather, it seeks to build upon the momentum and political

will already in place by proposing several "quick wins" that can be implemented to accelerate progress in green skills development. These are large-scale systems-level solutions in six key areas that can be achieved over the next three to five years, some at the subnational level, to significantly impact green skills development while building momentum for further systems change.

Efforts by the Green Climate Fund and others to build country platforms to coordinate climate financing and project implementation across sectors will be an important mechanism to coordinate climate policy and facilitate and direct climate financing to investment ready projects. While the proposed six quick wins could be coordinated through such a platform once created, country platforms and other medium- to long-term solutions are outside the scope of this study.

The following **six quick wins** are described in further detail in the body of this report. An increase in financing and, in some cases, access to technology will be crucial in implementing these interventions while helping to build momentum and support for the transition.

Figure 1: Six Quick Wins



1 **Establish and scale Local Green Development Alliances:** Establishing multi-sectoral Local Green Development Alliances across municipalities or cities to connect diverse stakeholders (e.g., TESDA, Department of Education [DepEd], DOLE, Department of Trade and Industry [DTI], local businesses, and youth leaders) would improve the coordination of efforts around green skilling. These alliances could conduct labor market assessments, align training programs and scholarships with local green job needs, and promote green entrepreneurship, thereby fostering inclusive green economic growth. These efforts would also offer a platform for knowledge sharing and best practice exchanges, ensuring tailored solutions for local green skill gaps. Local-level alliances could be coordinated through the country platform, or another national body, once created.

2 **Develop specialized technical courses in key subsectors:**
Address technical skill gaps in the six critical sectors identified in the NGJHRDP by expanding specialized courses and curricula at various educational levels to prepare and upskill youth and adults for green jobs. This quick win includes the development of technical and vocational education and training (TVET) programs specifically targeting emerging sectors, such as renewable energy and ecotourism. Offering more practical hands-on learning opportunities would prepare workers for high-demand green jobs and increase employability, particularly for vulnerable youth.

3 **Develop certified courses on cross-cutting skills with a green lens:**
Develop and offer stand-alone TESDA and university-certified courses focused on cross-cutting skills (e.g., communication, creativity, problem-solving) through a green lens. These courses would help youth and adults develop adaptable, lifelong learning skills, emphasizing sustainability and climate action. Such training would be cost-effective and could quickly expand the workforce's ability to participate in many types of jobs across both green and traditional sectors, while aligning with national goals to foster a green skilled labor force.

4 **Develop short-term green training programs for informal sector workers and entrepreneurs:**
Develop short-term green training and reskilling programs for informal sector workers and entrepreneurs starting or leading micro, small, and medium enterprises (MSMEs), comprising both business management skills and sustainable practices. The informal sector in the Philippines employs roughly one-third of the workforce and contributes significantly to the gross domestic product (GDP), yet it remains underserved in green and business development training. These courses would also serve to raise awareness of environmental issues and include cross-cutting and work-readiness skills.

5 **Create green career guidance programs at secondary, TVET, and university levels:**
Integrate climate leadership, work-based learning, and green entrepreneurship programs into career guidance at junior and senior high schools, technical and vocational education and training (TVET) institutions, and universities. This would increase youth engagement in green careers by strengthening environmental education and providing practical work experiences with green companies. Emphasizing green entrepreneurship will also empower young people to lead sustainable businesses, creating a more environmentally conscious workforce.

6 **Upskill teachers, faculty, skills assessors, and facilities:**
Rapidly upskill educators, trainers, and assessors to ensure that they are equipped with the necessary skills to teach and assess green and greening sectors effectively.

This quick win includes developing specialized training for faculty and upgrading educational facilities to support the latest green technologies. By strengthening the capacity of the education system, this initiative will ensure that future generations are adequately prepared to meet the challenges of the green economy.

Finally, expanding **finance for green skills** will be essential for achieving these quick wins and other investments in new skills and technology. A combination of public funding, private sector investment, and international climate finance will be needed to scale green skills training and ensure equitable access, particularly for low-income and marginalized populations. Innovative financing mechanisms, such as green bonds, may also be explored to support this transition. Particular interest may be paid to the opportunity to integrate green skilling into existing projects and programs for funding envelopes for which the Philippines has already qualified through multilateral climate funds, such as the Global Environment Facility and the Green Climate Fund.

By addressing these critical areas, the Philippines can accelerate its shift to a low-carbon economy, creating green jobs, fostering sustainable businesses, and ensuring that all workers have the skills needed to succeed in the evolving labor market. The Philippines' significant progress to date in creating the groundwork for such transformative investments makes it an ideal country champion for the Jobs and Skills for the New Economy Initiative.