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**Green Economy in the Context of
Sustainable Development and Poverty
Eradication:
A Latin American and Caribbean
Perspective**

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**Green Economy in the Context of
Sustainable Development and Poverty Eradication:
A Latin American and Caribbean Perspective**

I. What are the nature and origin of the concept of Green Economy in the context of sustainable development and poverty eradication?

Background

1. Though the concept of a green economy has been around for a number of years¹, it was officially placed on the table when the United Nations General Assembly resolved to hold its Conference on Sustainable Development in Rio de Janeiro, Brazil,² in 2012, defining the objective of the Conference in terms of:

“Securing renewed political commitment for sustainable development, assessing the progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development, and addressing new and emerging challenges”.

2. Under the General Assembly’s resolution, the products of the conference would include a specific policy document, and the conference would, among other things, focus on the following two issues:

- a) Green economy³ in the context of sustainable development and poverty eradication; and
- b) The institutional framework for sustainable development.

Green economy in the context of sustainable development and poverty eradication

3. Recognising the imperative need to eradicate poverty in developing countries as a main priority in these countries’ public policy decisions, and considering the intimate relationship between a country’s natural resources and its society’s ability to improve individual welfare and promote development, the concept of a green economy is to be understood in the context of sustainable development and poverty eradication,⁴ not as an isolated “green” economic phenomenon. This explicit focus on the need to eradicate poverty for good, while ensuring natural resources conservation brings at least two issues to attention. Firstly, one cannot speak of a green economy without addressing the needs the needs of the most vulnerable populations. Secondly, a green economy cannot exist unless consumption and production patterns ensure an improvement in the state of the natural environment, as well as social benefits, in the short, medium and long term.

¹ Pearce, D.W., Markandya A. and Barbier, E.B.(1989). Blueprinting for a Green Economy. Earthscan, London

² Resolution AG 64/236 (24 Dec. 2009).

³ The original text in Spanish mentions “ecological economy”, but the version in English establishes “green economy” as the most precise term to describe the concept.

⁴ In the present document, every mention of “green economy” should be understood as referring to the complete notion of “green economy in the context of sustainable development and poverty eradication”.

4. Given these premises, a green economy is one that increases human well-being and enhances social equity, while significantly reducing environmental risks and ecological shortages. In its most basic form, a green economy is one with low carbon emissions, one that uses resources efficiently, and one that is socially inclusive.

5. It is essential to note that the concept of a “green economy” is not a substitute for “sustainable development”. Rather, it is a path to sustainable development, though the path differs according to different countries, depending on their particular situation, conditions and perspectives. There are a number of sustainable development initiatives in the region that may already be considered “green economy” initiatives. Though they range rather broadly in scope, they have some common elements.

6. These include a paradigm shift from the old belief that natural resources cannot be exhausted and that nature has an unlimited capacity to regenerate them, to recognizing nature’s limits, and that human kind is responsible for ensuring that ecosystems and natural cycles continue to function in a healthy way. This responsibility is associated with two perspectives on environmental protection. On the one hand, there is the recognition of the rights of nature to develop harmoniously, and on the other there is an awareness of the need to maintain an environment that provides the goods and services needed for human welfare, including the most vulnerable, in a sustainable manner.

7. The false belief in an environment that has no limits is the failure to recognise that while society takes goods and services from nature to enhance its own welfare (e.g. water extracted from rivers, lakes and underground; benefits received from food-producing agricultural ecosystems; clean air; and countless other items), it does not return to nature or give nature the means and time to recover or recreate that which humanity has removed.

8. In order to correct this misconception and rectify its consequences, it is critical to understand the importance of the goods and services provided by nature, and the fact that the market has not incorporated the costs to society of ensuring that nature can continue providing these goods and services.

9. Given that the Region’s countries represent an enormous gamut of social, environmental, economic and cultural conditions, it is obvious that no single set of strategies can be used to transform the economy into one that respects the environment at all levels. It is the task of governments to establish the necessary conditions required for their countries to ensure poverty eradication, improve living conditions and conserve nature in the short, medium and long terms. The responsibility of defining, applying, promoting and coordinating the actions needed in specific contexts to achieve sustainable development in the shortest time possible also relies on the State.

10. Many policy initiatives, programmes and projects promoted by governments, the private sector and civil society in the Region, in areas that range from the generation of clean energy and sustainable agricultural practices, to ecotourism and sustainable natural resources management, are basic elements of a green economy. The transition to a green economy must not

impede development and industrialisation, or create conditions that do so. On the contrary, the green economy aims to promote industrialisation by ensuring reliable, local access to energy and technology, to make resource use more efficient and to improve the Region's competitiveness.

11. As indicated above, the debate about the green economy is closely related with the framework for sustainable development and poverty eradication. Achieving sustainable development requires strengthening the three interdependent pillars of sustainable development—the environmental, the social and the economic. A green economy would enable the promotion of public spending and private investment, while creating favourable conditions to ensure the allocation of capital and the alignment of policy decisions that are coherent with the objectives of sustainable development. Thus, the green economy promotes the implementation of Agenda 21. The transition to a green economy should therefore be seen as an economic, environmental and social vehicle and pathway towards achieving sustainable development.

12. Most of the most vulnerable populations in Latin America and the Caribbean depend on agriculture, forests, fisheries and other natural resources and ecosystem services for their subsistence, for their access to food, and for their jobs and income. By promoting investments that maintain and improve natural resources, a green economy can enable access to basic services such as food, energy, infrastructure, water and income for the most vulnerable. More sustainable forms of agriculture will increase yields and incomes, while reducing climate change and environmental vulnerability. In addition, parts of Latin America and the Caribbean continue to suffer from limited access to energy, which impedes economic activity and development⁵. In response, the green economy concentrates on finding renewable energy solutions such as modern biomass, solar energy, wind, hydro and geothermal sources, which can be more viable, accessible and adaptable options for heating, cooking and lighting for the most vulnerable populations.

13. A green economy should not create new technical barriers to trade and cooperation. In line with the Rio principles of common but differentiated responsibilities and respective capabilities, the transition to a green economy must take account of the impacts of international distribution. Thus, green growth can lead to new market opportunities.

14. According to one of the Region's countries, the green economy, far from requiring barriers or restrictions of any type, generates opportunities, since it represents:

- A reconciliation of the growth of economic and trade activity with sustainable resource management and stronger environmental protection;

5. Report produced by the Economic Commission for Latin America and the Caribbean on the role that energy plays in meeting the Millennium Development Goals. Based on UN data, the document calculates that in Latin America and the Caribbean as a whole there are some 30 million individuals, or 5.5% of the total population, who lack access to electricity. The document also underlines the inefficiency of existing electrical energy services, which are intermittent and charge exorbitant rates.

- Investment in agricultural technologies that permit more sustainable use of the soil and natural resources in general;
- Lower carbon emissions;
- Promoting, disseminating and investing in renewable forms of energy;
- Environmentally sustainable waste management;
- Proper management of chemical products;
- Promotion of sustainable consumption and production patterns, with the developed countries taking the lead in implementing measures;
- Promoting sustainable social housing by using clean technologies in construction, and creating industrial job opportunities.

15. Other possible instruments that can contribute to sustainable development in the framework of the green growth concept—the framework for discussion among the OECD countries is this strategy—are sustainable public procurement; the creation of respectable green jobs (especially for women and young people); the elimination of perverse subsidies; “green” taxes; sustainable infrastructure; sustainable farm production; renewable energy and energy efficiency; sustainable land use policies; the promotion of science, research, development and innovation in sustainable technologies and industries with high growth potential; and, in particular, the promotion of a low-carbon economy.

II. Conceptual frameworks in the Region for the promotion of sustainable development and poverty eradication

16. The Latin American and Caribbean Region has been promoting the development of novel conceptual frameworks for sustainable development. Knowledge and analysis of these can provide interesting input for discussions on ideas of an economy that is efficient in its resource use, low in carbon emissions and socially inclusive.

17. The case of the governments of Bolivia and Ecuador is relevant in this regard, with their proposal to promote recognition of the rights of nature, i.e. the right to respect for its existence, and for the conservation and regeneration of its life cycles, structure, functions and evolutionary processes as a whole. Countries should be urged to implement precautionary and restrictive measures for activities that could lead to the extinction of species, the destruction of ecosystems or the permanent alteration of natural cycles.

18. Ecuador also considers the criterion of “living well” (*el Buen Vivir*) as an alternative to the concept of “development”. This constitutes a new paradigm that could replace the dominant model which is based on infinite economic growth and has led to the over-exploitation of natural resources, while generating poverty and inequity and excluding a great portion of the population. The “living well” model is in the process of being constructed. It draws on the ancestral knowledge of indigenous nations peoples and, which mandate living in harmony with self, nature and others, and calls for the construction of States that are democratic, inclusive, plurinational and intercultural.

19. Another example of interest is the development model proposed by the government of Brazil. The Brazilian experience has centred on strengthening and intensifying investments for social protection and development. These initiatives

include *Bolsa Familia* ("Family Welfare"), *Luz para Todos* ("Light for all"), *Minha Casa, Minha Vida* ("My House, My Life"), *Brasil sem miseria* ("Brazil without extreme poverty"), and *Bolsa Verde* ("Green Welfare"). The vision associated with these programmes is that quality of life and environmental conditions are an integral part of the rights of the most vulnerable populations.

20. This approach has also been reflected in the Colombian government's development of public, private and mixed policy instruments designed to promote more efficient natural resource use, reduced emissions, use of cleaner technologies, increased productivity and improved quality of life. This also implies a need for information and knowledge that is capable of valuing natural resources and ecosystem services as a basis for economically and socially sustainable growth. It is understood that synergies between the three pillars are fundamental if concrete progress is to be made in reducing poverty. Also, connecting the three pillars in this manner (?) should strengthen processes of technological transition and innovation.

21. These factors are addressed in the Government of Colombia's main planning tool, the National Development Plan 2010-2014, which seeks to move toward "democratic prosperity" with five key sectors as the engines of development, namely: (1) agriculture, (2) mining and energy, (3) infrastructure, (4) housing and (5) innovation. These sectors are seen as the basis for the economic growth and competitiveness strategy that is fundamental to increasing the population's well-being —i.e., reducing poverty, providing equal opportunities, and achieving convergence in regional development. These economic growth mechanisms are connected with the country's environmental and social policies. For this reason, the objective of the environmental policy for the current four-year period is to ensure the recovery and maintenance of the country's natural capital and its ecosystem services as a basis for economic growth, and to provide support for the above-mentioned sectors as the driving force for growth.

22. Similarly, Jamaica has prepared its "Vision 2030 Jamaica – National Development Plan". This is the first time that Jamaica has had a long-term development plan that provides a strategic roadmap to make it a developed country by 2030. The plan contemplates a major transformation—from a developing middle-income country to one that offers its citizens a world-class quality of life and standard of life in critical areas such as education, health, nutrition, basic services, access to environmental goods and services, civic involvement and social order. The country has also developed a local planning framework for sustainable development that is implemented as part of the local government component of the country's reform process.

23. The Government of Venezuela has put forward the concept of an ecological social economy, which by definition takes environmental and social impacts into account, particularly as regards poverty, food security, education, health, promotion of productive capacity in developing countries and jobs. All of these are to be transversal aspects of all programmes, projects and activities, aimed at advancing the three independent pillars that underlie comprehensive sustainable development.

24. This development model puts the human being centre stage, and is based on the values of solidarity, justice, social inclusion, equity, respect, enforcement of

human rights and citizen participation. In line with this model, the Government of Venezuela implements social policies to eliminate exclusion, poverty and social discrimination, so as to achieve an inclusive and participatory society that can ensure a dignified life for all its members, and allows them to enjoy their social, economic, cultural, environmental, political and civil rights in a universal and equitable way.

25. As an element in this set of proposals, note should also be taken of SICA (the Central American Integration System) members' proposal stating that an ecological economy must strengthen the interaction of the three pillars of sustainable development. Focus should be on eradicating poverty, addressing hunger and inequality through a more just global economic regime that is inclusive and fair for both humanity and nature, promoting fair trade as well as decent jobs and safe and accessible technologies, emphasising ancestral knowledge as an element of good practice, and guaranteeing funding for the implementation of policies and strategies in developing countries, under the principle of common but differentiated responsibilities.

26. The ecologically-based economy must also help reduce the impact of emerging crises on the global level, particularly as they affect developing country populations and economies, with special emphasis on priority issues: the energy crisis and price volatility, financial crisis situations, disasters, food crises and food price speculation, climate change, water shortages, the "blue economy", and sustainable production and consumption patterns in the framework of a ten-year programme.

27. Barbados has also decided to incorporate the green economy concept through a comprehensive system of production, distribution, consumption and assimilation of waste. In essence, this approach reflects the fragility of the island ecosystem as the basis for public policy interventions to protect natural resources, regulate business and investment choices, drive human development, and support strategies to reach export markets. Barbados is committed to integrating the green economy in its development plans, including its Strategic Plan 2005-2025, so as to articulate all the sectors of the economy in a way that facilitates the unfolding of sustainable development.

III. Initiatives in the Region that promote the green economy in the context of sustainable development and poverty eradication

28. Although there is no consensus on the green economy concept, there is a set of successful experiences in progress, and one can safely assert that there is a perception in the public and private sectors regarding the basic features that any globally agreed version of the concept must have. Some examples are outlined below as a frame of reference.

The Chalalán Initiative, and the community-based sustainable management of ecosystems, Bolivia⁶

29. Chalalán Ecolodge is a community-based enterprise that offers a wide range of programmes and activities for recreation and learning in the depths of the jungle, under the guidance of local indigenous inhabitants. The undertaking includes 74 families, 42 of which are direct beneficiaries of the company's profits. Located in Madidi National Park, the project has used the local indigenous form of construction and locally available materials. The lodge has a wastewater management system that uses natural processes, and a major portion of the electricity used at the lodge is generated by solar panels, reducing the use of fossil fuels to a minimum.

30. Besides the direct transfers from Chalalán in the form of donations and contributions, the community generates income from goods and services provided by the lodge. The level of conservation achieved in the lodge's area of influence is related with the social and economic impact that the activity has on the community's population. Thanks to conservation initiatives, it has been possible to reintroduce species such as the black spider monkey, the white-lipped peccary and other endangered mammals.

31. The business community generates other benefits as well. For example, the firm played a key role in gaining recognition for the community's land rights, and plays a fundamental role in economic planning for the territory.

Green funding mechanisms in Trinidad and Tobago⁷

32. The Trinidad and Tobago Green Fund was established by the 2000 Finance Act, which introduced a 0.1% tax (the Green Fund Levy) on gross sales or receipts of all firms doing business in Trinidad and Tobago. The tax is paid at the end of each quarter. The purpose of the Fund is to provide financing for community groups and other organizations that are devoted to remediation, reforestation and conservation of the environment. The Green Fund is a mechanism through which money can be obtained for environmental programmes and projects.

33. In 2010, the government distributed over 2.7 million dollars through the Green Fund to two community organisations. Fondes Amandes will use the money to continue its reforestation initiative in the Fondes Amandes watershed in St. Anns. The Greenlight Network will use its portion for a plastic recycling initiative. This is the first project of its type in Trinidad and Tobago.

Conservation and sustainable use of biodiversity resources in a coffee-growing region in Colombia

34. In Colombia, coffee is grown in three mountain ranges in the Andean group,

6. Latin America and the Caribbean, a Biodiversity Super Power, UNDP, 2010.

7. UNEP. *Manual on Compliance with and Enforcement of Multilateral Environmental Agreements*. <http://www.unep.org/dec/onlinemanual/Enforcement/InstitutionalFrameworks/EconomicInstruments/Resource/tabid/1018/Default.aspx>

Greenlight Network. <http://greenlightnetwork.blogspot.com/2010/03/greenlight-gets-green-fund-upport-for.html>

covering an area of over 3.6 million hectares and 605 municipalities (56% of the country's municipalities).⁸ The industry involves 420,000 households and over 500,000 agricultural production units. The Colombian Federation of Coffee Growers, founded in 1927 and considered one of the world's largest NGOs, includes over 500,000 growers, who are the organisation's sole owners and controllers. The Federation's members receive benefits such as guaranteed prices, established as a way of absorbing shocks due to the unpredictability of prices in the international coffee market. Since its creation, the Federation has worked for the environmental sustainability of coffee production. It has also provided local communities with basic infrastructure, such as electricity, drinking water services, schools and roads, improving the living conditions in these areas. The National Coffee Research Centre (Cenicafé) is also its creation, formed to generate the technology needed for appropriate and competitive sustainable coffee production.

Compact fluorescent lamp distribution programme, Cuba⁹

35. 1997 marked the beginning of the Cuban Energy Saving Programme (PAEC), based on experiences in Mexico and Peru. The programme has eliminated incandescent lamps by selling compact fluorescent lamps (CFLs) at subsidised prices.

36. Between 1998 and 2000, Cuba replaced 3 million incandescent bulbs with compact fluorescents, reducing peak electrical demand by 150 MW, and reducing annual electrical consumption by 216 kWh. Starting in 2000, Cuba subsidised the sale of compact fluorescents in order to reduce retail prices. In late 2005, as a part of the country's "Energy Revolution", a programme to replace lamps began. In the programme, clients (both residential and other) were given a free CFL to replace an incandescent of the same lighting capacity, which the client turned in, and was later destroyed.

37. This programme has replaced approximately 10 million incandescent lamps, reducing the country's electrical consumption by over 720 kWh, its CO₂ emissions by over 1.3 billion (1,300,000,000) tons, and peak electrical demand by 250 MW. In addition, the government created a programme to collect tube-format fluorescent lamps so that they are handled and stored in a secure setting to prevent the release of mercury into the environment. The country is now researching the creation of a system to collect CFLs. One of the proposals is to reduce the sale price of CFLs to clients who turn in their used or broken CFLs.

Eco-labelling, Brazil¹⁰

38. Brazil's Secretariat of Foreign Trade at the Ministry of Development, Industry and Foreign Trade (MDIC/SECEX) and UNEP are working on a joint initiative to

8. Armenteras, D., Rincón, A. and Ortiz, N. 2004: *Ecological Function Assessment in the Colombian Andean Coffee-growing Region. Sub-global Assessment*. Working Paper. Millennium Ecosystem Assessment. Online at: <http://www.millenniumassessment.org/en/subglobal.colombia.aspx>

9. Draft *Report on transition to efficient lighting in Latin America and the Caribbean*. UNEP/GEF initiatives en.lighten and REGATTA in collaboration with OLADE. Presented at the Fourth Seminar on Energy Efficiency in Latin America and the Caribbean, at Santo Domingo, Dominican Republic, 3-4 August 2011.

10. EcoLabeling Project. UNEP. The Case of Brazil. <http://ecolabelling.unep.fr/sites/eco-label>

39. Taking advantage of this positive experience, SECEX is developing a national programme entitled *Brasil Eco-Exportador*, the object of which is to create favourable conditions for firms that obtain the certification. The programme reduces the cost of certification through incentives and government subsidies. The programme aims to increase the presence of eco-labelling certification among firms in the Brazilian and global markets, in order to demonstrate the formal commitment of the country's firms to environmental management and biodiversity conservation. Based on Brazil's experience, the same initiative is being promoted in the Southern Cone countries as a part of a regional eco-labelling effort.

Wind energy production in Mexico¹¹

40. In 2008, the Mexican Congress passed an Energy Reform bill, which also included a new Law to Use Renewable Energies and to Fund Energy Transition (LAERFTE). The goal was to reduce Mexico's dependence on fossil fuels by promoting renewable energy technologies. The new law recognises that renewable energy requires major support and financial incentives in order to reach its potential. It therefore created a Renewal Energies Fund to promote the use of renewable sources and encourage energy efficiency. The fund provides financing guarantees as well as direct support. Approximately 220 million dollars have been provided between 2009 and 2011.

41. To date, there are successful projects to promote wind energy in the state of Oaxaca. This is due to the atmospheric conditions in that section of the country. However, it is important to bear in mind that self-sustainability is a constraint on the generation of wind energy outside of Oaxaca, since the firms that produce energy must consider the amount of wind, the price at which energy can be sold, transmission costs and the technology available for wind-based generation.

Building a green economy in Granada

42. Green economy offers an opportunity to promote integral development by incorporating the economic, social and environmental dimensions of development. With this in mind, two integrated projects are worthy of mention by way of example. The first aims at the construction of a green economy to encourage poverty eradication and promote sustainable development, and takes the form of a demonstration micro-project in Carriacou, Granada. The project's main objective is to design a comprehensive strategy to transform the traditional economy of a small community on the Caribbean island of Carriacou into a green economy. The activity will lead to the general formulation of a "green economy roadmap" for the

11. Global Wind Energy Council. *GWEC Global Wind 2009 Report*. www.gwec.net; www.amdee.org

- a. An integrated water-energy-waste system;
- b. A centre of education for excellence designed specifically to develop capacities for low-carbon technologies and natural resource management;
- c. Development of tourism infrastructure that is respectful of the environment; and
- d. A community transportation system with low carbon emissions.

43. The second project, designed to integrate climate change in the national strategies and plans for sustainable development in Latin America and the Caribbean, focuses on:

- a. Water resources management in northern Granada;
- b. Community-based restoration of coastal ecosystems ;
- c. Renewable forms of energy for medical purposes and community centres immediately following natural disasters; and
- d. Flood and drought early warning systems.

IV. Contribution to the green economy in the framework of the multilateral environmental agreements (MEAs) and other initiatives

Sustainable production and consumption

44. In response to the Johannesburg Plan of Action of the World Summit on Sustainable Development (2002), the Marrakech Process was developed as an effort to promote the interaction of multiple stakeholders to accelerate the transition towards sustainable consumption and production patterns that promote the social and economic development within the capacity of ecosystems, commonly grouped under the name of sustainable production and consumption (SPC)

45. The region has made significant progress in the promotion of sustainable production and consumption patterns, many countries have developed national sustainable consumption strategies apart from their sustainable development strategies or plans, including Brazil, Colombia, Cuba, Dominican Republic, Ecuador, Mexico, Peru, St. Lucia and Uruguay. Honduras has started national consultations to develop its sustainable production and consumption strategy.

46. As concepts, SPC and green economy share the general objective of preventing certain phenomena, such as shortage of resources and insecurity. In view of these general objectives, they have also pinpointed more specific common objectives—in particular, poverty eradication, the internalisation of environmental and social costs, and the promotion of technological innovation and high job quality.

47. The SPC and green economy working frameworks can learn from each other. It should be noted that SPC activities contribute policy experience in environmental management, innovation and technology with a view to behavioural change; measurement of progress through non-financial indicators; and the improvement of executing capacity. Green economy activities offer discipline and an empirical analysis approach, combined with monetary data that facilitate integrating the approach with national economics and economic policy.

The Montreal Protocol

48. The Montreal Protocol is recognised worldwide as the most successful multilateral environmental agreement, and it also has the distinction of enjoying universal membership. This MEA has contributed not only to protecting the ozone layer in the stratosphere, but has brought economic, environmental and social benefits. It has contributed to the greening of the Article 5 economies (developing countries) and to the greening of non-Article 5 (developed) economies with technology transfer and creation of institutional and sectoral capacities through the Multilateral Fund of the Montreal Protocol, as well as through independent funding and parallel efforts by governments and the private sector.

49. Since going into effect in 1987, the implementation of the Montreal Protocol has reduced by 97% the production and consumption of around 100 industrial chemical compounds known to deplete the ozone layer. Since substances that deplete the ozone layer are also greenhouse gases (GHGs), the Protocol has had the additional advantage of reducing GHG emission by around 11 billion (11,000,000,000) tons of CO₂e (GtCO₂e/yr).

50. The following examples illustrate some of the contributions of this MEA to the transition to a green economy:

- a. Institutional strengthening of the public sector, and establishment of policies that provide synergy between governmental institutions, in particular for the sake of the ozone layer, climate and energy efficiency;
- b. Research, development, innovation and technology transfer in the long term; cleaner alternatives; and triangular South-South cooperation;
- c. Training for industrial services designed to recover, recycle and reuse substances regulated by the Montreal Protocol—a benefit that also contributes to job creation and security, especially for technical personnel employed by service providers;
- d. Management of data on international trade in substances and equipment;
- e. Benefits to health and ecosystems, and their inclusion in the mitigation of climate change;
- f. Education and creation of awareness on the purpose of the Montreal Protocol and its benefits for the environment and for development—a process that encourages market demand for technologies that are cleaner and do not deplete the ozone layer.

51. The benefits of the Montreal Protocol are measured, while the international community continues efforts to eliminate hydrochlorofluorocarbons (HCFCs) and adopt the best available alternatives. The message of the Secretary General of the United Nations on International Ozone Day in 2011 promoted this process, affirming that HCFCs are substances that degrade the ozone layer and have major greenhouse effects. The most common HCFC is nearly 2000 times more powerful than carbon dioxide in terms of global warming potential. With the agreement to eliminate HCFCs, the signatories of the Montreal Protocol strengthened their already very significant contribution to protecting the global climate system.¹²

12. UNEP, OzonAction. www.unep.org/ozonaction

United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol

52. The creation of the UNFCCC and the Kyoto Protocol represented the consolidation of concerns about the global climate effects of human activity, and put a number of issues on the table, which has helped move the Region's countries forward on the path to sustainable development.

53. The Convention obligates its signatories to consider climate change in their decision-making, and to take action to diminish their emissions, as well as prepare to adapt to climate change in the framework of the precautionary principle, considering the fact of common but differentiated responsibilities, as well as priorities as they relate to development, objectives and national circumstances. The Kyoto Protocol includes specific enforcement measures. The Latin American and the Caribbean countries (which are not listed in Annex I) have no obligation to reduce GHG emissions, but can participate in clean development mechanism (CDM).

54. Although only 15% (559) of the CDM projects that have been carried out around the world are in Latin America, and 197 of these are in Brazil and another 134 in Mexico, there have been successful experiences in reducing GHG emissions in various countries.

55. In the context of the UNFCCC, various countries have also incorporated climate as a dimension of their public policy process, leading to concrete action to reduce emissions, but above all to adapt to climate change.

56. The issue of climate change has been prominent recently because the end of the first period for meeting the Kyoto Protocol requirements is drawing near. Various schemes have been discussed during negotiations, calling attention to the need to ensure that any decision taken fully include the three pillars of sustainable development, as well as specific considerations for the most vulnerable populations.

V. Measuring progress in the transition to a green economy

57. The framework of indicators that makes it possible to evaluate progress in the transition to a green economy takes three main categories into consideration:

- a. Green investments, jobs and sectors are measured to assess the success of efforts to achieve a green transformation of the economy and success in certain key sectors in terms of investment and their contribution to production and jobs;
- b. Decoupling impact and resource efficiency. These indicators assess the environmental impacts of economic activity, specify efficiency in the use of resources and productivity, and decouple economic activity from these impacts. The main elements are materials and wastes, energy, water, use of the soil, changes in ecosystems, and emissions of hazardous substances.
- c. Indicators of progress toward sustainable development. These indicators are more general measures of economic progress and well-being, including the reduction of poverty and the depreciation of natural capital. Included here, therefore, is a wide range of indicators, above all to provide a complement to

GDP in the form of social criteria and more detailed environmental economic criteria.

58. The green economy concept calls for the green, or environmental, sectors to represent a growing share of the economy, or for activities to “green” by improving the efficiency with which they use resources. This can be evaluated by indicators associated with these “green economic activities”, namely: their contribution to production and GDP, to investment, and to jobs. The sectors involved are often subsectors of existing sectors. For example, sustainable agriculture as an agricultural subsector; sustainable tourism as a tourism subsector; and renewable energy as a subsector of the energy sector.

59. As these green or greener subsectors have come to represent a larger part of the economy, the impact of the economy on the environment in terms of energy, resource use and waste generation should diminish in relative terms, or even in absolute terms.

60. Changes in the economy’s environmental performance must also be captured. Many of the proposed indicators in this category are designed to represent numerous other dimensions of well-being and progress besides the environmental area. To the extent that the growth of a green economy can be expected to contribute to reducing poverty, the impacts of growth in the relevant green sectors will also be visible in the social sector.

VI. What can the Region’s governments do to promote an inclusive green economy?

61. The actions of the Region’s countries show their commitment to an agenda that promotes efficient resource use, promotion of sustainable production and consumption patterns, social inclusion and the reduction of inequity, which are all associated with improved human well-being, risk reduction and the reduction of ecological scarcities.

62. No single formula can successfully be applied in all countries, because of the great cultural, environmental, economic and political differences between them. Thus, each government must find the best strategy for pursuing its path toward the sustainability of its economic and development model, in order to ensure the maintenance of its cultural and natural wealth.

63. Nevertheless, a number of policies have been identified that governments can consider in seeking to stimulate investment and change in the context of this vision. They range from regulatory and economic instruments to public-private partnerships and voluntary initiatives.

64. Regulations and standards, both national and regional, will define the general policy framework for encouraging transition to a sustainable economic and development model. A context of clear, predictable and stable policies can create the confidence needed to orient planning and stimulate investment. The promotion of sustainable patterns of production, consumption, distribution and transportation are key elements in this transition. Sustainable public procurement can be

emphasised as a mechanism to stimulate the demand for sustainable products and services.

65. One possible measure consists of correcting the negative externalities, in order to ensure that prices reflect real social and environmental costs, which are often not captured by the market. The gradual reform of harmful subsidies such as subsidies for fishing and fossil fuels, and the use of tax instruments such as pollution taxes, are essential measures available to governments.

66. In general, carrying out an economic transformation requires a set of policies and institutions, as well as encouraging active participation by the private sector and by other non-governmental actors.

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