Regional Study on Green Jobs Policy Readiness in ASEAN

Highlights

March 2021

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▶ Highlights for policy makers

Green jobs are a high priority in ASEAN as evidenced by the ASEAN Economic Community Blueprint and the ASEAN Declaration on Promoting Green Jobs for Equity and Inclusive Growth adopted at the ASEAN Summit in 2018. ASEAN is actively promoting green employment in clean energy, energy efficiency and green buildings and urban planning, as well as developing policy to support sustainable production and consumption systems such as circular economy. Despite these commitments the growth of green jobs could be enhanced and further developments made to the supportive policy ecosystem that enables this growth. Member countries are requesting specific advice on how they should understand the impact of green jobs and greening on their workforces, what the labour market, skills and training development implications of green jobs will be, and how best to respond to these.

Many ASEAN member states (AMS) have already made inroads into defining and counting green jobs within their economies and building the skills and capacities of policy makers. Each AMS is working at a different pace, and with a differing focus. The consequence is that gaps exist in knowledge and data sources for green jobs at the ASEAN level, including understanding the country and sectoral level supply and demand drivers for green jobs, the resulting impacts on labour standards and occupational health and safety, as well as the implications for educational structures, particularly training and vocational education (TVET) systems.

What are green jobs?

The ILO defines green jobs as jobs that are good for people, good for the environment and good for the economy. They are both a mechanism to achieve sustainable development, as well as an outcome. They provide the double dividend of employment and reduced negative environmental impacts. Green jobs are decent jobs in economic sectors and activities that contribute to the preservation and restoration of the environment in either traditional sectors such as agriculture and manufacturing, as well as new, emerging green sectors such as renewable energy and energy efficiency.

Green jobs must be quality, decent jobs and in line with the four strategic objectives at the heart of the ILO decent work agenda, which seek to:

> ▶ set and promote standards and fundamental principles and rights at work;

> ▶ create greater opportunities for women and men to obtain decent employment and income;

> ▶ enhance the coverage and effectiveness of social protection for all; and

> ▶ strengthen tripartism (government, workers' and employers' organizations) and social dialogue.

At the enterprise level, green jobs can produce a variety of goods and services that benefit the environment. Some of these activities are easy to identify such as green buildings, recycling services or clean transportation. However, these goods and services are not always based on green production processes and technologies. Green jobs can also be derived from contributing to more environmentally sustainable production processes, even when the final outputs of these activities are not environmental good and services. Figure 1 provides an overview of the range of activities that can be considered green jobs.

▶**Figure 1: Green Job activities, ILO (2017)**
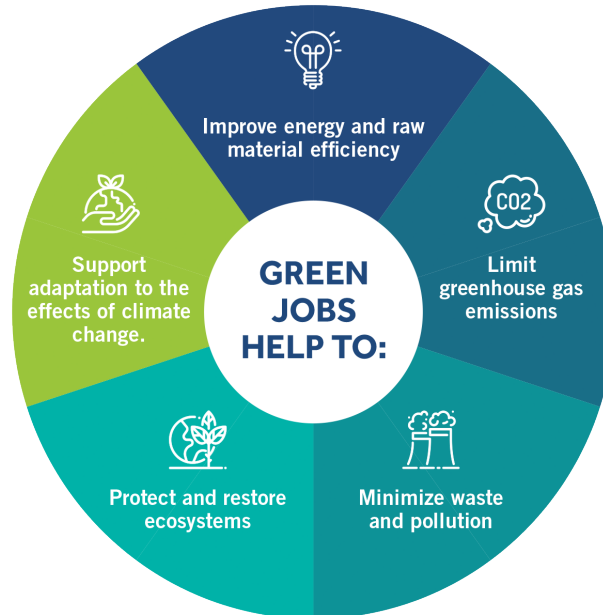
Greening work and a just transition

For most of the workforce, greening will change their work by only a small amount. For other occupations, greening will change work significantly, with new occupations created, and other occupations diminishing or being phased out. This is why a just transition is discussed alongside green jobs. A just transition ensures that in the process of moving to a green economy, people in jobs and occupations that are reduced and phased out have pathways to transition to other viable employment and have social protection on this pathway.

Social protection is a critical enabler of a just transition – facilitating decarbonisation by ensuring the provision of essential guarantees against social risks affecting income and health for workers (ILO, 2019c). Social protection systems include a range of policies and mechanisms that help people manage the social risks associated with employment disruption from climate change and climate action. Policies include unemployment benefits, maternity benefits, sickness and disability benefits, child benefits, old age pensions and other social assistance. The policies are further underpinned by public services in health, education and care (ITUC, 2019).

Identifying the new skill needs coming with greening employment is also a critical enabler of transition (ILO, 2019). The work to promote green jobs and a just transition also includes understanding skill needs. For green skills to adequately diffuse through the work force, an understanding of what green skills are, and how they are different/ additional to the skills that are already in the workforce, helps to define the re-skilling and re-training needs of the green economy. As the greening of the economy will impact most occupations and professions to some degree, understanding how and where these skills can be learnt on-the-job, and that these skills can be recognised and assessed.

The European Centre for the Development of Vocational Education and Training (Cedefop) defines green skills as "the knowledge, abilities, values and attitudes needed to live in, develop and support a sustainable resource efficient society" (Cedefop, 2012). Cedefop further states that the demand for green

skills is driven by a range of factors, including public policies and targets, and are defined by three main trends:

- ▶ across occupations and industries, greening requires upgrading skills and adjusting qualification requirements;

- ▶ new or emerging economic activities create new or renewed occupations and related qualifications and skills profiles; and

- ▶ structural changes create a need to realign sectors that will decline as a result of the greening of the economy and retrain workers accordingly.

Climate action and climate impacts in ASEAN

There is no question that environmental sustainability and employment are closely linked. As much as 1.2 billion jobs globally rely directly on the effective management and sustainability of the environment. The transition to a green economy, addressing the challenges of climate change, environmental degradation and resource limits will require a decoupling of economic growth from greenhouse gas production and resource use (ILO, 2018).

ILO has calculated that the measures taken to reach a green economy by decarbonise the production and use of energy will lead to job losses of 6 million as well as the creation of some 24 million new jobs – a net increase of 18 million jobs resulting from changing the energy mix to renewable energy and taking up energy efficacy opportunities (ILO, 2018). Also, the move to more sustainable agricultural practices can both reduce emissions as well as enhance the decency of work in agriculture by introducing additional opportunities for wage employment, for example medium and large organic farms, as well as allowing small holders to diversify income sources through conservation agriculture.

The employment implications from climate change will arise is two main areas:

- ▶ employment changes due to decarbonisation of economic activities to meet commitments for the Paris Agreement (i.e. to keep global warming to less than 2 degrees above pre-industrial levels). All AMS are signatories to the Paris Agreements and each country has made pledges regarding mitigation activities, detailed in their Nationally Defined Contributions (NDCs). Employment changes will be both positive and negative – as certain industries reduce carbon intensive activities, for example in the energy sector; and other industries grow in response, for example renewable energy, energy efficiency and resource efficient manufacturing.

- ▶ employment changes due to climate impacts in the ASEAN region. This includes the economic and employment disruptions associated with extreme weather events (storms, floods, etc.) and other physical impacts of climate change, for example sea level rise (inundation of low-lying urban areas, workplaces and agricultural assets), increased ocean temperature/ acidification (changes in fish stocks, etc.).

The role of policy in supporting green jobs and a just transition

Policy is necessary to both ensure the maximum amount of potential green jobs are created, and the labour force is skilled and ready to take up this employment. Policy must also ensure that workers who are in industries negatively affected by greening are provided with support and opportunities for skills development and training so they can effectively transition to new employment. Just transition includes a set of principles, processes and practices that produce plans, policies, investments and concrete measures designed to move the world towards a future where jobs are green and decent, carbon emissions are net zero, poverty has been eradicated, workers and their families enjoy their human right to social protection and communities are thriving and resilient (ILO, 2019). There is significant scope for policies in the world

of work to advance environmental sustainability, and for environmental sustainability to enhance decent work conditions (ILO, 2018).

The policy mix for promoting green jobs and skills, as well as a just transition, is broad, encompassing many policy fields including development and employment policy, energy policy, industry policy, training and skills development, as well as sectoral level policies and policies at different jurisdictional levels. The broad array means that policy coherence and coordination are also critical issues in the successful implementation of policies for promoting green jobs.

Policies influencing the demand for green jobs include macro-economic national development policy, and, increasingly, how these policies encompass the green agenda of individual nations (including how they will meet Paris Agreement targets through the NDCs), and how the impacts of this national development agenda manifest in labour markets. It is important to know how the employment implications of green economic policies and NDCs – essentially climate action and climate change – will map to employment and the employment of specific groups of people, including women, young people, and people working in specific geographical areas.

Other key policy areas affecting demand for green jobs include policies for mitigating and adapting to climate change, energy policy, and industry policies – particularly in target sectors for green jobs such as agriculture, forestry and fishing, manufacturing, construction and the built environment, transport and waste. Other strategies and plans for how public investments in infrastructure, procurement, and research and development support all play a role in creating demand for green products, services and organisations and thereby, green jobs.

The government's role encouraging private sector activities in the green economy is also critical. This includes specific policy support for subsidies and access to finance for greening production and employment, support for commercialisation and green entrepreneurship, the creation and enforcement of a supportive regulatory system for environmental sustainability and the creation of new, green markets – such as through payments for ecosystem services.

Policies and mechanisms that influence the supply side for green jobs include skills development policies and the institutions that provide and assess these skills such as Vocational and Technical Training organisations (Sakamoto and Sung, 2018).

The availability of social protection for workers and communities who are affected by the physical impacts of climate change or adverse effects from green policies is also important. A comprehensive social protection system includes measures that enhance the adaptive capacity of individuals and communities to absorb and respond to shocks. Measures include affordable health care, unemployment protection and facilitated early retirement for workers of advanced age at risk of losing their jobs due to phase-outs of carbon-intensive industries (ILO, 2019). Social protection measures also need to extend to workers who lose their jobs or working hours due to climate related impacts such as extreme weather events. In this case, examples of relevant measures are unemployment benefits and employment guarantee schemes that engage workers in the rebuilding of their communities after natural disasters associated with climate change (ILO, 2019). Cash transfer schemes that are flexible and rapidly scalable to expand coverage to affected groups can also be effective measures to cushion populations against climate-related impacts.

The creation of just transition plans for sectors and geographies that are highly impacted by decarbonisation will ensure that workers and communities negatively impacted by greening in the economy will not be left behind and have pathways to transition to new employment. Just transition planning is a new skill set for policy makers.

As the employment implications of the green economy are far-reaching and involve many public institutions, how policy is coordinated across government and the economy is integral to the success of these green policy frameworks. Therefore, part of the policy mix also needs to consider how policies are coordinated and coherent in total.

The ILO Guidelines for a just transition towards environmentally sustainable economies and societies for all highlight that the greening of economies and work will require "a country-specific mix of macroeconomic, industrial, sectoral and labour policies that create an enabling environment for sustainable enterprises to prosper and create decent work opportunities by mobilizing and directing public and private investment towards environmentally sustainable activities" (2015: p6).

Assessing policy readiness in ASEAN

A policy framework for promoting green jobs and a just transition was developed for this work, combining the nine key policy areas identified in the Guidelines for a Just Transition, and categorising each into the three broad areas of policies that promote green jobs;

- ▶ Creating demand for green jobs,

- ▶ Enhancing supply for green jobs,

- ▶ Institutional arrangements.

The resulting policy framework was then used to assess policy readiness for promoting green jobs and a just transition across AMS. In completing these assessments, we drew on responses to an extensive questionnaire completed by AMS countries between April and September 2020. Results from this questionnaire, along with other document analysis, were then used to develop the country narratives and summary assessment tables. The table below provides a colour coded summary of the findings, with green representing significant elements of the framework element in place, orange representing a need for additional processes and policies, and grey representing no policy elements identifiable to date.

▶ **Summary policy readiness assessment in AMS**

Policy area	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Development policies establish the green agenda	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Industrial and sector policies for greening	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Enterprise policies and initiatives for greening	Green	Some	Green	Some	Green	Green	Green	Green	Some	Some
Skills development for green skills	Some	Some	Some	Some	Green	Limited	Green	Green	Some	Some
Active labour market for greening	Limited	Limited	Some	Some	Green	Limited	Green	Green	Limited	Green
OSH for climate change issues	Limited	Some	Limited	Limited	Green	Some	Green	Green	Limited	Green
Social protection	Some	Some	Some	Some	Some	Some	Some	Green	Green	Green
Cross-cutting issues – labour rights, standards & social dialogue processes in greening	Limited	Some	Some	Some	Some	Some	Green	Green	Some	Green

■ Significant policy elements in place ■ Some policy elements in place ■ Limited/ No policy elements in place

Promoting green jobs and a just transition in ASEAN

The Covid-19 pandemic has led to the contraction of many economies across Asia after years, in some cases decades of growth (ILO, 2020). The recent Asia-Pacific Employment and Social Outlook estimates that the Covid-19 pandemic and related economic disruptions have resulted in the loss of some 81 million jobs in 2020 (compared with pre-covid-19 levels), with the consequence of an additional 22-25 million people forced into extreme poverty, living on less that US$1.90 per day. Needless to say that already vulnerable population groups, such as women and young people have been more severely impacted. The need for green jobs and a just transition has increased in ASEAN.

Yet, this study has shown that a gap exists for member countries in understanding and planning for the impact of green jobs and greening on their workforces, what the labour market and skills and training development implications of green jobs will be, and how best to respond to these. This knowledge gap includes understanding the country and sectoral level supply and demand drivers for green jobs, the resultant impacts on labour standards and occupational health and safety, as well as the implications for education structures, particularly TVET systems. Also limited capacity in planning for the impact of green jobs and greening on their workforces, specifically what the labour market and skills and training development implications of green jobs will be, and how best to respond to these, and do these skill profiles match workers and occupation transitioning from carbon intensive sectors. The economic and fiscal constraints imposed by the ongoing Covid-19 pandemic - which is still on ongoing challenge for many ASEAN countries – intensifies the impact of this knowledge gap.

The dilemma for many ASEAN member states is how to achieve sustainable development – with green jobs, just transition, development that addresses ongoing issues of poverty and inequality, in way that clearly leverages limited public investment in the post-covid period. The ability for the region to create development pathways through regional knowledge sharing and coordination, and south-south

cooperation is seen as essential. A clear result of the first ASEAN Green Jobs Forum in October 2020, was to schedule an annual Green Jobs Forum to enable regular exchange of knowledge between AMS on implementation progress at thr nation ststae level and identifying priorities for the regional implementation of the ASEAN Green Jobs Declaration, with links to the 5 year ASEAN workplan.

Recommendations from the Regional Scoping Study

Recommendation 1: AMS to work together to agree on common and workable definition of green jobs, using a spectrum approach to identify core green, indirectly green, and non-green occupations across different sectors and geographies.

Most AMS have some conceptual definitions of green jobs and green skills, and in many cases, these are developed from the ILO definition of green jobs. The specific defining of green jobs has been of less focus than the overall implementation of the green economy agenda with the belief that creating low carbon development and adapting to climate change will create momentum in the economy for green jobs.

A common definition for green jobs will allow knowledge sharing of green jobs analysis across the region and allow countries to leverage on other AMS's understanding of green jobs in various sectors, further accelerating knowledge and evidence for policy making and support. The proposed annual Green Jobs Forum would provide a mechanism for this knowledge sharing.

Recommendation 2: Using these definitions of green jobs, analyse labour markets to highlight where green jobs potential, skill needs and just transition hotspots are located.

The delineation of green and non-green is more important when developing specific sector strategies, considering negative employment impacts of greening and when considering the skills need and re-skilling task associated with green economies. For most of the workforce greening will change their work by only a small amount. For other occupations greening will change them significantly and new occupations will be created, and other occupations will diminish or be phased out. Definitions and categorisation of green jobs, especially definitions that implement a spectrum approach - consider greening on a spectrum, with some jobs categorised as 'core green' (renewable energy installers, recycling officers etc) and others as 'indirectly' green (construction workers on green buildings, workers in factories with cleaner production). It is also important to consider non-green jobs, and identify those jobs than can and will transition and those that will phase out. This will allow for Just Transition planning to take place.

Recommendation 3: Seek to differentiate likely occupiers of green jobs by age and gender.

The gender and age dimensions of greening also needs investigation. People who are socially, economically, culturally and institutionally marginalised are especially vulnerable to the impacts of climate change. This includes low income, low skilled workers, and workers in informal employment (ILO, 2018). Women also have less access to resources to adapt to climate change and may face additional barriers or discrimination in participating in opportunities from the green economy. Gender-responsive policies for green jobs and skills are necessary to ensure women have equal access to these jobs.

Recommendation 4: Create a knowledge sharing platform and opportunities for dialogue between TVET specialists, policy makers and other stakeholders to discuss, identify and share best practice in developing green skills in AMS.

Identifying what tasks in a green job are different to a non-green job, and how to develop the skills associated with the green task, highlights in what sectors/ occupations / demographics

re-training needs will be greatest. The so-called skill-distance (Autor et al, 2003), the extent of re-training required to transition from one (non-green) job to another (green) job also signals how re-training and re-skilling can occur (Bowen et al, 2018). Where the distance is short, on-the-job training can be used to build these skills.

Enhancing the capacities of people through the acquisition of green skills is critical to the broad promotion and creation of green jobs within the economy. Many AMS have active programs and policies to green their TVET systems and develop and integrate standards for green education and training within curriculum and competency frameworks. The Green Jobs Forum highlighted that knowledge and practice sharing on policies and programs for greening of TVET systems, and assessing the effectiveness of these systems will be a focus of further Green Jobs Forums.

Recommendation 5: Map and share promising examples of integrating push and pull factors in developing sector specific strategies, including for active labour market policies.

Many AMS have explicit strategies in place to implement the green economy in priority sectors – with agriculture, tourism services, the built environment, energy and environmental services (water, wastewater, waste) identified as priority sectors in countries. These sector strategies usually include investment and incentives from government at various levels. The more comprehensive strategies combine these incentives (pull factors) with research and development activities, innovation support and public procurement (push factors). The annual Green Jobs Forum would provide a regional knowledge sharing platform for identified relevant examples.

Recommendation 6: Map and share promising examples and evaluations of financing mechanisms and incentives for private sector activity in the green economy.

The Green Jobs Forum 2020 also highlighted the critical need to mobilise investment – both public and private for green infrastructure, as well as to support research, development and commercialisation of green products, processes and services. However, experience of other countries shows that access to finance alone does not necessarily translate into green jobs. Additional measures including guidelines, checklists and capacity building is required to ensure that investments in green or sustainable infrastructure or projects also translated into decent and green work.

Recommendation 7: AMS to work together and share evaluations of efficacy of private sector incentives for green jobs. One practical way to do this is to hold an annual Green Jobs Forum where progress can be discussed and strategies and initiatives which proved to be effective in promoting green jobs and green employment can be shared among AMS.

Across all AMS a range of incentives to create private sector demand and awareness for green jobs exist. These range from subsidies, tax exemptions, preferential investment treatment and various forms of regulation. There are some examples of where these activities have been in place for a number of years, but for most incentives they are relatively new, so there is little clarity and evidence of efficacy yet. In many cases there is the assumption that these incentives will lead to the creation of green jobs, but this is untested, or at least the number of types of green jobs that are created is not known. Activities that assess the number of types of jobs generated by these incentives and assess whether these match expectation for public expenditure need to be developed.

Recommendation 8: Map and assess the Occupational Health and Safety (OSH) implications of the greening of employment across ASEAN, and identify how OSH frameworks and training activities will need to be enhanced in order to manage these risks.

The implications of greening for (OSH) and the role of social protection in achieving a just transition are emerging and critical issues. Climate change is one of the most significant drivers of change in the workplace; it will also become a significant source of workplace harm. Environmental risks resulting from climate change including air, water and soil pollution; heat and increasing temperatures; erosion; sea-level rise and risks from rapid onset events, such as extreme weather events (bush fires, severe storms, floods) will be a major driver of change in the world of work (ILO, 2018). Climate change will alter the

intensity and frequency of these events, and lead to cascading effects. This means that whereas in the past these impacts were not seen as workplace risks, now and into the future they will be.

Recommendation 9: Map and assess the implications for and suitable modes of social protection associated with achieving a just transition.

Social protection is identified as a critical enabler of a just transition and is one of the elements identified in the policy assessment framework for promoting green jobs used in this report. The methods of assessment used in this report – ratification of ILO convention 102 and assessment of elements of social protection systems in ASEAN from a 2015 ILO report highlight that there are gaps in our knowledge about social protection systems across AMS and the adequacy and need that greening and climate change will place on these systems. The implications of greening and just transition on social protection, and particularly the modes and forms that this protection needs to be the focus on further analysis and discussion across ASEAN. The need for this renewed focus was acknowledged is discussions at the Green Jobs Forum.

Recommendation 10: Examine coordination mechanisms across AMS to identify and establish what successful coordination across green jobs policy framework looks like and how to replicate it.

A range of Institutional mechanisms were identified across AMS for coordinating policy frameworks for promoting green jobs and just transition. These typically consisted of inter-ministerial groups and related senior-officer groups. For example, The Philippines has a highly developed range of institutions to support the implementation of the Philippines Green Jobs Act and Climate Change Plan, including the creation of a Climate Change Commission. The emerging nature of these institutions means that we do not have a good understanding of how coordination is successfully managed, and what the critical ingredients are in the establishment and maintenance of these mechanisms.

Mechanisms for coordination and coherence of policy for promoting green jobs and a just transition are common requirements for all AMS, and therefore provide another area that is highly relevant for knowledge sharing and cooperation at the regional level. As all AMS manage the health, social and economic disruptions from the COVID-19 pandemic, ways and means for AMS to work together and develop best practice mechanisms in developing green jobs will provide an effective investment of public and private resources for sustainable development.

Green jobs are a high priority in ASEAN. The COVID-19 pandemic is challenging all ASEAN Member States as they balance the health crisis with economic downturn and additional calls for fiscal stimulus. The need for green jobs is even more important now, yet resources both in the public and private sectors are constrained. Knowledge sharing and understanding best practice in promoting green jobs is essential to ensure scarce resources are used in the most effective ways. This report contributes to this knowledge sharing by using data from each of the ASEAN Member States to develop a policy framework and assess the level of policy readiness needed to promote green jobs and just transition in ASEAN countries.

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