

Chapter 1

Asia-Pacific, Green Economy,
and Institutions for Sustainable
Development

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1. Background

Twenty years after the 1991 Earth Summit in Rio de Janeiro, Brazil the United Nations Conference on Sustainable Development (referred to as Rio+20) was held again in Rio de Janeiro, in June, 2012 with the objective “to secure renewed political commitment for sustainable development, assess the progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development, and address new and emerging challenges.”¹ Under the main themes of Rio+20—a green economy in the context of sustainable development and poverty eradication; and institutional framework for sustainable development,²—the United Nations General Assembly noted that “the green economy approach is an attempt to unite under one banner a broad suite of economic instruments relevant to sustainable development” (UNGA 2010). From an institutional perspective, the “key question is whether institutional or structural changes could help to accelerate the achievement of the sustainable development agenda in all three of its dimensions” (UNGA 2010) – economy, society, and the environment. The other key question, therefore, is whether the old governance arrangements that oversaw the failure to operationalize sustainable development over the past two decades are now up to the task of maintaining and accelerating this renewed push for a transition to a green economy, or is more radical reform required?

Box 1.1 Brief history of UN sustainable development conferences

1972	Stockholm, Sweden	UN Conference on the Human Environment. Outcomes included the Stockholm Declaration, Stockholm Action Plan (109 recommendations), 5 resolutions (ban on nuclear weapons, international database on environmental information, actions linking development and environment, creation of an environment fund, and establishment of United Nations Environment Programme).
1977	New York, USA	UN Conference on Desertification
1983		World Commission on Environment and Development, convened to prepare a long-term action agenda. The main outcome was the report, <i>Our Common Future</i> , published in 1987.
1992	Rio de Janeiro, Brazil	UN Conference on Environment and Development (Earth Summit). Outcomes included the Rio Declaration, Agenda 21, Statement of Forest Principles, and the UN Framework Convention on Climate Change and Convention on Biological Diversity.
1994	Cairo, Egypt	UN Conference on Population and Development, leading to an international plan of action.
2002	Johannesburg, South Africa	World Summit on Sustainable Development. Main outcomes were the Johannesburg Declaration on Sustainable Development and the Johannesburg Plan of Implementation.

Source: ENB (2011), Speth (2004)

Since 1992, global policy makers have struggled to operationalize the concept of sustainable development, with its emphasis on the integration of economic, social, and environmental pillars and protecting the needs of future generations. During the Rio+20 process there was renewed interest in finding effective ways of communicating the urgency of sustainable development, especially to decision makers primarily interested in poverty eradication and economic growth, often from a short-term, politically expedient perspective.

While the debate regarding how best to strengthen the weak environmental pillar of sustainable development at the global level dominates discussions in preparations for Rio+20, for the Asia-Pacific region, a detailed examination of regional, national, and local governance arrangements is needed, if past mistakes are not to be repeated post 2012. Asia-Pacific cannot rely on UN reforms alone to address its urgent sustainable development agenda. Accordingly, this White Paper focuses on the adequacy of current governance arrangements in Asia-Pacific to accelerate the transition to a green economy, examines innovative approaches to governance that have emerged from the region, and recommends additional changes in governance arrangements that will be needed over the next few decades.

Box 1.2 Governance and institutions

Governance refers to how societies share power, through structures and processes that govern individual and collective decisions and actions. Governance is not the sole domain of governments, but involves multiple actors, including the private sector, non-governmental organizations (NGOs), and academia. Governance includes laws, regulations, policies, institutions, partnerships, public debates, political parties, public participation and consultation processes, demonstrations and protests, strikes and other union actions, the judiciary, and other decision-making influences.

Institutions are part of governance but specifically refer to the networks and organizations that organize stakeholder groups to formulate decisions and implement actions. Institutions vary from informal arrangements, like communities of practice, to formally established organizations, like government agencies. As for governance, institutions are not necessarily governmental but can facilitate action among multiple levels of governments, locally, nationally and regionally, along with NGOs, academia, and the private sector.

1.1 Green economy in the context of sustainable development and poverty eradication

Green growth and the green economy have been subjected to considerable investigation by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP 2005) and the United Nations Environment Programme (UNEP 2011), as well as by other international organisations (European Commission 2011). UNEP positions the green economy in the context of sustainable development and poverty eradication, in part due to the sensitivity of developing countries which still regard the decades-old debate over poverty eradication and sustainable development as unresolved and are suspicious that a green economy might impose new barriers to trade. The “Towards a Green Economy” report claims that “transitioning to a green economy has sound economic and social justification” (UNEP 2011).³ The report debunks the myths that there must be a trade-off between “environmental sustainability” and economic progress, and that greening of the economy is a drag on economic growth. It also shows how a green

economy can contribute to poverty alleviation in agriculture, forestry, freshwater, fisheries and energy (UNEP 2011). Policies to achieve this transition and the estimated price tag (USD 1.05 to 2.59 trillion or 2% of global GDP) are also documented.

UNESCAP notes that the challenge for Asia-Pacific is to pursue economic growth that will enable achievement of the Millennium Development Goals (MDGs) on poverty alleviation and environment for the current generation “without jeopardizing the environmental carrying capacity for future generations” (UNESCAP 2005). According to UNESCAP, green growth is a paradigm shift requiring countries to create “win-win” synergies between environment and economy, while acknowledging that even greater economic growth is needed in this region. Enabling policies are divided into “measures for environmental performance and for environmental sustainability” (UNESCAP 2005, 2009).

The green economy is portrayed, therefore, as being consistent with the earlier concepts of sustainable development, but with an emphasis on the economic dimension. Green growth makes this emphasis on the economy even more transparent. According to the UN Department of Economic and Social Affairs (UNDESA), “there is no unique definition of the green economy, but the term itself underscores the economic dimensions of sustainability or, in terms of the recent UNEP report on the Green Economy (UNEP 2011), it responds to the ‘growing recognition that achieving sustainability rests almost entirely on getting the economy right.’ It also emphasizes the crucial point that economic growth and environmental stewardship can be complementary strategies, challenging the still common view that there are significant tradeoffs between these two objectives—in other words, that the synergies prevail over the tradeoffs” (Ocampo 2011, p. 4).

As for sustainable development, where multiple definitions have emerged, the green economy and green growth potentially suffer from the same definitional morass. Huberty et al. (2011) find three predominant concepts of green growth that have emerged: (i) that greenhouse gas (GHG) emissions reductions can be compatible with economic growth (and not a drag on growth); (ii) that investment in low carbon technologies can generate green jobs in a recession (and stimulate recovery); and (iii) that green investment can transform the economy and “fuel a new green industrial revolution.” The concept of a green stimulus or Green New Deal, in the context of kick-starting economies suffering from the global financial crisis, emphasises investments in clean energy that expand demand for green jobs and other factors of production in the short-term, while reducing GHG emissions and increasing economic growth in the longer term (Strand and Toman 2010).

In fact, the notion of a green economy is not new, as it has been debated for more than three decades, with early antecedents including Arne Naess’ concept of ecosophy and deep ecology dating from 1973 (Naess 1989, Glasser 2005) and the Club of Rome’s Limits to Growth in the 1970s (Meadows 1972), followed by Small is Beautiful (Schumacher 1973), Spaceship Earth (Buckminster Fuller 1968), and the Blueprint for a Green Economy in the 1980s (Pearce et al. 1989; Pearce 1991, 1993). Unfortunately many of these concepts were seen at the time as left-wing, anti-industry, or anarchistic, suitable only for dropouts and hippies, and they rarely penetrated mainstream economic thinking (Bookchin et al. 1993). Other influential strands that have guided the current debate on the green economy include the ideas of natural and social capital (Prugh 1995, Kareiva 2011), ecological economics (Costanza et al. 1997), natural capitalism (Hawken 2008), and mainstreaming environment into development.

The global financial crisis in 2008/2009 certainly appears to have given the old idea of

a green economy new life, as several countries seized the opportunity to invest heavily in green technology in the guise of economic stimulus packages (Robins, Clover, and Singh 2009, European Commission 2011, Strand and Toman 2010). Others have looked at the current financial crises in the U.S. and Europe and sought to provide a rationale for a zero-growth economy (Meadows et al. 2004, Victor 2008, Jackson 2009, Strauss 2010, Mantica 2010) to rethink the seemingly inevitable march of globalization (Milani 2000), and for more ethical behaviour by companies, consumers and politicians (Perelman 1976, Bednar 2003, Henderson 2007, Clapp 2011). In addition, climate change and the need to reduce GHG emissions, by moving away from an economy so dependent on fossil fuels, have provided further impetus for rethinking the structure of the global economy (Ellis et al. 2010).

1.2 Institutional framework for sustainable development

At the global level, discussions on strengthening the institutional framework for sustainable development have focused on (i) reinforcing the role of the UN Economic and Social Council (ECOSOC); (ii) upgrading the UN Commission on Sustainable Development (CSD) to a permanent agency with enhanced functions; and (iii) building on the UNEP Nairobi-Helsinki process to reinforce the United Nations Environment Programme (UNEP) (European Commission 2011). Emphasis is on greater efficiency and effectiveness of the relevant UN agencies, with several observers noting that form should follow function. There is, however, still considerable debate over the optimal scope and mandate of these institutions.

UNEP has been singled out as an important actor in the global arena but is seen by most observers as being hamstrung as it is only an inadequately funded “programme” rather than an “organization.” Some countries have called for UNEP to be transformed into a World Environment Organization (WEO) or specialized UN agency (UNEO) along the lines of the World Health Organization (WHO) or the International Labour Organization (ILO), while others doubt that such a change will make UNEP any more efficient or more effective. Several other institutions also claim a mandate in relation to environmental issues, including the United Nations Development Programme (UNDP), Food and Agricultural Organization (FAO), World Health Organization (WHO), Global Environment Facility (GEF), and the various secretariats of the multilateral environment agreements (which in turn need to be better integrated and streamlined). Recognizing the particular weaknesses of environmental governance within this institutional framework for sustainable development, in preliminary discussions for Rio+20, reform of international environmental governance intends to include:

- (i) A UN system-wide, medium-term strategy for the environment;
- (ii) A joint management mechanism for all major trust funds for the environment;
- (iii) Establishment of environment-development country teams; and
- (iv) Development of an overarching framework for capacity building and technical assistance.

As for the green economy, this attention to the institutional framework for sustainable development and international environmental governance is not a new agenda, but has periodically re-emerged ever since the Stockholm Conference in 1972. Mr. Gus Speth, former head of UNDP, recalls that in 1989, 24 countries signed the Hague Declaration calling for “an international body that could make non-unanimous decisions needed to protect the global environment” (Speth 2004). Eventually 40 countries signed the declaration, but key states like the U.S., China, Russia, and United Kingdom did not, so it went no further. Many of these opponents have not changed their view in the past two

decades, and several other UN agencies and secretariats of the multilateral environment agreements are not supportive, so the prospects for WEO/UNEO remain highly uncertain.

1.3 IGES Proposal to Rio+20

While most of the focus in the build up to Rio+20 has been on the issue of reforming global/international environmental governance, less attention has been paid to reform of environmental or sustainable development governance at the regional, national and sub-national levels. At the second preparatory committee meeting for Rio+20, Mr. Sha Zukang, the Conference Secretary-General, noted that deliberations on the institutional issues should address all levels of government. This gap in the analysis to date was seen as an opportunity for the White Paper IV and the IGES Proposal for Rio+20 to leverage IGES' knowledge and policy-research experience to contribute ideas from the Asia-Pacific region and influence the Rio+20 outcomes.

Accordingly, while acknowledging the importance of action at the global level and its likely subsequent impact on regional governance, any real chance of achieving global sustainability goals ultimately depends on successful reform in Asia-Pacific—in structural transformation of the economy (towards a sustainable, low carbon, green economy) and in governance structures, processes, and effective implementation (towards effective performance, policy coherence, and integration). As the fastest growing and most populous region in the world, and often referred to as the global “factory,” Asia-Pacific needs to provide leadership in moving towards a sustainable future rather than waiting for the rest of the world to act. Without significant governance reform in Asia-Pacific, it could be argued that global sustainable development will remain an under-implemented ideal rather than a new reality.

At the risk of being repetitive, the main IGES submission to the Rio+20 process (IGES 2011) picks up on many of these conclusions and bears reiterating at this point. With respect to the outcomes of the Rio+20 conference these points were proposed based on many years of participation and research on sustainable development policies in Asia-Pacific and we believe these points bear consideration as a part of relevant future policies and institutions.

On resilient societies:

- Multi-stakeholder collaborative approaches should be incorporated into economic and social development planning, environmental policies, and disaster management plans.
- Resilient societies should build upon cooperation among local municipalities, NGOs and private companies. Community-to-community relief has been observed as more flexible than the vertical relief channel of national government to local community.
- Public participation should be encouraged in disaster management policies as well as in overall economic development.
- Reducing vulnerability to hazards should be based on an integrated assessment of social, economic, environmental and geographical vulnerability factors, as these are the factors which affect vulnerability and determine if hazards will become disasters.
- Governments should consider development of financial schemes to alleviate risks and stimulate post-disaster economic recovery.
- Decentralized and diversified infrastructure should be emphasized so that the economy is able to mitigate the impact of disasters and quickly spring back to normalcy after a major crisis.

On promoting green growth:

- A precautionary (no-regrets) approach should be followed, starting with building a low-carbon economy with a resilient, secure energy supply system.
- Governments should promote the green economy by introducing fiscal incentives, e.g., shifting the tax base from labour and income to taxing environmental damage such as pollution and unsustainable resource consumption and gradually phasing out environmentally harmful subsidies.
- Decoupling of economic growth and resource use and environmental impacts, through the promotion of green technologies, mindful of possible rebound effects.
- A phased approach, along with international policy cooperation, should be used in setting priorities regarding sustainable production and consumption.
- Current policies should be revised to promote less resource intensive development, resource circulation, resource substitution, total reduction of environmental impact from consumption, and wider investment in green industries through development of packaged policy at all stages of the life cycle of products and services.
- Policymakers should internalize negative ecological externalities into the economic system and promote sustainable agriculture and greening of the product supply chain.
- Overall, IGES recommends developing a green economy roadmap to move in the directions mentioned above.

On promoting an improved institutional framework for sustainable development:

- To change the direction of economic systems and stave off ecosystem collapse, fundamental institutional changes and coherent goals that are reinforced at global, regional, national, and local levels by consistent incentives, regulations, policies, and action will be required.
- Multi-level governance is necessary for coherent and effective action. Vertical and horizontal cooperation between and within levels is needed to minimize policy tradeoffs and maximize synergies between traditionally separate sectors and policy domains, and sustainability goals need to be mainstreamed into all major societal decisions and sector plans.
- Environmental and sustainable development governance should be carried out in accordance with the subsidiarity principle, which prescribes that issues ought to be dealt with by the smallest, lowest or least centralized competent unit.
- Cooperation between countries should be enhanced to share best practices on environmental compliance and enforcement, to provide technical assistance to developing countries in need of capacity strengthening, and to continuously upgrade regional, national, sub-national and local compliance and enforcement actions.
- Governments are encouraged to support the creation of a global Sustainable Development Council to better coordinate and oversee budgeting of all UN programmes and agencies.
- Ultimately, IGES recommends that UNEP be upgraded to a specialized agency, with its own decision making mandate and legal identity.
- For improved coordination and information sharing, IGES suggests the formation of a regional environmental focal point, which in the long run could be developed into an Asian Environmental Organization.
- At the national level, IGES recommends that high level focal points and coordination committees be appointed above the sector ministries to ensure that sustainable development concerns receive sufficient attention and are vertically integrated and mainstreamed.
- National level environmental governance should be improved in such a way that

will further promote local level actions in close collaboration with municipal or local governments.

1.4 Overall context in Asia-Pacific

As indicated above, the key question to be addressed in this section is how governance changes in Asia-Pacific could help to accelerate the achievement of the sustainable development agenda in all three of its dimensions, assuming that a low carbon economy, green economy, and sustainable consumption and production are all critical elements (and possible stepping stones) of that transition. To address this question, a thorough understanding of the current governance arrangements, existing strengths and weaknesses, and possible alternative arrangements is needed. The overview in this chapter is supported by more detailed analysis and specific recommendations in the chapters that follow and in the IGES Proposal for Rio+20 (IGES 2011).

1.4.1 Regional and subregional governance

Asia-Pacific has developed rather limited regional and subregional institutions up to now. Even in the economic area, institutions in the region have been weak and lacking coordination compared to other regions such as Europe. The tremendous diversity in Asia-Pacific, in cultures, languages, social and economic systems, and the unfortunate history of geopolitical conflict in the region, are major obstacles to increased regional integration.

Since only low priority has been given to the environment, naturally the region's environmental institutions (including soft options such as forums and networks) have been weak and sporadic, covering only specific issues in a non-substantial manner. Despite the lack of regional institutions, the fact that almost all countries in Asia have remained as developing countries with small economies at the global scale until recently has, by default, kept most environmental problems in the region from being totally destructive when viewed from a planetary perspective (although often quite disastrous at a national level). However, steady economic growth, the emergence of economic superpowers, continuing population growth, and regional integration are now changing the regional context very quickly. In the so-called Asian century, the Asia-Pacific region is now seen as a major force in changing the global environment and benign neglect of the environment is no longer an option.

Economic integration in the region has promoted translocation of various highly polluting industries to developing parts of Asia, which may have resulted in the total increase in environmental loads, such as GHG emissions, and transboundary environmental issues. This clearly indicates an emerging need to strengthen regional environmental institutions which can properly deal with growing environmental challenges in the region and the responsibility of developed countries to assist in creating a level playing field for protection of their own industries. Attracting industries on the basis of lax environmental controls is a race to the bottom and is not in the best interests of any country or the region.

Existing regional and subregional environmental governance arrangements including those addressing particular thematic issues (e.g., Malé Declaration, ASEAN Transboundary Haze Agreement, EANET, etc.) are diverse yet weak in addressing substantial issues. For example, Indonesia's failure to ratify the ASEAN Transboundary Haze Agreement, despite being at the centre of the problem, is reflective of weak compliance and enforcement at all levels. Much could be achieved simply by insisting on

more comprehensive implementation of existing agreements, legislation, regulations and policies already part of current governance arrangements. A reluctance to add sanctions to regional agreements stems from the overarching principle of non-interference in sovereign affairs. Yet, as seen from the European experience, some degree of yielding sovereignty is a necessary condition for effective regional governance.

There is no overarching regional environmental or sustainable development institution in the Asia-Pacific region, although regional arms of global institutions such as UNEP's Regional Office for Asia and the Pacific, UNDP, WHO, FAO, and UNESCAP, use their convening powers and, in the case of FAO, UNEP and UNDP, access to GEF funds to undertake a wide range of mostly capacity strengthening projects. Similarly, the Asian Development Bank (ADB) and country offices of the World Bank have access to GEF and other environmental and climate change funds and are now extremely active in pursuing a sustainable development agenda, with funding levels outweighing other regional institutions.

At the subregional level, there is a plethora of institutions, including the Association of South East Asian Nations (ASEAN), Tripartite Environment Ministers' Meeting (TEMM), South Asia Cooperative Environment Programme (SACEP), Greater Mekong Subregion (GMS), North East Asian Subregional Programme on Environmental Cooperation (NEASPEC), and Secretariat of the Pacific Regional Environment Programme (SPREP). These subregional institutions are intended to foster cooperation among countries, harmonize approaches to the environment, carry out subregional environment programmes, and provide a unified "voice" for the community represented.

In some respects, there may be too many of these subregional institutions, as mandates overlap, funds are limited, and a lot of time is taken up by national agencies in preparing for and attending the large number of subregional meetings, conferences, and workshops, which may detract from the necessary attention to environmental issues at the national level. As one example, the multiple coastal and marine programs at the subregional level—the Coordinating Body on the Seas of East Asia (COBSEA), the Partnerships for Environmental Management of the Seas of East Asia (PEMSEA), and the Coral Triangle Initiative—could benefit from streamlining and integration.

The Asia-Pacific region is dynamic, and needs to strengthen its governance framework to achieve sustainable development goals, fully involving key stakeholders at all levels. Strong economic growth and further globalisation will necessitate greater involvement of the private sector, while serious social issues like poverty and unemployment require full involvement of civil society including communities and families. Corporate social responsibility and ethical investment are pursued by regional bodies such as Corporate Social Responsibility in Asia (CSR-Asia) and regional chapters of the World Business Council on Sustainable Development. To date, the regional arm of the World Business Council on Sustainable Development has not been particularly active but could take on a more active role in the lead up to Rio+20.

Topics covered at the regional/subregional level later in this White Paper include regional environmental agreements, regional institutions (such as the subregional environment programmes of SPREP, SACEP, other), regional networks and partnerships (AECEN, CAI-Asia, PEMSEA, COBSEA, CTI, other), and regional centres of excellence. Mapping this complex set of existing governance arrangements is necessary to understand the potential for streamlining and integration, possibly through better information sharing initially and ultimately some form of regional environmental organization, as implemented in Europe.

1.4.2 National and sub-national levels

Understanding of the relationship between the environment and development is rapidly changing in the Asia-Pacific region. Green growth and the green economy concepts are now gaining substantial support in Asia. The Republic of Korea, for example, has introduced a basic law to promote green growth, which will include a cap and trade system in the near future.

The revitalized concepts of green growth and/or the green economy in the context of sustainable development suggest that there is no inherent contradiction between economic growth, social equity, and environmental protection. Countries can achieve economic growth without destroying natural and social capital in the process. Generic pathways of a transition towards a green economy have been espoused by UNEP and UNESCAP among others and a number of countries seem to be responding. Pump priming to “kickstart” economies following the onset of the first global financial crisis in the late 2000’s witnessed apparent paradigm shifts in a willingness to invest in critical elements of the green economy, such as renewable energy, mass transit, reforestation, and climate change mitigation and adaptation. Countries in Asia such as China, Korea and India have shown global leadership in demonstrating this willingness to invest in green growth.

National environmental governance has been substantially improved as most governments have now created a central environmental authority under a framework environmental law, along with subsidiary laws, decrees and regulations, but still many challenges remain in implementation. Compliance and enforcement remains weak in most countries and the environmental agencies tend to be under-resourced for the challenges they face. A positive development in the region has been the increasing environmental activism of the courts, with creation of “green benches” and training of judges and prosecutors to hear environmental cases which demand a more technical understanding of the issues involved. In India and the Philippines, the supreme courts have issued instructions to the national environmental agencies to enforce the law and clean up the environment (e.g., air quality in New Delhi and coastal environmental quality in Manila Bay).

At the national level, many countries have prepared a wide range of national action plans, national capacity self assessments, national councils (of sustainable development and climate change), mainstreaming efforts, innovative legislation, integrated policy assessments and planning approaches (such as strategic environmental assessment), and attempts to deal with transparency and corruption. Environmental quality, however, continues to degrade (UNEP 2012), suggesting perhaps that too much governance is directed towards the appearance of progress rather than effective implementation. A casual glance at many of the region’s “action plans,” for example, will show that hundreds of specific actions are proposed but these are almost never integrated into annual budgets, subjected to cost-benefit analysis, or ever followed up with periodic evaluation of implementation progress or impact assessment. Honest performance assessment, as is periodically carried out with peer review in OECD countries, would be a good starting point in the region to identify why so many plans have resulted in so little progress.

1.4.3 Local and community levels

At the local level, emphasis is on implementation of local Agenda 21s, climate change adaptation, community empowerment, community-based management of natural resources and payment for ecosystem services, city level networks and replication of

good practices. Compliance and enforcement is often best addressed at the local level, where political leaders and environmental agencies are closest to, and impacted by, specific instances of environmental degradation. For example, in Viet Nam, some local governments have created an environmental police force (environment specialists given subsequent policing training) to supplement the efforts of the local environment agencies.

Decentralisation and rapid urbanisation have made it necessary for local government, particularly cities, to address environmental issues at the sub-national level. However, most cities have only limited capacities, funding and mandates. Regional/international networks at the city level, including south-south, peer-to-peer assistance schemes, appear effective in promoting the environmental agenda at the local level.

1.5 Possible changes in governance arrangements in Asia-Pacific

Does the Asia-Pacific region have innovative governance approaches that should be adopted more widely at the global level? What are the remaining governance weaknesses and what are possible solutions? If certain changes are made to current governance arrangements, is there confidence that this region could actually make the transition to a green economy? If Asia-Pacific fails to make the transition over the next few decades, what are the implications for the global environment and the ultimate goal of sustainable development? What are the costs of governance in this region failing to adapt to the current challenges? These are some of the questions that will be addressed in subsequent chapters of the White Paper.

There is tremendous scope for optimism as continued governance failure in this region is simply too serious to contemplate, while there are sufficient examples of what can be achieved once political will is mobilized – many of which are included in this White Paper. Among the analysis and recommendations a common element is the necessity of information sharing and capacity development as essential yet basic components necessary for continued and accelerated progress on sustainable development governance. As outlined in the next chapter developing a regional hub for sharing environmental information and developing capacity should be a priority for Asia-Pacific to overcome the challenges of working in a region with a myriad of policy networks and communities. This formal institution would be the first step towards developing a regional environmental organisation.

1.6 Overview of subsequent chapters

This chapter has outlined the context for the White Paper by exploring underlying issues in Asia-Pacific and globally which affect environmental governance and sustainable development pathways in the region. Research for this White Paper started with discussions on the themes of Rio+20 and what the Rio+20 process means for the region. Many issues have been raised for the international framework for sustainable development as well as green economy and poverty alleviation, very critical issues of course, but each region in the world has its own particular issues based on their respective geographies, growth patterns, and stages of development. The chapters of **Section 2** identify some of the major issues for the Asia-Pacific region and make recommendations on near and long-term actions, and share insights based on IGES research and expertise, but also draw from analysis of strategies employed in other regions and good practices from Asia-Pacific itself.

Chapter 2 explores how to enhance international cooperation on environment and development issues in Asia-Pacific. The chapter reviews a number of pertinent drivers

of environmental change in and outside the region including a discussion of important international treaties that Asia-Pacific countries need to develop additional capacity to implement. The chapter presents an overview of the strengths and weaknesses of the “spaghetti bowl” of existing regional and subregional institutions. The analysis finds that capacity and information sharing are the most appropriate areas to focus on for expanding cooperation in the short term and recommends developing a regional information sharing hub to enhance the effectiveness of national efforts and reduce information gathering costs while building a foundation for the further institutionalization of regional cooperation. The paper recommends climate change, disaster resilience and carbon market related issues as the least contentious issues for cooperation and the most obvious benefits for countries that may choose to engage in this kind of cooperative arrangement.

Access to environmental information has long been promoted as a critical tool for promoting effective management of the environment and resources in the context of sustainable development. While a number of useful initiatives and policy measures have been adopted and are being implemented in an increasing number of countries, there is still a great deal of room for improving their effectiveness and scaling them up across the Asia-Pacific region. Environmental and natural resources issues are not restricted to national borders and as regionalisation and globalisation become the norm, access to information and meaningful participation by multiple stakeholders at multiple levels become essential to formulate sustainable development pathways. In line with recommendations for a regional information sharing hub, **Chapter 3** analyzes access to information globally based on Agenda 21 and the Rio+20 process, and examines examples from other regions for lessons which may be learned for emulating in Asia-Pacific.

Assuming that climate change issues must be addressed in the context of sustainable development to meet the concerns of government and industry, **Chapter 4** looks at making carbon governance in Asia greener by exploring the relationship between climate change mitigation, green economy and sustainable development. This chapter examines how these concepts have been realized and operationalized in domestic mitigation actions and the Clean Development Mechanism (CDM) in selected Asian countries. Governance schemes and enabling conditions are discussed and a regional platform for promoting low-carbon development is proposed.

While the previous chapters mainly look at the framework for sustainable development from international and regional perspectives, **Chapter 5** draws a line between the international and local level by examining REDD+ and community forest management (CFM) in the context of a green economy and poverty alleviation. Many countries in the Asia-Pacific region are undergoing decentralization processes that have given CFM a stronger role as an instrument to sustainably manage forest resources and alleviate poverty. In this context, the authors consider how CFM may have the potential to contribute to the empowerment of local communities and enhance their well-being with benefits for climate change mitigation and adaptation. This chapter draws on cases in six countries in Asia-Pacific which represent a range of geographical conditions and illustrate state-sponsored CFM programmes in various stages of development and intended outcomes. The chapter highlights how CFM can make a significant contribution to REDD+, and vice versa.

Continuing the focus on green economy and moving to an even more concrete level of analysis and examples, **Chapter 6** draws on case studies of past and ongoing projects between India and Japan which IGES has been closely involved with and identifies some

of the barriers and strategies for technology transfer as a key contribution to developing a green economy. Case study evidence and previously published research indicates that given the risks of the current global environmental and economic conditions and the need for urgent action, governments and companies should focus on promoting the horizontal transfer of proven and commercially available technologies as they can more easily be transferred with fewer barriers. The chapter provides realistic strategies to promote the deployment and diffusion of low-carbon technologies.

The previous chapter explored technology transfer as a part of a green economy with examples of public-private partnerships between countries in the region. **Chapter 7** emphasizes relationships between local governments as an effective means for increasing capacity and sharing knowledge for effectively managing environmental and sustainability issues in a rapidly urbanizing region. The Kitakyushu Initiative for a Clean Environment, CITYNET, and Clean Air Initiative for Asian Cities are included in the analysis as good practice examples for knowledge sharing and mutual learning. This chapter studies the functions, achievements and impacts of intercity networks, as well as the evolution of their management and operational strategies in response to the needs of network members and emerging global environmental challenges.

The final chapter in this section proposes a phased approach for achieving sustainable resource circulation and management as for developing Asia, improving resource efficiency including promotion of resource circulation will continue to be a priority. **Chapter 8** builds on the messages generated in the previous chapters on regional integration and how contributing to a green economy can be done by all countries with due consideration given to their position within the context of sustainable development. This is based, in part, on the notion that political support for a green economy at the national level is only a first step, and a political framework starting at the international level is needed for many sectors, in particular waste resource circulation and management. Specific strategic actions are suggested, including a proposal for the establishment of an international fund for sustainable resource management for financing bilateral and multilateral cooperation programmes in the 3R/materials circulation field, as well as encouraging technological development and infrastructure investment for resource efficiency and decoupling.

1.7 Conclusions

Environment and sustainable development problems cannot be solved at just one level. Therefore Asia-Pacific should promote multi-level, multi-stakeholder governance reform. In a region that is constantly threatened by natural disasters, emphasis should be placed on creating resilient societies that can minimize the impacts of disasters and quickly rebound. Decentralization and application of the subsidiarity principle should be the foundation of multi-level, multi-stakeholder governance, as well as contributing to resilient societies.

The implications of increasing regional integration in Asia-Pacific and the region's increasing global significance and emerging role are profound, not least in the need for substantive governance reform. There is a need to ensure that effective attention to environmental quality and sustainable development proceeds at least as fast as trade integration. Environment and sustainable development must be integrated into Asia-Pacific's institutions, at regional and subregional levels, from the beginning as they develop. In the best of all possible worlds, environment and sustainable development could become the leading focus of integration (perhaps progressing faster than trade), rather than constantly lagging behind and threatening the wellbeing of the region's burgeoning population.

IGES hopes that this White Paper together with the IGES Proposal and other publications prepared for Rio+20 will influence the decisions of policymakers in the Asia-Pacific region and globally to carve out efficient and effective institutional arrangements and improved governance that will take us into a sustainable future. There are many promising governance developments in the region that can be built on and the implications of failure are so severe that the challenge now is to find the collective will to bring in the changes, not just for the region but for the whole planet.

Notes

1. The UNCSO homepage contains a wealth of information on the inputs and outcomes to the Rio+20 process: <http://www.uncsd2012.org/rio20/index.php?menu=61>
2. Refinement of these themes is possible during the preparatory process and there is strong pressure for oceans (blue economy) issues to be added to the agenda (ENB 2011).
3. UNEP's Green Economy Report has been under increased fire, particularly on the modelling that underpins the report, which several observers regard as a critical weakness in the arguments (Ibon Foundation 2011).

References

- Bednar, C. (2003) *Transforming the dream: ecologism and the shaping of an alternative American vision*. State University of New York Press.
- Bookchin, M., G. Purchase, B. Morris, R. Aitchey, R. Hart and C. Wilbert (1993) *Deep ecology and anarchism*. Freedom Press.
- Buckminster Fuller, R. (1968) *Operating Manual for Spaceship Earth*. MIT Press.
- Clapp, J. (2011) *Paths to a green world: the political economy of the global environment*. MIT Press.
- Costanza, R., D'arge, R., De Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'Neill, R.V., Paruelo, J., Raskin, R. G., Sutton, P., and Van Den Belt, M. "The Value of the World's Ecosystem Services and Natural Capital," *Nature*, Vol. 387 (1997), p. 259.
- Ellis, K., N. Cantore, J. Keane, L. Peskett, D. Brown and D. te Velde (2010) *Growth in a carbon constrained global economy*. Overseas Development Institute, London, U.K.
- ENB (2011) *Earth Negotiations Bulletin*, International Institute for Sustainable Development, <http://www.iisd.org/>.
- European Commission (2011) *Future skill needs: for the green economy*. Dictus Publishing.
- Glasser, H. (ed) (2005) *The selected works of Arne Naess, Volumes 1-10*, Springer.
- Hawken, P. (2008) *Natural Capitalism: Creating the next industrial revolution*. Back Bay Books.
- Henderson, H. (2007) *Ethical Markets: Growing the Green Economy*. Chelsea Green.
- Huberty, M., H. Gao, J. Mandell, J. Zysman (2011) *Shaping the Green Growth Economy: A Review of the Public Debate and the Prospects for Green Growth*. Prepared for Green Growth Leaders by the Berkeley Roundtable on the International Economy.
- Institute for Global Environmental Strategies (2011). "The IGES Proposal for Rio+20 –Version 1.0." Inputs to the compilation document of the outcome document of Rio+20. Hayama, Japan.
- Jackson, T. (2009) *Prosperity without growth: economics for a finite planet*. Earthscan, London, U.K..
- Kareiva, P. (ed) (2011) *Natural Capital: Theory and practice of mapping ecosystem services*. Oxford University Press, USA.
- Mantica, R. (2010) *Unlimited growth in a limited environment*. Amazon Kindle E-book.
- Meadows, D. (1972) *The Limits to Growth: A report for the Club of Rome's project on the predicament of mankind*. Signet.
- Meadows, D., J. Randers, and D. Meadows (2004) *Limits to Growth: The 30-year Update*. Chelsea Green.
- Milani, B. (2000) *Designing the green economy: the post-industrial alternative to corporate globalization*. Rowman and Littlefield.
- Naess, A. (1989) *Ecology, community and lifestyle*. Cambridge University Press, Cambridge, U.K.
- Ocampo, J. (2011) *The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective – Summary of Background Papers*. United Nations Report by a Panel of Experts to Second Preparatory Committee Meeting for United Nations Conference on Sustainable Development.
- Pearce, D. A. Markandya, E. Barbier (1989) *Blueprint for a green economy*. Earthscan, London, U.K.
- Pearce, D. (ed.) (1991) *Blueprint 2: Greening the world economy*. Earthscan, London, U.K.
- Pearce, D. (1993) *Blueprint 3: Measuring Sustainable Development*. Earthscan, London, U.K.
- Perelman, L. (1976) *The Global Mind: Beyond the Limits to Growth*. Mason/Charter.
- Prugh, T. (1995) *Natural Capital and Human Economic Survival*, Second Edition. CRC Press.
- Robins, N., Clover, R., and Singh, C. (2009). *A climate for recovery: The color of stimulus goes green*. London, UK: HSBC.
- Schumacher, E. (1973) *Small is Beautiful: Economics as if people mattered*. Harper and Row, New York, USA.
- Speth, J. (2004) *Red Sky at Morning: America and the Crisis of the Global Environment*. Yale University Press.
- Strand, J, and M Toman (2010). "Green Stimulus," *Economic Recovery, and Long-Term Sustainable Development*. World Bank Policy Research Working Paper No. 5163, Washington DC, January.
- Strauss, W. (2010) *The myth of endless growth: Exposing capitalism's insustainability*. Lulu.com.
- UNEP (2011) *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. United Nations Environment Programme, Nairobi, Kenya.
- UNESCAP (2005) *Achieving environmentally sustainable economic growth in Asia and the Pacific*. Theme Paper for Ministerial Conference on Environment and Development in Asia and the Pacific, Seoul, 2005. United Nations Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand.

UNESCAP (2009) Greening Growth in Asia and the Pacific. United Nations Economic and Social Commission for Asia and the Pacific, Bangkok, Thailand.

UNGA (2010) Progress to date and remaining gaps in the implementation of the outcomes of the major summits in the area of sustainable development, as well as an analysis of the themes of the Conference. Report of the Secretary General, Preparatory Committee for the United Nations Conference on Sustainable Development, First Session, 17-19 May 2010. United Nations General Assembly, New York, USA.

Victor, P. (2008) Managing without growth: slower by design, not disaster. Edward Elgar.