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CLIMATE CHANGE, ENVIRONMENTALLY SUSTAINABLE ECONOMIC GROWTH AND EMPLOYMENT

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Note by the secretariat

This paper was prepared by the Economic and Social Commission for Asia and the Pacific, the International Labour Organization and the United Nations Development Programme with inputs from the Secretariat of the Pacific Community and the South Pacific Regional Environment Programme. The paper provides background information on climate change, environmentally sustainable economic growth and employment related policies in the Pacific,

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I. Introduction

1. Climate change and climate variability affect economic sectors ranging from agriculture, forestry, fisheries to energy and tourism in countries of the Pacific. They consequently pose a challenge to both sustainable development as well as the way of life in countries of the Pacific.¹ Yet, climate change, itself, is a direct result of global economic growth and its impact on the environment. To address the impact of climate change on people, countries in Asia and the Pacific need to consider how they can pursue environmentally sustainable economic growth, otherwise known as Green Growth, as a strategy for development.

2. To ensure environmentally sustainable economic growth, Governments need to be able to assess the environmental impacts of economic growth and apply appropriate policies to minimize their impacts; promote sustainable consumption through demand side management; develop methodologies, policy tools and mechanisms to address climate change; and develop infrastructure through application of Strategic Environment Assessments (SEA). Since current economic growth results from sub-optimal allocation of resources, ways in which financial, human and natural resources are used and managed could also be re-examined. Better use of these resources could lead to improved efficiency in both production and consumption in countries of the Pacific.

3. Given the backdrop of the global economic crisis, ways to foster decent employment that are environmentally sustainable could also be considered. Green Growth presents opportunities for employment in environment-related sectors such as eco-tourism, renewable energy, waste management and agriculture that are labour intensive and in rural and remote areas. Employment in these sectors needs to be productive and deliver a fair income, security in the workplace and social protection for families. Such employment could furthermore stem environmental degradation caused by urbanization, as less people seek employment in cities. Countries of the Pacific may wish to consider how they could introduce the concept of Green Jobs regionally in order to stimulate economic growth, reduce poverty and ensure attainment of environmental sustainability.

II. Green Growth: Environmentally sustainable economic growth

A. Seoul Initiative on Environmentally Sustainable Economic Growth

4. Rapid economic growth in Asia and the Pacific has exerted considerable pressure on environmental sustainability. The resultant environmental degradation could have an adverse effect on attainment of sustainable development, as envisaged in the Johannesburg Plan of Implementation of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August to 4 September 2002. When fostering economic growth, which is a prerequisite to reducing poverty, countries also need to simultaneously address the issues of environmental protection and social development. Given the small and fragile eco-systems in the Pacific island countries, strategies which minimize impact on the environment, including that of climate change, are especially critical.

5. To address this issue at the regional level, countries of Asia and the Pacific adopted the Ministerial Declaration on Environment and Development in Asia and the Pacific, 2005; the Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2006-2010 and the Seoul Initiative on Environmentally Sustainable Economic Growth (Green

¹ Food and Agriculture Organization, South Pacific Regional Environment Programme, Secretariat of the Pacific Community and University of the South Pacific. "Climate Change and Food Security in the Pacific". Rome, November 2009. p. 5.

Growth) at the Ministerial Conference on Environment and Development at its fifth session held in Seoul on 28 and 29 March 2005 (Annex I).

6. The Seoul Initiative on Environmentally Sustainable Economic Growth (Green Growth) is aimed at promoting regional cooperation to (1) improve environmental sustainability (the way environmental resources are used); (2) enhance environmental performance; and (3) promote environmental protection as an opportunity for sustainable economic growth. In addition, the Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2006-2010 included (4) integration of disaster risk management into socio-economic development policies and planning. The policy areas of these identified targets and are enumerated in Table 1.

7. Improving environmental sustainability requires changes in consumption and production patterns and harmonization of economic development with environmental protection and management. Enhancing environmental performance requires establishment of institutional mechanisms for environmental protection and enactment of legislation for pollution control and natural resource management. Promoting environmental protection as an opportunity for sustainable economic growth aims at presenting the environment as an opportunity for economic growth and private sector business. Finally, national capacities for integrating disaster risk management into socio-economic development policies and planning need to be strengthened since disasters remain a significant challenge. Table 2 summarizes the expected outcomes due to implementation of the Seoul Initiative on Green Growth.

B. Implications for countries of the Pacific

8. The Ministerial Conference on Environment and Development noted that while global environment issues affected all countries, small island developing States were the most vulnerable in that regard.² Their very existence was being threatened by global climate change resulting from current lifestyles and production patterns. The Conference urged swift action, in particular by developed countries, to safeguard the future of small island developing states.³ The five least developed small island developing States in the Pacific furthermore agreed that Green Growth, as a development strategy, could assist in fostering more inclusive and sustainable development at the High-level Asia-Pacific Policy Dialogue on the Brussels Programme of Action for the Least Developed Countries held in Dhaka from 18 to 20 January 2010.

9. The Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2006-2010 identified (1) climate change adaptation, (2) ecotourism and (3) natural resource management to enable sustainable community lifestyles as the subregional initiative for the Pacific.⁴ Due to the vulnerability of small island developing States to climate change, adaptation measures should not only address short-term development challenges but also build long-term resilience. Climate change adaptation planning also needs to consider how to engage stakeholders in complex development and natural resource use issues. Given their negligible emissions, climate change mitigation in the Pacific should focus on energy security and access, reduced dependency on external markets and reduction of greenhouse gases.

² Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Palau, Samoa, Tonga, Vanuatu as well as Cook Islands, Guam, and Niue attended the Conference.

³ Economic and Social Commission for Asia and the Pacific. "Report of the Ministerial Conference on Environment and Development, 2005". (E/ESCAP/MCED(05)/Rep.). Ministerial Conference on Environment and Development, Seoul, 28 and 29 March 2005. Para. 6.

⁴ The Economic and Social Commission for Asia and the Pacific requested the secretariat to provide capacity building activities related to Green Growth approach in developing countries through resolution 61/9 on the Fifth Ministerial Conference on Environment and Development in Asia and the Pacific.

Development of eco-tourism should take into account the policy, capacity and implementation needs of these countries. Since tourism has an impact on other sectoral activities, ways to introduce efficiency and resilience in various supply chains and income generation activities, ranging from agriculture, fisheries, transport and construction, need to be addressed. Natural resource management needs to consider how customary land ownership which could affect policy implementation. Despite growing awareness of these issues, lack of economies of scale, dispersed human settlements, difficulties in attracting investments and limited human and institutional capacity adversely affect implementation of measures.

10. The Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2006-2010, also needs to take into consideration the challenges faced by countries of the Pacific in terms of economic growth. In these countries, economic growth varies considerably from year to year as their economies are not only small, but narrowly based on a few commodities and sectors, and highly vulnerable to exogenous shocks. As a result, options for pursuing any kind of economic growth, much less one that is environmentally sustainable, are highly limited. Economies of scale required for long-term economic growth and the need for greater employment may not necessarily be compatible with environmental sustainability. Finally development of promising sectors such as eco-tourism could ironically lead to greater overall emissions of greenhouse gases, given the geographic location of these countries.

11. Implementation also needs to take into account the realities within the Pacific. Given the cost of imported petroleum products that are need for power generation, renewable energy systems, for example, can reduce the cost of and increase access to power in remote island communities. In order for such systems to be successful, however, skilled personnel and equipment to maintain and repair these systems need to be on the ground. For a business providing these services to be economically viable, sufficient demand for maintenance and repair are essential. The geographic dispersion and size of many island countries, however, makes widespread installation of renewable energy systems that are needed to make such businesses viable difficult. At the same time, the limited capacity to maintain and repair these systems prevents their wider use. Dilemmas like these can be solved only through policy interventions that take into consideration the local contexts.

12. Many of the issues discussed at the Ministerial Conference on the Environment and Development, such as climate change, energy, and natural resource and environmental management, are reflected in the Final Communiqué of Fortieth Pacific Islands Forum, Cairns, Australia, 5 and 6 August 2010, as well as the Pacific Plan for Strengthening Regional Cooperation and Integration, Port Moresby, 26 October 2005.⁵ Programmes in the policy areas identified in the Seoul Initiative for Green Growth have also been conducted at national and regional levels. Implementation of the Green Growth in the Pacific should therefore begin by recognizing the work implemented by countries in the Pacific and their development partners that are in line with the outcomes of the Conference. It also should recognize that the needs of countries in the Pacific generally differ greatly from those in Asia and that, despite their common challenges, each country requires a different approach to promote sustainable development due to differences in population, geography, income level and economic structure.

⁵ Countries have also signed regional agreements such as the Convention on Conservation of Nature in the South Pacific Apia, 12 June 1976; Convention for the Protection of the Natural Resources and Environment of the South Pacific Region and related Protocols, Noumea, 24 November 1986; Action Strategy for Nature Conservation in the Pacific Islands Region (2003-2007), Rarotonga, 30 October 2002; Pacific Islands Framework for Action on Climate Change, Climate Variability and Sea Level Rise, 2000-2004 and Pacific Islands Framework for Action on Climate Change (2206-2015); as well as multilateral agreements such as the Convention on Biological Diversity and United Nations Framework Convention on Climate Change.

13. The Council of Regional Organizations in the Pacific (CROP) Sustainable Development Working Group, at its fourteenth meeting held in Suva on 13 October 2009, therefore decided to conduct a scoping study to assess country needs, ascertain existing initiatives and identify key partners, including the private sector, in these policy areas. Based on the outcomes of the scoping exercise, the Sustainable Development Working Group will consider formalization of the Green Growth Partnership.

III. Green Jobs: Decent work in an environmentally sustainable, climate-resilient, low-carbon world

A. The social and environmental dimensions of the Green Jobs concept

14. Green Jobs have become an emblem of a more sustainable economy and society that preserves the environment for present and future generations and is more equitable and inclusive of all people and all countries.

15. Green jobs help protect the environment, ensure a shift to a low carbon development and adapt to the effects of climate change. This includes, and is not limited to, jobs that reduce the environmental impact of enterprises and economic sectors ultimately to levels that are sustainable; protect ecosystems and biodiversity; reduces the use of energy, raw materials and natural resources, including water, through high-efficiency strategies, techniques and technologies; help the society adapt to the most severe effects of climate change and climate variability such as sea level rise and flooding, and minimize or altogether avoid generation of all forms of waste and pollution.

16. One will find green jobs where in particular there are efforts to reduce the environmental footprint of human activities. They can be found in the renewable energy sector, construction, transportation, mining including copper, gold and nickel, cement or paper industries, in recycling, refurbishment, remanufacturing or repair activities, agriculture, fisheries, tourism and forestry. It is therefore necessary to couple the notion of green jobs with the global trend to move to a diversifying economic base and an economy that is less dependant on fossil fuels, generates less hazardous waste, produces less harmful chemicals, that transforms waste into resources, uses less chemical inputs in agriculture, that protects commercial fish species, that promotes agro-forestry, organic food production, afforestation and reforestation, that fits better into sound land-use planning and ecosystem restoration, that limits water usage and resource extraction and provides decent work.

17. The concept of Green Jobs is inclusive of the two dimensions of environmental sustainability and decent work. For a job to be considered green, it needs to comprise decent work⁶. In reality, many jobs, including jobs that may be considered to be promoting environmentally-friendly technologies or products, would not comply with the minimum standards of decent work. Some 'green sectors' are better defined by their informal nature, the length of the supply chains, hardness and occupational and health hazards and are areas of the economy, as in others, where achieving decent work remains a challenge. For instance,

⁶ 'Decent work' is built upon a set of social and labour rights and obligations and the Decent Work dimension is measured against indicators and criteria that have been developed and through the adoption of the core ILO Labour Standards. These include:

- (a) freedom of association and the effective recognition of the right to collective bargaining;
- (b) elimination of all forms of forced or compulsory labour;
- (c) effective abolition of child labour; and
- (d) elimination of discrimination in respect of employment and occupation

However, more ILO standards are also relevant to the further characterization of the social and labour dimension of 'green jobs'. These include for instance those ILO conventions that relate to occupational health and safety.

jobs linked to recycling and waste management or biomass energy may tend to be precarious, lowly paid or completely informal with little or no rights at work. Consequently, a central element of any Green Job policy will be to enhance opportunities for decent work and income in those particular sectors where green jobs are likely to be found.

18. In this respect, Green Jobs effectively link Millennium Development Goal 1 on Poverty Reduction and Millennium Development Goal 7 on Sustainable Development in a mutually supportive manner.

B. The Green Jobs Initiative

19. The Green Jobs Initiative⁷ was launched in 2007 to promote opportunity, equity, and a just transition process and to encourage governments, employers, and workers to collaborate on coherent policies and effective programmes that will support a green economy, with green jobs and decent work for all. The Green Jobs Initiative assists in developing job-centred environmentally sustainable policies that contribute to the recovery from the global economic and the social crisis. It promotes in a mutually supportive manner decent work and the environmental performance of enterprises and economic sectors. It also promotes the expansion of an employment-rich green economy.

20. In this regard, the Global Jobs Pact⁸ adopted by the International Labour Conference at its ninety-eighth session, Geneva, 19 June 2009, proposes measures and policies to, *inter alia*, support job creation and promote investments in employment-intensive sectors, including green jobs. This global policy instrument addresses the social and employment impact of the international financial and economic crisis and promotes a productive recovery centred on investments, employment and social protection. It calls for urgent worldwide action at national, regional and global levels for shifting to a low-carbon, environment friendly economy that helps accelerate the job recovery, reduce social gaps and support development goals and realize decent work in the process. Not only the Pact considers that in the context of the current economic and social crisis, the greening of the economy is not an option but that the transition process towards a low-carbon, environmentally friendly economy should speed up.⁹

21. In this context, the proposed activities of the Green Jobs Initiative to be initiated in the Pacific will aim at:

- i. Facilitating the development of employment-centred environmentally sustainable policies in the context of the recovery from the economic and social crisis through the facilitation of national consultative processes that involve the labour authorities and the social partner;
- ii. Developing a body of knowledge and information on good practices in key sectors of the economy for the purpose of raising awareness to a large audience, such as agriculture, tourism, forestry, fisheries and, climate adaptation related infrastructure;

⁷ The Green Jobs Initiative is a global partnership established in 2007 between the International Labour Organization (ILO), the United Nations Environment Program (UNEP) and the International Trade Union Confederation (ITUC). The International Organization of Employers (IOE) joined in 2008.

⁸ The Global Jobs Pact was adopted at the International Labour Conference at its Ninety-eighth session, Geneva, 19 June 2009 by Government, Employer, and Worker representatives of 183 countries.

⁹ It should be mentioned here that these issues being, first and foremost, relevant to all countries, including non-ILO members, the ILO initiatives are of universal application and the ILO standards and conventions are means for all countries, including non-ILO members, to address these common challenges.

iii. Deepening research, in particular assessing the labour market impact of climate change, climate variability and environment driven policies and identify green-jobs related skills requirements;

iv. Enhancing the capacity of the social partners (employers and trade unions) through awareness, training and engagement in policy formulation, promoting a One United Nations approach and innovative partnerships; and

v. Launching technical cooperation activities for Green Jobs in particular for women and the young, that would primarily contribute to a low-carbon development (climate mitigation related activities) and a more climate resilient economy (climate adaptation related activities).

C. Green Jobs as agents of change towards a low carbon, climate resilient, environmentally sustainable economy

22. An important related aspect of the Green Jobs Initiative is how to promote a 'just transition' to advance the green agenda. While more and better employment and income opportunities can be generated by actively promoting low-carbon, sustainable development, it is expected that both job gains and losses will occur. A 'just transition' generally refers to active labour market policies aimed at providing assistance and support, such as training and/or the extension of social protection, for employment sectors affected by the transition to a greener growth.

23. Furthermore, the development of green jobs employment policies are expected to produce net gains in employment. Jobs like installing climate-proof materials and apparatus in buildings, restoring mangrove forests along the coastline or installing renewable energy systems are expected to bring more jobs at balance. Crucial to the creation of jobs in these sectors is ensuring that along with technology transfer governments and development partners build the skills of local workers and suppliers through integrating green technology into education and training courses at local institutions. For the growing number of environmentally-conscious consumers, the Pacific has an opportunity to build on the image of clean, green islands to promote fair trade niche export products that promote environmental sustainability and job creation. Accessing carbon finance for renewable energy and forest protection and enhancement may also provide opportunities in the future. In addition to increasing employment opportunities, such green jobs would increase the resilience of the society by securing jobs and financial stability, to which climate change adaptation and mitigation measures would play a central role.

24. Green jobs are supported by domestic policies and regulations concerning employment, environmental protection, trade and health and safety and, in this context, governments are progressively clarifying their own notion of green jobs and developing criteria for qualifying what correspond to a green employment. These efforts set the broad national framework within which industry, business and services organize their green jobs arrangements and, as appropriate benefit from government support to do it.

25. The creation of green jobs will depend greatly on how individual governments develop programmes and legislation to boost the development of a greener economy. It is likely that a lot of efforts would be geared to improve energy efficiency of large companies or industries at a start. But the highest potential for green jobs creation as well as the 'greening' of existing sectors and therefore jobs lies within the supply chains that are constituted by small medium enterprises which represents a huge part of the economic base in most developing countries. In the Pacific, the drive to more environmentally friendly tourism, which includes eco-tourism, and food production sectors has the potential to create direct opportunities for green jobs throughout the local supply chains. Efforts to enhance the carbon capture capacity (carbon sinks) and prevent deforestation are also providers of green jobs.

26. The role of governments in creating the enabling environment for the growth of environmentally friendly public employment programmes which can create hundreds and thousands of green jobs in environmental protection and to combat climate change must be stressed. The successful experiences in India through the National Rural Employment Guarantee Act which is considered currently for replication in other countries in Asia, or in South Africa through the 'Work for water' programme highlight the potential, and need, for public employment schemes that can reconcile the dual objectives of poverty reduction and environmental protection, the very essence of the concept of green jobs. A Green Jobs programme in Pacific island countries should therefore also focus in promoting such public employment schemes in such areas as natural resource conservation and waste clearing.

27. However, the creation of green jobs would also need to be given special consideration in the context of the development of climate adaptation policies and programmes. Since the Pacific is particularly prone to the effects of climate variability, such as extreme weather events, and of climate change, such as sea level rise, climate change adaptation policies and measures would need to make sure that the expected environmental and socio-economic benefits are maximized, in particular, through the creation of green jobs and enhanced income distribution at the local level. Various types of employment promotion and social programmes exist and should be put in place to address different types of challenges in Pacific island countries, such as the prevention of coastal erosion and marine intrusion in low-lying lands through coastal management programmes, the development of extreme weather events resistant buildings and infrastructure, and the relocation of human settlements and infrastructure. Public employment programmes in climate adaptation related works is therefore an area where national governments can work closely with the United Nations which can claim decades long experience with field tested participatory approaches that involve a wide range of partners, including the social partners.

28. A critical element in the set of tools for overcoming the global economic crisis and facilitating a sound recovery in particular in climate and environment challenged societies is the need for adequate safety nets. Under the United Nations framework, a promising experience is currently underway in the Philippines to assist farmers in accessing micro-finance for livelihood diversification in disaster prone areas.

29. The important differences that exist between the socio-economic profiles in the various Pacific island countries will imply that the impact on the creation of new green jobs from climate change adaptation and mitigation will be different and that the loss of jobs and the absorption capacity of laid off workers by other sectors will be different for various countries. For instance, the Solomon Islands are still heavily dependent on agriculture, which contributes over 35 per cent to GDP. By comparison, agriculture contributes 16 per cent to GDP in Vanuatu and 10 per cent in Samoa.

30. A recent preliminary study on Green Jobs conducted in January 2010 in Fiji, Samoa, Solomon Island and Vanuatu has revealed the potential for green jobs creation in tourism, agriculture, waste management and climate adaptation infrastructure related works.¹⁰ Several mitigation related programmes have been launched which are bringing positive results such as the introduction of solar energy systems in rural areas of Fiji and the Solomon Islands. A programme in the Solomon Islands to engage indigenous populations into the environmental protection agenda by enhancing the value of indigenous knowledge and skills is another contribution, albeit in the informal sector. Several actions in the region have already been initiated, which give a clear indication of the interest and commitment of the region in tackling these issues that would need to be further supported and built upon.

¹⁰ The study was commissioned by the International Labour Organization.

31. The consultations held with the national authorities and the social partners in Fiji and the Solomon Island demonstrate that although there is a high level of consciousness about the adverse impacts of climate change on the society and the economy, little is known on the actual impacts on employment and the labour market. Also, the actual potential for job creation, in particular for women and the young, through mitigation and adaptation programmes and policies would need to be better known.

32. A higher level of involvement of the key institutions and the social partners would be necessary. However, there is generally a lack of understanding of the issue of green jobs and its potential which should be addressed as a first priority.

VI. Conclusions and recommendation

33. The Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2006-2010, which recommended steps to strengthen capacity for environmentally sustainable economic growth at the regional, subregional and national levels, was adopted at the Ministerial Conference on Environment and Development. In line with their commitments, countries in the Pacific and their development partners have implemented programmes that are in line with the policy areas and targets of the Seoul Initiative on Environmentally Sustainable Economic Growth. The outcomes of the scoping study conducted by the Council of Regional Organizations in the Pacific (CROP) Sustainable Development Working Group should form the basis for further implementation of the Seoul Initiative on Environmentally Sustainable Economic Growth by countries and development partners in the Pacific. Sharing of experiences with countries of Asia and the Pacific could also be useful.

34. While there exist major opportunities, there are also challenges associated to the promotion of green jobs and green growth in the region. Economic sectors and individual enterprises can make a major contribution to reducing emissions of greenhouse gases and reducing the environmental footprint generally through labour-management initiatives to promote green workplaces. However, without the commitment and initiative of governments, employers, workers and consumers these environmental goals will not be achieved.

35. In this context, an enhanced collaboration between Governments, employers, trade unions, and the civil society is indispensable. Information sharing and awareness raising initiatives are a first step forward that will help raise the understanding of the linkages between environment, the economy and employment. Additional research is also required on the possible impact of climate change on the labour market and the potential for employment creation through environment driven policies tailored to the particular needs of Pacific island countries.

36. The role of governments in creating the enabling environment for the growth of environmentally friendly public employment programmes which can create many green jobs in environmental protection and to combat climate change must be stressed.

37. Another critical element in the set of tools for overcoming the global economic crisis and facilitating a sound recovery in particular in climate and environment challenged societies is the need for tailored safety nets to the specific needs of community people.

38. Also, the social costs of the climate change mitigation and adaptation policies need to be better understood with a view to optimizing their social and labour benefits, in particular through the enhancement of green employment programmes.

39. Due to differences in the socio-economic profiles between the Pacific island countries, the composition of the labour markets and the respective importance of the

informal economy, a flexible and country based approach on green jobs will be required. There is no one common solution that is applicable to all Pacific island countries.

40. Programmes aimed at addressing the two priorities of climate change and employment at the same time could be launched without delay. Examples include labour intensive programmes for the development of infrastructure in coastal as well as remote areas and the relocation of human settlements and industrial infrastructure such as waste disposal sites.

41. Local programmes for the greening of economic clusters targeting first the young and women must be put in place for demonstrative purposes. Likewise, vocational training systems are required to meet expected demands in terms of skills for the adoption of low-carbon and environmentally friendly systems and technologies.

42. Several actions in the region have already been initiated, which give a clear indication of the interest and commitment of the region in tackling these issues, and that would need to be further supported and built upon.

Table 1 Targets and Policy Areas of the Seoul Initiative on Environmentally Sustainable Economic Growth (Green Growth) and the Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2006-2010

Target 1. Improving environmental sustainability

Policy areas: Identify and promote the policy measures and concept and system change necessary to address such issues as:

- (a) Incorporating the concept of ecological efficiency and environmental sustainability into economic and social development planning, since ecological efficiency is critical in ensuring environmental sustainability,¹¹
- (b) Sharing experiences on assessing the pressure being placed on the environment by rapid economic growth;
- (c) Enhancing the ecological efficiency of economic growth and harmonizing fast growth with environmental sustainability;
- (d) Promoting sustainable production and consumption patterns by changing the way society produces and consumes as called for in the Johannesburg Plan of Implementation, possibly by linking them with traditional lifestyles and cultural values;
- (e) Internalizing environmental costs into the price structure by employing various economic instruments such as green GDP and tax incentives of expenditures aimed at ecological sustainability;
- (f) Promoting demand-side management to improve the ecological efficiency in the way society produces and consumes natural resources such as water, energy and raw materials;
- (g) Promoting a circular economy by improving the way society uses the available resources;
- (h) Promoting capacity-building and awareness of Governments, the private sector and civil society concerning the need to improve ecological efficiency;
- (i) Promoting partnership among various stakeholders in society to improve ecological efficiency and environmental sustainability and awareness of the respective roles they are expected to play.

Target 2. Enhancing environmental performance

Policy areas: Identify and promote the policy measures and concept and system change necessary to:

- (a) Promote the “polluter pays” principle in managing and protecting the quality of natural resources such as air, water and the natural ecosystem;
- (b) Promote environmentally friendly production processes through the promotion of cleaner production and development and transfer of environmentally sound technologies;
- (c) Promote the effectiveness of environmental governance by upgrading environmental regulations and standards and effectively enforcing legal instruments for pollution control and ecosystem management;
- (d) Promote best practices such as integrated natural resources management and total pollution load control for water, air and oceans;
- (e) Promote partnership among the various stakeholders to enhance their participation and compliance with environmental governance;
- (f) Strengthen close cooperation among the member States and the concerned stakeholders to address transboundary pollution and environmental risks.

Target 3. Promoting environmental protection as an opportunity for economic growth and development

Policy areas: Identify and promote the policy measures and concept and system change necessary to:

- (a) Promote environment-related investment and environmental technology research and development as an opportunity for economic growth, employment and industrial competitiveness;
 - (b) Promote and create a positive synergy between environment and economy;
 - (c) Promote the role of the private sector in presenting the environment as a business opportunity, not as a burden or cost for the economy and private sector;
 - (d) Present environmental regulations and demands for environmental quality as an opportunity to promote the environmental industry and the market for environmental goods and services;
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¹¹ Ecological efficiency, otherwise known as eco-efficiency, refers to minimization of ecological damage while maximizing efficiency in production, through the lesser use of inputs increased recycling and elimination of hazardous emissions.

(e) Establish policy frameworks that encourage the creation of new market opportunities for infrastructure, goods and services as well as technologies related to pollution control and environmental resource management;

(f) Promote environmentally sound technologies and facilitate their adaptation, diffusion and transfer;

(g) Take advantage of government purchasing power in facilitating market-building and make cleaner production activities profitable in the early stages;

(h) Enhance consumer awareness of environmentally friendly products;

(i) Encourage sustainable ecotourism taking into consideration the natural environment of the Asian and Pacific region to generate income for its residents.

Target 4. Integrating disaster risk management into socio-economic development policies and planning

Policy areas: Integrating disaster risk management into socio-economic development policies and planning may include the following:

(a) Integrating disaster risk reduction into national and local development policies;

(b) Strengthening the legal and institutional framework for effective disaster risk management;

(c) Identifying, assessing and monitoring disaster risks;

(d) Reducing underlying risk factors;

(e) Building capacity in disaster risk management at all levels.

Table 2. Expected outcomes due to implementation of the Seoul Initiative on Environmentally Sustainable Economic Growth (Green Growth)

Industrial Economy (Yesterday)	Eco-Efficient Economy (Today)	Sustainable Economy (Tomorrow)
Environment (Pollution)	Environment (Pollution)	Environment (Pollution)
<ul style="list-style-type: none"> • Puts billions of kilograms of toxic material into the air, water and soil every year • Produces some materials so dangerous they will require constant vigilance by future generations • Results in very large amounts of solid waste, which is used predominantly as landfill. • Requires thousands of complex regulations, mainly oriented towards the end-of-pipe control of pollution rather than avoiding the creation of pollutants 	<ul style="list-style-type: none"> • Releases fewer kilograms of toxic wastes • Seeks to substitute less for more hazardous substances and emissions • Innovates to produce more effective end-of-pipe controls and new processes that produce fewer pollutants • Innovates to use energy and materials more efficiently, producing fewer emissions and less waste • Where appropriate, substitutes economic incentives (e.g., environmental taxes, trading schemes) for regulations • Through separate collection and investment in waste management infrastructure, increases re-use and recycling of materials and reduces landfilling 	<ul style="list-style-type: none"> • High material and waste costs drive systematic energy efficiency, material efficiency (dematerialization) and waste minimization • Systematic substitution of renewable for non-renewable resources, and benign for hazardous substances and emissions • “Design for environment” greatly facilitates re-use and recycling • Industrial ecology and industrial symbiosis (life cycle thinking and use of wastes as raw materials for another process) become standard concepts and practices
Environment (Resources)	Environment (Resources)	Environment (Resources)
<ul style="list-style-type: none"> • Fails to account adequately for either the depletion of non-renewable resources or the non-renewal of renewable resources • Fails to adequately account for ecosystem functions and services • Results in widespread destruction of renewable resources, habitats and ecosystems and threatens millions of species with extinction 	<ul style="list-style-type: none"> • Values appropriately the depletion of renewable and non-renewable resources, promoting their more efficient use, re-use and recycling • Recognizes the value of ecosystems and gives them appropriate protection • Builds a global network of conservation areas to conserve habitats and species and the basic integrity of the biosphere 	<ul style="list-style-type: none"> • Use of primary non-renewable resources (including energy) diminishes as a result of substitution by renewables and efficient energy use • Output of material renewables is increased through better management and stringent observance of sustainable yields • The full range of marine, fresh water and terrestrial species, habitats and ecosystems is maintained by an internationally enforced mixture of conservation and sustainable use
Economic wealth-creation	Economic wealth-creation	Economic wealth-creation
<ul style="list-style-type: none"> • Measures wealth largely by economic output and human welfare by consumption • Regards labour productivity as the key production indicator, to the exclusion of resource productivity • Ignores many aspects of human welfare, including environmental quality and the quality of work and working conditions, and, in the social realm, family, social relationships, cultural integrity and ethical and spiritual issues. • Tends to distribute economic wealth unequally 	<ul style="list-style-type: none"> • Adopts a broader framework of measures of wealth creation and welfare than economic output and consumption. • Pays as much attention to resource productivity as labour productivity. • Has little in general to say about social aspects of wealth creation 	<ul style="list-style-type: none"> • Humans value the ecosystems and habitats that comprise the biosphere both for their functions that benefit humans and for themselves • Human economies recognize that economic output and consumption are important contributors to welfare, but also both that the biosphere is important to sustain these and that welfare has other important components • Social dimension of development, both in terms of distribution of wealth and cultural and spiritual values, is given weight

Source: ESCAP (2006): Green Growth at a Glance – The Way Forward for Asia and the Pacific, p. 20, 21.

Sources

Duncan, Ronald. "Labour Market Scenarios and Decent Work Country Programmes in Pacific Island Countries in the context of the Global Economic Crisis and Climate Change". December 2009.

Economic and Social Commission for Asia and the Pacific. "Achieving Environmentally Sustainable Economic Growth in Asia and the Pacific". (E/ESCAP/SO/MCED(05)/7). Theme paper of the Preparatory Meeting of Senior Officials, Seoul, 24-26 March 2005 for the Ministerial Conference on Environment and Development, 2005.

Economic and Social Commission for Asia and the Pacific. "Green Growth Capacity Development Programme: Map to Green Growth for Asia and the Pacific".

Economic and Social Commission for Asia and the Pacific. "Green Growth Partnership." Working Paper (4) i. prepared for the Fourteenth Meeting of CROP Sustainable Development Working Group, Suva, 13 February 2009.

Economic and Social Commission for Asia and the Pacific. "Greening Growth in Asia and the Pacific." Follow-up to the World Summit on Sustainable Development: Taking action on the Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2001-2010. (ST/ESCAP/2510). Bangkok: United Nations, 2008.

Economic and Social Commission for Asia and the Pacific. "Report of the Ministerial Conference on Environment and Development, 2005". (E/ESCAP/MCED(05)/Rep.). Ministerial Conference on Environment and Development, Seoul, 28 and 29 March 2005.

Economic and Social Commission for Asia and the Pacific. "Trends and Progress in the Field of Environment and Development: Integration of Environmental Sustainability in Development Policy". (E/ESCAP/CED/1). 16 September 2009. Note by the secretariat for the Committee on Environment and Development, First session, Bangkok, 2-4 December 2009.

Food and Agriculture Organization, South Pacific Regional Environment Programme, Secretariat of the Pacific Community and University of the South Pacific. Climate Change and Food Security in the Pacific. Rome, November 2009.

International Labour Organization. Decent Work Country Programs of Fiji, Papua New Guinea, Kiribati, Republic of Marshall Islands, Samoa, Solomon Islands, Tuvalu and Vanuatu.

International Labour Organization. "Recovering from the Crisis: A Global Jobs Pact." Paper prepared for the International Labour Conference, Geneva, 9 October 2009.
http://www.ilo.org/global/What_we_do/Officialmeetings/ilc/ILCSessions/98thSession/texts/lang--en/docName--WCMS_115076/index.htm

Narayan, Paresh Kumar. "Study on Green Jobs in the South Pacific." Foundation of the Peoples of the South Pacific International. January 2010.

Pacific Islands Forum. Final Communiqué of Fortieth Pacific Islands Forum (PIFS(09)12), Cairns, Australia, 5 and 6 August 2010. (<http://www.forumsec.org.fj/pages.cfm/newsroom/press-statements/2009/final-communicue-of-40th-pacific-islands-forum-cairns.html>)

Pacific Islands Forum. The Pacific Plan for Strengthening Regional Cooperation and Integration. Port Moresby, 26 October 2005.
(http://www.forumsec.org.fj/resources/uploads/attachments/documents/Pacific_Plan_Nov_2007_version.pdf).

United Nations System in the Pacific. "United Nations Climate Change Scoping Study: Report on Opportunities to Scale-up Climate Change Support to Pacific Island Countries". Draft, 28 July 2009.