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Executive Summary
In October 2017, the Government of Indonesia committed to its goal of integrating climate action into the country’s development agenda by launching the Low Carbon Development Initiative (LCDI). The LCDI aims to support the achievement of Indonesia’s Nationally Determined Contribution (NDC) by incorporating environmental considerations into the country’s development-planning framework. It is designed to identify policies that maintain economic growth, alleviate poverty, and achieve sector-level development targets while fulfilling Indonesia’s climate objectives and preserving the country’s natural resources.

In Phase I (2017-2019) of the LCDI, the Ministry of National Development Planning (BAPPENAS) successfully introduced a system-dynamic planning tool that allows for the simultaneous assessment of economic, social and environmental impacts in various development scenarios. The LCDI has subsequently been integrated into Indonesia’s existing National Mid-Term Development Plan (Rencana Pembangunan Jangka Menengah National, RPJMN 2020-2024) – the country’s first green national planning document, with a clear strategy and targets. Now in Phase II, BAPPENAS is working with the Partnership for Action on Green Economy (PAGE) and other partners to implement LCDI policy at the national and sub-national level. This process will also inform the development of a new LCDI model, strategy, and targets for the next RPJMN in 2025-2029.

To support the implementation of the LCDI, PAGE conducted a Green Economy Learning Assessment to identify the learning needs and priorities for advancing the green economy and climate change agenda in Indonesia according to the LCDI Phase II Framework. This focused on the needs of those that will be responsible for implementing the LCDI at the national level – including development policy-makers and planners working within BAPPENAS, relevant national ministries or sub-national governments, and other key stakeholders. The assessment also reviewed the existing institutional capacities of academic and training organizations within Indonesia to deliver green economy learning activities. Based on these findings, a concrete action plan and training strategy was developed to strengthen and scale green economy learning within BAPPENAS and other relevant institutions at the national and sub-national level.

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The Green Economy Learning Assessment was conducted from April to December 2020. It was a broad and participatory process that engaged with government stakeholders, university and research institutions, the private sector and also local communities. Data was collected through a desk review of relevant national policies; an online survey yielding 170 responses from national experts; two focus group discussions with almost 300 participants; 8 individual interviews; as well as a review of existing programs and initiatives related to a green economy. The assessment can also support the development and implementation of BAPPENAS’s “B3-Low Carbon” initiative to “Build Back Better”, which aims to design green stimulus packages for a medium to long term green recovery from 2022 onwards.
Three Main Outputs of the Assessment

An overview of green economy-related learning programs and initiatives offered by government ministries, universities, research institutions and not-for-profit organizations in Indonesia.

A competency framework for each of the six priority thematic areas identified in the LCDI Phase II Framework (forestry and peatland, agriculture, energy, industry, waste, and blue carbon/mangrove), and mainstreaming LCDI into sub-national levels, allowing for a structured analysis of green economy learning needs and priorities.

An action plan and training strategy containing concrete priority actions to advance learning and skills development for greening the Indonesian economy in line with the LCDI Phase II Framework.

Existing Green Economy Learning Programs and Initiatives

The main green economy-related learning initiative in Indonesia is the “Pro-Green” training platform, which is a technical training program for high-level government officers and other civil servants. The platform was developed by the National Institute for Public Administration (LAN) – a government institute that is responsible for developing and delivering training programs for Indonesian officials – in collaboration with the Global Green Growth Institute (GGGI Indonesia), BAPPENAS, and the Ministry of Environment and Forestry. Launched in 2019/2020, the primary objective of the platform is to build the technical competencies needed to formulate policies and plans that will mainstream green growth strategies. The “Pro-Green” training has been a key milestone in the development of green economy learning opportunities for government officials, and therefore also represents a key entry point for scaling these in the future.

While Indonesia’s government institutions do not provide specific training programs on green economy, programs offered by training centres within a number of government ministries do extend to green economy-related topics. For instance, the Financial Education and Training Agency provides training on economic issues such as green tax and green financing. The Ministry of Environment and Forestry, while providing training programs on environment-related issues, also incorporates learning on sustainable and consumption and production. At the same time, it is estimated that more than 100 study programs at university and training institutions within Indonesia actively engage in environmental and climate change issues, with up to a quarter of these conducting green economy-related learning activities. However, the vast majority of these are integrated within other programs.

Competency Frameworks for Green Economy Policy Action

As a first stage to defining green economy learning needs and priorities, competency frameworks were developed in the priority thematic areas of the LCDI Phase II Framework (including mainstreaming LCDI at the sub-national level). These identified the national leadership, management, socio-cultural and technical competencies needed to meet five core learning needs under the LCDI Phase II Framework: 1) strengthening LCDI policy development, modelling and strategic planning, and capacity building on international reporting obligations; 2) capacity building on monitoring, evaluating and reporting (MER) frameworks at the national and sub-national levels; 3) fostering private sector engagement; 4) improving stakeholder communication to raise awareness on LCDI; and 5) mainstreaming LCDI into sub-national policies and models.

Forestry and Peatland

To meet the LCDI Framework’s targets on forest governance, and peatland protection and management, a range of competencies are required in five focus areas including moratorium, restoration, sustainable management, productivity, and land rights – particularly for those living in poverty in surrounding forest and peatland areas.

Agriculture

The LCDI Framework identifies the need for more sustainable land use and increased productivity as part of a systemic transformation towards a more diversified, efficient, and higher-value agricultural system. To achieve this transformation, enhanced skills in spatial planning, increased investment in critical ecosystems, and actions to repair the agricultural value chain and increase food security are required.

Energy

The LCDI Framework promotes the phase-out of coal through the transition to renewable energy and increasing energy efficiency, including a scale-up Indonesia’s renewable energy share from 8% in 2015 to 23% by 2030. This will require building knowledge and awareness of both the external costs of pollution, and the opportunities presented by the development of green energy technologies.
Industry

Indonesia’s NDC contains key industry-related interventions to support its greenhouse gas emission reduction targets of up to 41% by 2030. These focus on efforts to increase industrial efficiency and CO2 recovery in the cement, petrochemical and steel industries, such as through the use of blended cements and the promotion of new Industrial Process and Product Uses (IPPU).

Waste

The LCDI Framework identifies a number of key waste reduction and waste management interventions that can help the country to achieve future targets. These include policies to reduce waste generation by 30% and emissions related to industrial waste by 50% by 2045. Other interventions aim to enhance waste utilisation and the management of industrial waste.

Blue Carbon and Mangroves

Indonesia is home to the largest mangrove and sea grass ecosystems in the world. However, the unsustainable exploitation of marine resources is adversely impacting those communities whose livelihoods depend on them, with such households experiencing on average the second-highest poverty levels in the country. LCDI policy interventions therefore focus on new development paths for the protection and restoration of ocean and coastal ecosystems.

Mainstreaming LCDI at the Sub-national Level

A key objective for LCDI implementation is its mainstreaming into development plans and policies at the sub-national level. However, political agendas at this level are diverse among provinces and districts/cities. A range of social-cultural competencies are therefore needed to engage and build trust among key regional political actors.

Learning Needs and Priorities

The assessment found that most of the topics or subjects identified in the competency frameworks are being taught somewhere within Indonesia, and particularly in the areas of forestry and peatland, agriculture, and waste. These often form part of integrated courses or programs, and are not taught specifically in the context of green economy. Meanwhile, the focus of green economy-related training programs is often academics and researchers, with only a third being designed to enhance the capacities of civil servants and those engaged in policymaking processes. Such programs are also often tailored towards the development of management competencies, and focused on delivering knowledge-based training at the expense of skill-driven learning and technical expertise. Given the skillsets needed to implement the LCDI, the development of technical competencies should be a key learning priority in the future.

The lack of dedicated training programs on green economy point to the need for a specific competency framework and curriculum to inform the design of green economy learning activities. Enhancing the competencies of policy-makers will require addressing existing knowledge and skills gaps across all green economy layers. At the agenda-setting level, policymakers need a strong understanding of core green economy theories (e.g. environmental economy) and concepts (e.g. nature-based solutions) as well as the benefits provided by a green economy transition to achieve the competencies needed for national leaders. In addition, management and socio-cultural competencies require knowledge of the various approaches that can give effect to a green economy transition (e.g. resource efficiency), while technical competencies further presume the practical understanding and application of green economy assessment tools (e.g. carbon accounting, system dynamics modelling). At the organizational level, green economy learning activities are also needed to build knowledge and skills in relation to capacity building, stakeholder engagement and public communication, with a greater understanding of monitoring, evaluation and reporting (MER) systems for low-carbon development pathways to be prioritized at the operational level.
Learning Challenges and Opportunities

A number of challenges to scaling green economy learning opportunities remain. Institutional barriers relating to limited budgets for education and training, inflexible regulations, internal capacities for assessment and development, and a lack of coherence and coordination between education and training institutions persist. Meanwhile, the absence of a green economy competency framework identifying learning needs and priorities also restricts the ability of education and training institutions to develop their own green economy curriculums and modules. This has also led to a shortfall of qualified trainers, with those delivering learning activities often lacking specific expertise on green economy topics. These issues are amplified by Indonesia’s accreditation program, in which LAN has sole authority to accredit education and training centres. So far, only 21% have received such recognition – meaning over three-quarters of learning institutions in Indonesia have limited accountability in terms of delivering green economy-related learning.

Increasing the number of accredited institutions would improve the capacities and readiness of such centres to offer green economy training. Mainstreaming the climate change and green economy agendas into the accreditation process therefore provides a key opportunity for scaling green economy learning across over 700 training centres. However, such a move would require the high-level support of LAN management officials. Politicians have a strong influence on the direction taken by government institutions, and there is a need to raise political awareness and support for a transitional agenda at the national and sub-national levels. At present, bureaucratic reform in Indonesia is focused on principles of good governance. Promoting agenda-setting issues relating to the green economy transition could subsequently have a trickle-down effect on the learning focuses of government institutions.

Finally, while capacity building activities have at times being carried out in partnership with external, Non-State Actors (NSAs), these often follow a short-term, project-based approach. A more structured, coordinated approach for engaging with external partners – including those that already have established green economy programs in place – could address internal capacity deficits and scale green economy learning at the institutional level.

Action Plan for Green Economy Learning in Indonesia

The assessment identified a number of specific actions that government institutions and other partners can undertake in the short and medium term to build the institutional capacity needed to scale green economy learning in Indonesia.

1. **Adapt institutional processes.** Specific actions include developing a template for accreditation readiness, reviewing internal regulations to create an enabling framework, incorporating learning activities into budget planning processes, and developing an overarching national strategy and action plan to guide green economy learning.

2. **Increase training capacities.** Train-the-trainer programs, including with external partners, can be implemented to increase the green economy capacities of over 5,000 trainers registered at education and training institutions in Indonesia.

3. **Build leadership awareness and capacity.** A long-term green economy strategy can raise the awareness and concern of those in leadership positions (e.g. high-level politicians) on transitional issues, ensuring that capacity in these positions is retained beyond typical political cycles.

4. **Create accountability.** Developing regular green economy education and training programs, as well as a formal green economy competency framework and curriculum, would serve to generate accountability for green economy learning within government institutions.

5. **Incorporate green economy into the accreditation system.** Accreditation represents a strategic entry point for scaling green economy learning in Indonesia. With only 21% of all education and training institutions currently accredited by LAN, requiring institutions to incorporate green economy learning as part of an accelerated accreditation process can be a key multiplier for learning opportunities.

6. **Mainstream green economy learning into reformation policies, plans and programs.** Promoting agenda-setting issues relating to the green economy transition as part of the reformation agenda can help gain the support of high-level politicians, strengthening efforts to integrate green economy learning into government education and training programs.

7. **Develop partnerships with external organizations.** Partnerships with organizations already providing green economy training would serve to increase institutional capacities within Indonesia. External partners may provide both financial and technical support, including through trainer’s exchanges, shared best practices, and the joint delivery of training programs.