

## **Chapter 5: Regional Policy and Action Matrix**

The following regional policy and action matrix provides recommendations at both the strategic and operational levels for India, India, Indonesia, Sri Lanka, and Viet Nam with regard to suggested policies, proposed activities, potential benefits and incentives, and implementation agencies.

Recommendation	Suggested policy	Suggested activities	Rationale (potential benefits/ incentives)	Implementation agency (India)	Implementation agency (Indonesia)	Implementation agency (Sri Lanka)	Implementation agency (Viet Nam)
<b>STRATEGIC LEVEL</b>							
Policy integration	Strengthening and expanding national green growth strategies such as National Strategy for Sustainable Development (NSSD) in Sri Lanka or National Green Growth Strategy 2012 in Viet Nam to achieve better alignment among economic, industrial, environment, education, and skills development policies.	Assessment to examine elements such as research skills in solar energy production under National Solar Mission (India) or technical skills in recycling materials and urban waste management under National Mission on Sustainable Habitat (India) or technical skills and research skills in environmental services, in reducing usage of fossil fuels for green skill development covered under National Green Growth Strategy 2012 of Viet Nam.	<p>Identification of areas for immediate action on green skill development.</p> <p>Climate change policies need to have a clear pathway to develop human resources for the sectors.</p>	Ministry of Skill Development and Entrepreneurship along with Ministry of Environment and Forests and Ministry of Commerce and Industry; Ministry of New and Renewable Energy	National Council on Climate Change (NCCC) and Indonesian Climate Change Council, National Board on Development Planning (BAPPENAS) along with Ministry of National Education and Culture (MoEC), Ministry of Energy and Mineral Resources	National Council for Sustainable Development (NCSDD); Tertiary and Vocational Education Commission (TVEC) under the Ministry of Youth and Skills Development; Department of Technical Education and Training (DTET); Ministry of Environment and Natural Resources; Ministry of Education; Ministry of Industrial Development; Ministry of Industry and Commerce; Ministry of Labour Relations and Manpower; Ministry of Power and Energy	Ministry of Planning and Investment (MPI) along with Ministry of Industry and Trade (MOIT), Ministry of Labour, Invalids and Social Affairs (MOLISA), Ministry of Education and Training (MOET), Ministry of Natural Resources and Environment (MONRE), Ministry of Construction, Asian Development Bank (ADB), World Bank, International Labour Organisation (ILO), United Nations Industrial Development

							<p>Organisation (UNIDO), Gesellschaft für Internationale Zusammenarbeit (GIZ)</p>
		<p>Strengthening and expanding national green growth strategies for industry by supporting cross border cooperation for supply chains and industry sectors that benefit from joint cooperation and a strategic approach to their joint customer base.</p>	<p>The ASEAN region is gearing up to become borderless from 2015; at this point industry sector blocks or clusters may benefit from grouping based on customers and not necessarily based on nationally determined boundaries.</p>	<p>ASEAN, APEC, and SAARC secretariats to work together to pilot cross-border green skills development projects following supply chains, for example, Sri Lankan textile factories and their customers working with textile manufacturers in the People’s Republic of China, Bangladesh, and India. For example, the ASEAN Economic Community (AEC), whose aim is to transform ASEAN into a region with free movement of goods, services, investment, skilled labor, and freer flow of capital, could work with sectoral and environmental centers to promote green value chains. These centers could include the ASEAN Centre for Energy (ACE), ASEAN Centre for the Development of Agricultural Cooperatives (ACEDAC), ASEAN Coordinating Centre for Transboundary Haze Pollution, and ASEAN Centre for Biodiversity (ACB).</p> <p>The ASEAN Economic Community (AEC) could coordinate these efforts jointly with the APEC Senior Officials' Meeting (SOM) Steering Committee on Economic and Technical Cooperation (SCE) and the SAARC working groups on energy and tourism, the Technical Committees on the Environment, Transport, Agriculture and Rural Development.</p>			
				<p>In 2010, senior APEC officials endorsed a new framework to guide the APEC-funded capacity building and all economic and</p>	<p>The APEC SOM Steering Committee on Economic and Technical Cooperation (SCE), which coordinates and manages APEC's economic and technical cooperation (ECOTECH) agenda through the sectoral working groups relevant to this study, such as, the Experts Group on Illegal Logging and Associated Trade (EGILAT), Energy Working Group (EWG), Transportation Working Group (TPTWG).</p>		

			<p>technical cooperation (ECOTECH) activities.</p> <p>Under the framework, five areas have been identified as medium-term ECOTECH priorities:</p> <p>Regional economic integration</p> <p>Addressing the social dimensions of globalization (inclusive growth)</p> <p>Safeguarding the quality of life through sustainable growth</p> <p>Structural reform</p> <p>Human security</p>	
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		<p>Strengthening and expanding national green growth strategies for industry across the region by developing green skills development plans for priority industry sectors.</p>	<p>All three regionally focused organizations have a charter to improve regional cooperation and economic development.</p>	<p>ASEAN, APEC, and SAARC secretariats to jointly develop/ review industry sector strategies to incorporate green growth strategies underpinned by existing and new worker green skills development strategies.</p> <p>The APEC Human Resource Development Working Group (HRDWG), the ASEAN Socio-Cultural Community Department, which includes the Cross Sectoral Cooperation Directorate and the Education Youth and Training, and the Labour and Migrant Worker divisions, along with the SAARC Human Resources Development Centre (SHRDC).</p>			
	<p>Policy framework to invite international assistance and support local expertise for adopting good practices on green skills</p>	<p>Capacity development of institutions on processes and tools for green skills at departments such as General Department of Vocational Training (GDVT) and National Occupational Skills Standards Developing Committees in Viet Nam or National Board on Development Planning (BAPPENAS); Ministry of Education and Culture, and the Ministry of Manpower and Transmigration in Indonesia.</p>	<p>Enhanced capacity to design integrated policies.</p> <p>Availability of knowledge and expertise on good practices.</p>	<p>Ministry of Skill Development and Entrepreneurship with multilateral agency support (Organisation for Economic Cooperation and Development, Asian Development Bank, World Bank, United Nations, ILO, GIZ, USAID, DFID)</p> <p>Multinational companies such as Marriott, Hilton (hospitality), IL&amp;FS, Gammon (construction), Suzlon, Clarke (energy), and Alstom, Siemens (transport) can</p>	<p>National Board on Development Planning (BAPPENAS) with multilateral agency support such as UNIDO, Organisation for Economic Cooperation and Development (OECD), Asian Development Bank, World Bank, United Nations, ILO, Gesellschaft für Internationale Zusammenarbeit (GIZ), USAID, Department for International Development (DFID)-UK</p>	<p>Tertiary and Vocational Education Commission (TVEC) under the Ministry of Youth and Skills Development with multilateral agency support such as UNIDO, Organisation for Economic Cooperation and Development (OECD), Asian Development Bank, World Bank, United Nations, ILO, Gesellschaft für Internationale Zusammenarbeit (GIZ), USAID, Department for</p>	<p>Ministry of Industry and Trade (MOIT); Ministry of Labour, Invalids and Social Affairs (MOLISA); Ministry of Education and Training (MOET) along with support from multilateral agencies UNIDO, Organisation for Economic Cooperation and Development (OECD), Asian Development Bank, World Bank, United Nations, ILO, Gesellschaft für Internationale Zusammenarbeit (GIZ), USAID,</p>

				provide international expertise to boost good practices and green skills.	Multinational companies such as Marriott, Hilton (hospitality), Turner, Gammon (construction), and Alstom and Siemens (energy, transport) can provide international expertise to boost good practices and green skills.	International Development (DFID)-UK Multinational companies such as Marriott, Hilton (hospitality), Turner, Gammon (construction), and Alstom and Siemens (energy, transport) can provide international expertise to boost good practices and green skills.	Department for International Development (DFID)-UK Large corporations such as Hoa Phat Group, Doji Gold and Gems Group, Vinamilk or public sector corporations such as PetroViet Nam, and Vinacomin. Multinational companies such as Marriott, Hilton (hospitality), Turner, Gammon (construction) and Alstom, Siemens (energy, transport) to provide international expertise to boost good practices and green skills.
Green practices to become a "business" issue	Policy on green standards in each sector	Large corporations such as Reliance Industries, public sector undertakings such as Bharat Heavy Electricals Limited (India), Coal India, PetroViet Nam,	Availability of clear direction to include green skill strategies in industrial practices.	Large corporations along with sector skill councils, Confederation of Indian Industry (CII), and Federation of Indian Chambers	Large corporations along with industry associations such as Indonesian Chamber of Commerce and Industry (KADIN),	Large corporations along with industry associations such as Industrial Association of Sri Lanka, Ceylon Chamber of	Large corporations along with industry associations such as Viet Nam Chamber of Commerce and Industry, Viet

		<p>Samsung, Aitken Spence, Haleys, Viettel Group, Viet Nam Posts and Telecommunications Group (VNPT), Vietsovpetro, Vinacomin and Agribank to financially support, reward and recognize models of innovation in green practices. Initiatives can be supported through government funds such as Viet Nam Environment Protection Fund or PPP projects or by industry councils and associations. Green models to be patented or creating subscription-based green process management modules to generate additional revenue stream to companies.</p> <p>Benefits of up-skilling on green skills need to be communicated widely during industry summits and trade</p>	<p>Creation of a vibrant ecosystem to adopt and promote green practices and related green skills.</p> <p>Additional revenue streams in the form of patent fees and consulting services for the industry.</p>	<p>of Commerce and Industry (FICCI), Associated Chambers of Commerce and Industry of India (ASSOCHAM).</p> <p>Steering committees or working groups under Planning Commission (having cross-industry participation).</p>	<p>Importers Association of Indonesia (GINSI), and Indonesian Exporters Association (GPEI).</p> <p>Ministry of Industry, Ministry of Trade</p> <p>Ministry of National Education and Culture (MoEC)</p>	<p>Commerce, Federation of Chambers of Commerce and Industry of Sri Lanka, Sri Lanka Chamber of Small Industry, etc.</p> <p>Ministry of Industrial Development; Ministry of Industry and Commerce;</p> <p>Ministry of Education; Ministry of Labour Relations and Manpower</p>	<p>Nam Association of Rural Industrial Small and Medium Enterprises, Viet Nam Association of Mechanical Industry</p> <p>Ministry of Industry and Trade (MoIT)</p>
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		National Education and Culture (MoEC) in Indonesia.					
	Policy on green standards in each sector	Regional organizations such as APEC, ASEAN, and SAARC work with their member economies to develop green standards for industry that can be widely applied at the regional level.	Supports regional aims for economic integration and cooperation.	The ASEAN Economic Community (AEC) could coordinate these efforts jointly with the APEC SOM Steering Committee on Economic and Technical Cooperation (SCE) and the SAARC Committee on Economic Cooperation.			
	Include green practice standards in the industrial policies especially for new economic corridors such as Kilinochchi, Batticaloa and Ampara in Sri Lanka and the East-West Economic Corridor (EWEC) around Dac Nong port in Viet Nam.	Promote colocation of training providers with industry clusters. These could be targeted at special economic zones (SEZs) by opening up industrial parks and training center/s together.		Ministry of Skill Development and Entrepreneurship with Ministry of Industry and Commerce, Ministry of Corporate Affairs, Ministry of Heavy Industry and Public Enterprises, Ministry of Micro, Small and Medium Enterprises	Ministry of Industry, Ministry of Trade, Ministry of National Education and Culture (MoEC)	Ministry of Education; Ministry of Industrial Development; Ministry of Industry and Commerce; Ministry of Enterprise Development and Investment Promotion	Ministry of Industry and Trade (MoIT)
		Development of skills strategies to support the environmental and	At the Bali Summit in October 2003,	ASEAN Economic Community (AEC)			

		sustainability actions identified in the ASEAN Economic Community Blueprint, along with the developing specific initiatives for industry clusters supported by ASEAN.	ASEAN leaders declared that the ASEAN Economic Community (AEC) shall be the goal of regional economic integration (Bali Concord II) by 2020.	
		Development of skills strategies to support specific initiatives for industry clusters supported by APEC.	ECOTECH projects by priorities (period 2010 – 2013) identifies that safeguarding the quality of life through sustainable growth accounted for 37% of all projects <sup>49</sup>	The SOM Steering Committee on Economic and Technical Cooperation (SCE)
		Development of skills strategies to support specific initiatives for	The transition to a South Asian Free	SAARC Committee on Economic Cooperation

<sup>49</sup> <http://www.apec.org/Groups/SOM-Steering-Committee-on-Economic-and-Technical-Cooperation.aspx>

		industry clusters that can be piloted and supported by SAARC.	Trade Area (SAFTA) leading towards a Customs Union, Common Market and Economic Union.				
Support for green growth, green jobs, and green skills from foreign aid and investment agencies	Common agenda and policy between foreign aid and investment agencies with respect to green growth, green jobs, and green skills.	Documenting and sharing green investment advisory notes promoting green growth at regular intervals, advocating the agenda of green skills to support a greening economy at global scale using platforms like G-20 summits and capacity building on national and international good practices on green skills.	Consolidation of initiatives of aid agencies.  Greater emphasis on green skill development through a unified approach of aid agencies.	Aid agencies – Asian Development Bank, World Bank, United Nations, GIZ, ILO, DFID, USAID;  Large corporations and multinational companies, Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI)  Ministry of Finance (Department of Economic Affairs, Foreign	Aid agencies – Asian Development Bank, World Bank, United Nations, GIZ, ILO, DFID, USAID  Large corporations along with industry associations such as Indonesian Chamber of Commerce and Industry (KADIN), Importers Association of Indonesia (GINSI), and Indonesian Exporters Association (GPEI); Ministry of Industry, Ministry of Trade; Ministry of National	Aid agencies – Asian Development Bank, The World Bank, United Nations, GIZ, ILO, DFID, USAID  Large corporations along with industry associations such as Industrial Association of Sri Lanka, Ceylon Chamber of Commerce, Federation of Chambers of Commerce and Industry of Sri Lanka, Sri Lanka Chamber of Small Industry, etc.; Ministry of Education; Ministry of	Aid agencies – Asian Development Bank, World Bank, United Nations, GIZ, ILO, DFID, USAID  Large corporations such as Hoa Phat Group, Doji Gold and Gems Group, Vinamilk or public sector corporations such as PetroViet Nam, and Vinacomin along with Viet Nam Chamber of Commerce and Industry, Viet Nam Association of Rural Industrial Small and Medium Enterprises, Viet

				Investment Promotion Board)	Education and Culture (MoEC)	Industrial Development; Ministry of Industry and Commerce	Nam Association of Mechanical Industry Ministry of Finance, along with Ministry of Industry and Trade, MOLISA and MOET
Bridge the gap between TVET outcomes and jobs requirements	<p>Policy on comprehensive approaches for skills forecasting</p> <p>Policy on partial autonomy of TVET institutions</p>	<p>Ensure that there are established pathways for narrowing the skill gaps, including green skills</p> <p>Ensure that curriculum structure allows up to 30% of flexibility that TVET institutions can use to address industry needs;</p> <p>allow principals flexible use of funds gained through short courses delivery for green skills initiatives.</p>	Enhanced capacity to adjust curriculum development to industry needs and through this channel to support greening of industries.	Ministry of Human Resource Development; Ministry of Industry and Commerce	BAPPENAS, MoEC	Ministry of Education; Ministry of Industry and Commerce;	MOLISA, Ministry of Industry and Trade (MoIT)
	Common agenda and policy between foreign aid and investment agencies with respect to green growth, green	Support the regional organizations to develop cross-border industry strategies for green growth and green jobs, and underpinned by green	Supports the regional priorities for economic integration and cooperation.	Aid agencies – Asian Development Bank, World Bank, United Nations, GIZ, ILO, DFID, USAID			

	jobs and green skills	skills development initiatives.					
OPERATIONAL LEVEL							
Initiate easily implementable activities around green skill development	Include elements of green skills/ education under accreditation and certifying bodies such as National Occupational Skills Standards Developing Committee (NOSSDC) under MoLISA in Viet Nam or NAITA and UNIVOTEC in Sri Lanka.	Develop and include green skill knowledge nuggets in existing education curriculum – school, technical, higher education.	Fast-tracking inclusion of green skills in skill development ecosystem.	Ministry of Skill Development and Entrepreneurship with Ministry of Human Resource Development (MHRD) and Ministry of Labour and Employment  National Skills Qualifications Committee under National Skill Development Agency, Sector Skill Councils, central ministries, state governments, regulatory institutions such as UGC, AICTE, etc.	National Board on Development Planning (BAPPENAS); Ministry of National Education and Culture (MoEC); Ministry of Manpower and Transmigration	TVEC and DTET; Ministry of Education; Ministry of Labour Relations and Manpower	National Occupational Skills Standards Developing Committee (NOSSDC) along with Ministry of Labour, Invalids and Social Affairs (MOLISA), Ministry of Education and Training (MOET)
	Include green job training in the list of training priorities among TVET institutions		Broad-basing of green skill development across sectors.	Ministry of Skill Development and Entrepreneurship along with National Skill Development Agency	Ministry of National Education and Culture (MoEC); Ministry of Manpower and Transmigration	Ministry of Education; Ministry of Labour Relations and Manpower	Ministry of Labour, Invalids and Social Affairs (MOLISA), Ministry of Education and Training (MOET)

				Ministry of Labour and Employment			
		Establish institutional linkage between higher education institutions and TVET institutions on green skills development .	Greater integration between higher education and TVET institutions (a good practice)	Ministry of Skill Development and Entrepreneurship with Ministry of Human Resource Development (MHRD)	Ministry of National Education and Culture (MoEC)	Ministry of Education through TVEC, NAITA, UNIVOTEC, and DTET	Ministry of Education and Training (MOET)
	Include elements of green skill/ education for teacher education guidelines	Include generic and specific green skills in preservice and in-service teacher training programs and courses.  Consider these modules as prerequisites for teacher registration.	Capacity enhancement of preservice and in-service teacher trainers on the ways green skills can be included in TVET programs	Ministry of Skill Development and Entrepreneurship with Ministry of Human Resource Development (MHRD)	Ministry of National Education and Culture (MoEC)	Ministry of Education	Ministry of Education and Training (MOET)
Support for local community partnerships to develop pro-poor public-private partnership models for local sustainable enterprises	Policy framework to help small informal economies develop sustainable local businesses	Develop initiatives to foster participative approaches to, partnerships, skills development, and participatory learning approaches.  Explore initiatives to develop infrastructure alongside developing networks and linking informal enterprises	Strengthen the viability of the informal sector to meet sustainability challenges at the local level	Aid agencies – Asian Development Bank, World Bank, United Nations, GIZ, ILO, DFID, USAID			

		<p>with more formal value chains.</p> <p>Identify initiatives for TVET institutions to develop pathways from informal skills development into formal TVET pathways.</p> <p>Identify initiatives to support interaction of the local community, skills providers, and industry.</p>					
<p>Outcome-based incentives for enterprises and TVET institutions</p>	<p>Direct and indirect incentives to promote green skills</p>	<p>Direct financial incentives in the form of tax breaks, subsidies, and viability gap funding; innovation funds for the private sector to move towards sustainable processes.</p> <p>TVET, enterprises offering green skill development training can be entitled to general incentives concerning vocational training under government regulations or be allowed to recover</p>	<p>Creation of green jobs and increased demand for green skills</p> <p>Promoting green skills training</p>	<p>Ministry of Finance, along with Ministry of Commerce and Industry, Ministry of Skill Development and Entrepreneurship, and Ministry of Labour and Employment</p>	<p>Ministry of Finance, along with Ministry of Industry and Ministry of Trade along with Ministry of National Education and Culture (MoEC)</p>	<p>Ministry of Finance and Planning along with Ministry of Industry and Commerce and Ministry of Education</p>	<p>Ministry of Finance, along with Ministry of Industry and Trade; Ministry of Labour, Invalids and Social Affairs (MOLISA); Ministry of Education and Training (MOET)</p>

		<p>training expenses through users or sponsoring institutions.</p> <p>Government may provide indirect incentives in the form of land provision, provision of training equipment, international exposure visits, and industrial exposure for TVET staff.</p>					
	<p>Policy on support of TVET practicums/ workplace learning</p>	<p>Use incentives to support further enterprises in their engagements with TVET institutions</p>	<p>Provide an enhanced opportunity for TVET providers to organize workplace learning as a part of their curricula so students can be exposed to greening practices</p>	<p>Ministry of Commerce and Industry; Ministry of Labour and employment, MHRD</p>	<p>Ministry of Industry, Ministry of Trade, Ministry of Education and Culture</p>	<p>Ministry of Industry and Commerce; Ministry of Labour Relations and Manpower, Ministry of Youth and skills development</p>	<p>Ministry of Industry and Trade; MOLISA</p>
<p>Sensitivity towards sustainability to become a "social" issue</p>		<p>Positioning messages on green practices through all forms of media</p>	<p>Higher sensitivity towards environmental issues</p>	<p>Ministry of Skill Development and Entrepreneurship and Ministry of Labour and Employment</p>	<p>Ministry of National Education and Culture (MoEC) along with Indonesia Chamber of</p>	<p>TVEC and the National Environmental Protection Council along with Ministry of Mass Media and</p>	<p>GDVT under Ministry of Labour, Invalids and Social Affairs (MOLISA) and the Centre for</p>



					Commerce (KADIN); Directorate General of Radio, Television, and Film; and large media companies	Information, media companies, and NGOs	Environmental Education and Communications; Industry associations such as Viet Nam Chamber of Commerce and Industry, Viet Nam Association of Rural Industrial Small and Medium Enterprises, Viet Nam Association of Mechanical Industry
	Special green skill modules targeted to women and marginalized groups	Special green skills development programs targeted for rural areas	Greater participation of women and marginalized groups in environment-friendly activities leading to equitable engagement of all stakeholders  Inclusion of rural population will impact on social	Ministry of Skill Development and Entrepreneurship along with Confederation of Indian Industry (CII); Federation of Indian Chambers of Commerce and Industry (FICCI); and News Broadcasters Association, India Broadcasting Foundation	Ministry of National Education and Culture (MoEC); Ministry of Manpower and Transmigration, Ministry of Social Affairs and Ministry of Justice and Human Rights along with NGOs and SHGs  State Ministry for Cooperatives, Small and Medium Enterprises; State Ministry for Women	Ministry of Education; Ministry of Labour Relations and Manpower; Ministry of Child Development and Women's Affairs; Ministry of Social Services along with NGOs and SHGs	Ministry of Labour, Invalids and Social Affairs (MOLISA); Ministry of Education and Training (MOET) along with NGOs and self-help-groups (SHGs)  Committee for Ethnic Minorities and Mountainous Areas

			wellbeing due to increased quality of the environment		Empowerment; State Ministry for Accelerated Development of Backward Regions		
				Ministry of Skill Development and Entrepreneurship along with NGOs and SHGs Ministry of Social Justice and Empowerment Ministry of Women and Child Development			