1st National Roundtable on Sustainable Production and Consumption
Mexico 2010

Base Line. Document for Discussion
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I. INTRODUCTION

There are now nearly 7 billion people in the world, who everyday demand a large quantity of products and services to meet their needs.

During the last 100 years, world production and consumption patterns have been synonymous of the degradation of the environment, the indiscriminate use of natural resources, high production of waste and emission and a major reduction in the future availability of natural resources.

The pollution of rivers and seas, loss of forest coverage, soil degradation, the decrease in natural productivity, the emission of waste and the loss of species and their habitat are a highlight of this.

At the same time, several other problems, such as poverty, social inequality, scarcity of food and climate change are clear examples that these patterns have emerged, without taking into account that economic decisions in search of development have sacrificed the environment, for the sole purpose of benefiting productive growth and without taking into account the costs to the environment.

The lack of sustainability of these models has been the main feature of the efforts made in the search for growth in both developed and developing countries. In the former, growth rates have been defined by a use of natural resources that goes beyond the availability and capacity of ecosystems, this giving rise to a high level of environmental deterioration around the world. Developing countries have created this loss by extracting resources for their own use, and those required by developed countries in order to meet their needs, giving rise to another series of problems that affects society directly.

Therefore, it is clear that society needs to adopt new forms of production and consumption that link economic development to respect for and protection of the environment, and equality between societies, in other words, patterns that are addressed to sustainability.

Sustainable production and consumption should be developed on an overall basis to create plans that reduce environmental, social and economic costs, benefiting competitiveness and reducing poverty. In order to achieve this, it is necessary to promote new technologies that are efficient in the needs of natural and energy resources, and of low production of waste and emissions, and the development of sustainable infrastructure required to develop “green jobs” that reflect an increase in well being and the quality of life.

Changes also need to be made to current consumption paradigms so that, by means of education, culture and awareness, society may be encouraged to adopt consumption cycles that lead to a transition towards rational use of products and services and reusing or valuing waste.

Therefore, it is important to consider that Sustainable Production and Consumption should be seen as a single commitment for which various sectors and stakeholders should take responsibility, so that, by investment and consensus, the social and environmental effects of goods and products are reduced throughout their entire lifecycle.
Current environmental policy recognizes that in addition to knowledge, society also needs to change its current ways of living and take advantage of nature so as to move towards a true cultural evolution comprising the sustainable use of resources.

Therefore current production and consumer patterns should be reviewed and execute the required actions to modify these patterns, in a way that the development and growth of this country go in line with the definition of Sustainable Production and Consumption:

“The use of services and products that meet basic needs, improve the quality of life and, at the same time, reduce the use of natural resources and toxic material, and the emission of waste and polluting substances throughout the lifecycle of the service or product, without placing at risk the needs of future generations”.

Mexico has decided to join this international effort by introducing a National Sustainable Production and Consumption Strategy, so as to bring together the current initiatives in Mexico and focus on those sectors or areas established as priorities and thereby, determine the targets and goals to be in a position to select suitable policies and initiatives to promote production and consumption patterns that lead to sustainability, thereby favoring the development of a Green Economy and conserving the environment, namely, reducing greenhouse emissions that are the main cause of the climate change.

The Under Ministry of Environmental Regulation and Promotion of the Ministry of Environment and Natural Resources through its General Direction of Industry, has been given the task of creating a Strategy as part of the international commitment agreed under the Marrakech Process, derived from the World Summit on Sustainable Development in Johannesburg.

This National Roundtable on Sustainable Production and Consumption is carried out as part of the Working Plan related to the development of the Strategy and in order to count in with the experience of different stakeholders in the process of defining the priority areas for our country.

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1 Symposium of Oslo 1994
II. BACKGROUND

The theme of Sustainable Production and Consumption first appeared on the international agenda around 20 years ago; it was in 1992, during the United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil, where this theme was identified as a need to combine the challenges facing the environment and development.

Agenda 21 was agreed at the conference, which states that “the main causes of the continuous deterioration of the environment around the world are the unsustainable patterns of consumption and production, in particular in industrialized countries, being this a cause for great concern and that has originated an increase of poverty and imbalances”.

During the Symposium on Consumption Patterns held in Oslo, various areas of consumption were analyzed, which gave rise to a more widely known definition of “Sustainable Production and Consumption” and the responsibility of the various stakeholders involved.

At the beginning of this century, at the World Summit on Sustainable Development, held in Johannesburg in 2002, it was acknowledged that the eradication of poverty, changes on production and consumption patterns and the protection and making the good use of natural resources as the basis for economic and social development, are fundamental objectives and essential requirements for achieving a sustainable development.

Chapter 3 of the Johannesburg Plan of Implementation, drafted at the Summit, underlines the need to change unsustainable production and consumption patterns, also stating that “in order to achieve sustainable development around the world, fundamental changes must be made to the manner in which society produces and consumes. All countries must promote sustainable consumption and production patterns.” (2)

In order to achieve these objectives, the need to encourage and promote the development of a 10-Year Framework of Programmes on Sustainable Consumption and Production (10YFP) to speed up the change towards sustainable production and consumption, by promoting social and economic development within the supply capacity of ecosystems, without economic growth being linked to environmental degradation was defined.

The Marrakech Process was established in 2003 in order to support Chapter 3 of the Johannesburg Plan of Implementation, specifically the development of the 10-Year Framework of Programmes and the introduction of projects and strategies geared to sustainable consumption and production.
III. THE MARRAKECH PROCESS (MP)

The Marrakech Process is a multi-stakeholder process that supports implementation of sustainable production and consumption and the drafting of a Framework of Programmes on the subject.

This process is lead by the United Nations Environment Programme (UNEP) and the United Nations Department of Economic and Social Affairs of the United Nations (UNDESA), with the participation of governments, business and industry, civil organizations, academic groups and other sectors of society.

In order to achieve its targets, the MP was developed with the following purposes:

a) To organize regional conferences to promote awareness and identify priorities and needs on regard to Sustainable Production and Development.

b) To help to introduce regional programs and means of implementation with regional, sub-regional and national ownership, to be approved by the relevant regional authorities.

c) To implement specific projects and programs at regional, national and local level, in order to develop and/or improve sustainable production and consumption tools and methods, with the seven Task Forces as the main means of implementation.

d) To assess progress, exchange information and encourage international collaboration and coordination by holding international review meetings.

e) To ensure and incorporate contributions from interested parties regarding the drafting of a 10-year program framework to be presented at the 18th and 19th meetings of the Commission on Sustainable Development (CSD 18/19).

The following Task Forces were set up, headed by representatives of governments and with the assistance of various players, to implement the objectives the Marrakech Process, concentrated in specific areas concerning Sustainable Production and Consumption, and in order to agree a number of regional and national activities to promote the transition towards sustainable production and consumption patterns:

- Collaboration with Africa (led by Germany)
- Sustainable Products (led by the United Kingdom)
- Sustainable Lifestyles (led by Sweden)
- Sustainable Public Procurement (led by Switzerland)
- Sustainable Tourism (led by France)
- Sustainable Building and Construction (led by Finland)
- Education for sustainable consumption (led by Italy)
The objectives of these working groups are as follows:

- **Sustainable Products.**
  Making people aware that policies aimed at the product may be a means of achieving international environmental and development objectives and, at the same time, seeking common priorities and opportunities to promote innovation in the eco-design of products, and establishing processes that improve the use and performance of products.

- **Sustainable Lifestyles.**
  Promoting lifestyles in which people live in harmony with the environment in an ambiance of community living.

- **Sustainable Public Procurement.**
  Promoting and supporting the implementation of Sustainable Public Procurement programs, as a means to foster the development of sustainable products and services.

- **Sustainable Tourism.**
  Promote tourism that optimizes the use of natural resources, helping to conserve the environment and biodiversity, respecting social-cultural authenticity of communities, retaining their values and traditions, ensuring social-economic benefits in the long term for all players involved, and local development.

- **Sustainable Construction and Buildings.**
  Promote the efficient use of energy, energy saving and the use of renewable energies in building by introducing public policy legislation.

- **Education for Sustainable Consumption.**
  Incorporate the issues of sustainable production and consumption into study plans and in formal and informal educational and information processes.

As far as Latin America and the Caribbean is concerned, five meetings have been made to identify and propose efficient and efficacious means to put into practice policies, strategies and programs that promote the adoption of sustainable production and consumer patterns. Targets and obstacles in these areas are assessed and sources of international funding and means of intra-regional cooperation are identified.

These regional enquiries were held in Buenos Aires (2003), Managua (2003 and 2005), Sao Paulo (2007) and Colombia (2009).

As a result of these meetings, the need was established to set up international roundtables of dialogue at which all sectors of society would take part in order to establish national policy and strategies concerning the subject, according to the development conditions of each country.

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During the 1st National Roundtable on Sustainable Production and Consumption, those Marrakech Process Task Forces that could be relevant to promote the transition towards sustainable production and consumption patterns in Mexico will be analyzed, according to our national development conditions.

During the initial analysis, there is no doubt that those activities that bring together development and social equality, reduction in poverty, supply of products and the involvement of the community, technological innovation, competitive production processes, changes of lifestyles by mean of education and intelligent consumption, equality in consumer relations, protecting the rights of the consumer, and supporting the government in introducing and making changes to community production and consumption patterns, through policies related to government purchasing and procurement, will be sought.

Activities may also be identified in sectors such as tourism and building, to promote the efficient use of energy, the better handling of soil and making the services related thereto more efficient.
IV. CREATING THE NATIONAL SUSTAINABLE PRODUCTION AND CONSUMPTION STRATEGY

As many countries, including Mexico, have introduced policies to promote efficient production and consumption, by means of isolated actions or contradictory policies, and with restricted scope, during the regional meetings held on Sustainable Production and Consumption as part of the Marrakech Process, development of National Strategies as a form of creating optimal situations of mutual benefit (win-win) by encouraging dialogue between stakeholders and incorporating coherent policies, were identified.

The United Nations Environment Programme gave rise to the “Planning for Change” guidelines, in order to lay down specific guidelines as to how government and other interested sectors may develop National Sustainable Production and Consumption Programs or Strategies, which bring together development activities and identify priority actions or areas linked to sustainable production and consumption.

The various stages of these guidelines comprise the following tasks:

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3 PLANNING FOR CHANGE. Guidelines for national programs on sustainable production and consumption. UNEP 2008
1. **SETTING UP AN ADVISORY GROUP.** To set up an advisory committee made up of a number of interested stakeholders, so as to manage the process.

The General Direction of Industry was given the task of inviting related Governmental Organizations and other interested sectors of the community, such as community groups, business organizations and academia to constitute an advisory group. This task consisted of identifying possible interested parties, according to their attributes, social purpose or orientation, to whom the project was submitted to establish a National Sustainable Production and Consumption Strategy. Based on these presentations, the following Advisory Group was set up:

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<thead>
<tr>
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<th>Institution</th>
<th>Representative</th>
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</table>
2. **DETERMINING SCOPING.** A formal review of the main related problems, needs and challenges, including sustainable production and consumption in the local context, cataloguing current policies and activities and studying their linkage:

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**PLANNING FOR CHANGE**

**STEP# 2. DETERMINING SCOPING**

(Formal review of the main needs, problems and challenges with regard to sustainable production and consumption)

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4 Drafted by the General Direction of Industry, based on the Planning for Change guidelines
2.1 Assessing the impact of current consumption and production patterns.

In Mexico, sustainable consumption in itself is realized on natural resources directly in goods that have already been processed. The former may be understood as the efficient use of natural resources, so that they are not damaged irreversibly and so that they may be regenerated, and the latter may be understood as the use of goods and services the manufacture of which requires less resources and has a reduced environmental impact.

Sustainable production may be understood as production directed to improve both products and their manufacture and supply processes, in order to reduce the use of resources, use of hazardous material and the generation of waste and polluting substances.

Based on these definitions and on official reports, it should be recognized that to date consumer and production patterns have been unsustainable, proof of which follows:

- Mexico’s ecological footprint in 2005 was 3.4 hectares per person, which exceeded the country’s bio-capacity, calculated at 1.7 hectares per person. The ecological footprint in Mexico has increased mainly due to the effect of emissions from fossil fuels.

- A little over 175 thousand hectares of forest, around 7 thousand hectares of temperate forest, 136 thousand hectares of xerophilous mangrove and a little over 84 thousand hectares of natural pastureland were lost between 2002 and 2007.

- In 2002, 44.9% of national territory showed some signs of degradation, being chemical degradation and hydric erosion the main degradation processes. The main causes of this degradation are due to the change of soil use associated to agricultural activity and deforestation.

- The change of soil use, demographic growth, the building of infrastructure, the introduction of invasive species, overexploitation of resources and, more recently, the global climate change, are the main threats resulted from the loss of biodiversity.

- The National Emission Inventory of Mexico was published in 2006. According to this inventory, 40.5 million tons of polluting substances have been emitted, 58% from natural sources and 42% from anthropogenic sources. The major sources of pollution were motor vehicles and other uses of fuel.

- The number of overexploited water bodies has also increased in recent decades: 15% of the country’s water bodies.

- The generation of waste water in urban centers between 1998 and 2007 increased from 239 to 243 m$^3$ per second, while industrial discharge increased from 170 to 188.7 m$^3$ per second.

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• The estimated volume of urban solid waste in the country increased by 28% between 1997 and 2008, from 29.3 to 37.6 million tons. The daily production of waste per person during the same period increased from 840 to 940 gr.

• The volume of hazardous waste produced in Mexico was around 1 million 127 thousand tons between 2004 and 2009. The large part of hazardous waste produced comprised solid waste (asbestos, industrial waste and heavy metals) and used oils.

### 2.2 Benefits of Sustainable Production and Consumption in the local context.

Sustainable production and consumption may lead to the following benefits:

• Reduce poverty by incorporating the poorest sectors of the community into the economic activity.

• Help to reduce the ecological footprint by decreasing emissions from the burning of fossil fuels, and other similar activities.

• Reduction on changes of soil use and soil degradation.

• Hold the affectation in natural ecosystems, which will help to reduce impacts on wildlife.

• Reduce polluting emission produced by the transport of persons and goods.

• There would be a reduction in pressure on water bodies, thereby maintaining the hydrological cycle and the environmental services that they offer.

• Reduce the production of waste water, by increasing the volume of treated water and reusing treated water for the same processes that produced them.

• Reduce the production of urban and hazardous solid waste, as well as the pressure on collection, transfer, treatment and final disposal services.

### 2.3A. General perspective of Sustainable Production and Consumption policies and activities.

As from the second half of 1999, national development should be comprehensive and sustainable, as established in Article 25 of the Mexican Constitution. This establishes that all policies, strategies and actions for which the federal, state or local public administration are responsible, must be addressed to sustainability.

Notwithstanding, nowadays, there are only a few policies and actions whose express objective is sustainable production and consumption. As an example, there is the Responsible Use of Office Material Program of the Ministry of Environment and Natural Resources (SEMARNAT, acronym in Spanish).
Despite this, the Public Administration has introduced a large number of programs, projects and actions related with Sustainable Production and Consumption.

Following are some examples:

- Forestry Development Program (PRODEFOR, acronym in Spanish) for sustainable forestry use, the transformation and/or sale of raw material and forestry products, made from wood and not wood materials.

- Temporary Employment Program of the National Surfaces National Commission, in order to maintain and promote the sustainable handling of natural resources and to cover needs during times of low income.

- The Refund of Rights Program (PRODDER, acronym in Spanish). The purpose of this program, introduced by the National Water Commission, is to improve the efficiency and infrastructure of water, sewage and waste water treatment.

- Program to encourage the Competitiveness of Industrial Sectors (PROIND, acronym in Spanish), set up by the Ministry of Economy, whose general purpose is to increase competitiveness and to reduce the impact on the productive performance of the industries affected by the financial economic crises.

- The High-technology Industry Development Program (PRODIAT, acronym in Spanish), set up by the Ministry of Economy.

- The Household Appliance Energy Saving Replacement Program.

- The Sustainable Use of Natural Resources for Primary Production Program, set up by the Ministry of Agriculture, Farming, Rural Development, Fisheries and Food (SAGARPA, acronym in Spanish).

2.3B. Framework of National Policies with possible connections and/or integration with sustainable production and consumption.

As stated in the previous section, most policies, programs and actions taken or introduced by the government implicate sustainable production and consumption, mainly because they are all directed to promote the development of sustainable productive activity, dealing with poverty, the fair distribution of public wealth, conservation of natural resources and protecting the environment.

This circumstance derives from all such programs being subject to the Mexican Constitution, an issue that becomes even more obvious if we take a look at the National Development Plan, the main instrument in the road to define national strategies and priorities.

Next there are some of the strategies and actions established in the National Development Plan related to or associated with sustainable production and consumption.
# NATIONAL DEVELOPMENT PLAN

## SECTION 2. Competitive Economy and Creating Jobs

<table>
<thead>
<tr>
<th>PURPOSE</th>
<th>STRATEGY</th>
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<tbody>
<tr>
<td><strong>2.7 Rural Sector</strong></td>
<td>9.9 Review the policy of agricultural production for producing bio-energetic products. Making sustainable use of our rich biodiversity, ensuring that jungles and forests are not affected by the production of bio-energetic products.</td>
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<td></td>
<td>10.3 Achieve a balance between rural and marine production activities and protecting the environment in order to conserve water and soil. A balance must be maintained between production activity and protecting the environment, so as to continue providing environmental goods and services on an ongoing and sustainable basis. The incentives (legal and economic) introduced by the government must be aligned to conservation of water and soil.</td>
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<td><strong>2.8 Tourism</strong></td>
<td>12.4 Update and reinforce the legal framework of the tourism sector. Together with the Legislative Power, communities and companies of the sector, updating the legal framework for sustainable development of the sector, and introducing legislation to guarantee the rendering of competitive tourism services.</td>
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<td><strong>2.10 Telecommunications and Transport</strong></td>
<td>14.7 Extend the coverage of all types of transport, modernizing infrastructure and provide reliable and quality services for the entire community.</td>
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<td><strong>2.11 Energy, Electricity and Hydrocarbons</strong></td>
<td>15.11 Extend the electricity supply to remote communities using renewable sources of energy when it is not technically or economically feasible to connect these communities to the network.</td>
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<td>15.13 Encourage the efficient use of energy so that the country may develop in a sustainable manner, by introducing technology that offers increased energy efficiency and savings for consumers.</td>
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<td>15.14 Encourage the use of renewable sources of energy and bio-fuels, establishing a legal framework that lays down the authority of the State to orientate their sources and encourage investment so as to boost the country’s potential in this area.</td>
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<td>15.15 Intensify energy savings programs, including the use of co-generation capacities.</td>
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<td>15.16 Take advantage of research activities carried out by the energy sector, reinforce the sector’s research institutes, and orientate their programs towards the development of renewal sources of energy and energy efficiency.</td>
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<tr>
<td><strong>2.12 Hydraulic Sector</strong></td>
<td>16.1 Introduce economic incentives and means to promote the conservation of rivers, lakes, wetlands, basins, water bodies and coastlines to improve the efficiency of the operation and handling of the country’s dams and agricultural areas; treating waste water produced and encouraging its reuse, and exchanging first-use water for treated waste water; designing mixed financing schemes so as to make better use of the scarce public resources available.</td>
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<tr>
<td><strong>2.13 Housing</strong></td>
<td>17.5 Design and develop legal and institutional instruments to encourage housing in harmony with rational and sustainable urban growth.</td>
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Section 3. Equal Opportunities

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<th>PURPOSE</th>
<th>STRATEGY</th>
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<tr>
<td>3.1 Closing the Poverty Gap</td>
<td>1.3 Ensure that poorer members of the Mexican community have sufficient food and housing, and that they have access to basic services, education and health services.</td>
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<tr>
<td>3.3 Education Transformation</td>
<td>12.4 Encourage education on community rights and responsibilities.</td>
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Section 4. Environmental Sustainability

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<th>PURPOSE</th>
<th>STRATEGY</th>
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<tbody>
<tr>
<td>4.1 Water</td>
<td>1.2 Create a water culture so as to ensure the saving and rational use of water in the home, industry and in the agricultural sector.</td>
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<tr>
<td>4.3 Biodiversity</td>
<td>5.1 Introduce cleaner and environmentally-friendly technology into the country’s production sectors.</td>
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</tbody>
</table>
| 4.4 Environmental Management and Justice | 6.2 Encourage the private sector to incorporate eco-efficiency practices into its manufacturing activities and to develop an environmental infrastructure. 
6.4 Ensure the right application of the legal framework by the authorities, and guaranteeing strict compliance with environmental legislation, by carrying out inspections, supervisory tasks and repairing damage. 
8.1 Design and orchestrate means to facilitate cooperation between the three levels of government in programs and action related to environmental sustainability. |

2.4. Assessing the compatibility of current instruments and policy.

As you have noticed, by their composition, it is evident that policies, strategies, programs and actions reviewed complement each other.

Even so, there is some repetition, particularly regarding support given to manufacturing to make it more sustainable, and action taken regarding poverty. Nevertheless, far from being a shortcoming, it is considered that this is a mean of improving the taken actions as they refer to various sectors of the public administration.

Therefore, it is indispensable to establish precisely the action to be taken, with economic estimations and anticipate a lower or higher allocation of resources.

Sectorization and public policies not orientated towards sustainability

On the other hand, a clear barrier to achieve the objectives of sustainable development is sectorization. Not all sectors of the public administration agree in the way sustainability should be understood and the actions required realizing it.

An example of this is the majority of economic aid programs established. Most of them provide assistance, even those directed to promote sustainable production. In other words, the funds provided do not ensure that manufacturing is improved or that its practices no longer affect the environment, as funds are provided without being complemented with assessment processes for measuring their
effective use. Inclusively, they are not preceded by appreciations that point out their sustainability.

**Lack of mechanisms to monitor and control public policies**

In addition, although la Secretaría de Hacienda as well as la Secretaría de la Función Pública in charge of verify the fulfillment of all dispositions from the National Development Plan as well as with the programs derived from, without the experience in all areas of public administration, their reviews are limited to the extent that there are no penalties for failure to meet either the plan or these programs, as established in Article 42 of the Planning Act, despite the fact that many tasks scheduled have not yet being undertaken, or they are geared towards areas other than those established in the Plan and these programs.

**Lack of community involvement**

Nowadays, the community is hardly involved in defining the country’s development policy or in assessing compliance therewith. This is a serious shortcoming, for which both the community itself and the legal framework that covers it are responsible.

Although there are certain legal procedures, such as complaints for taking disciplinary action against public officials, this is no guarantee that the performance of public institutions may be improved. It would be better if private individuals could go to court to complain of the lack of activity or poor performance of public officials, when they do not observe the law or fail to meet scheduled commitments, however, the law does not allow this.

As you may appreciate, the problems about the achievement of sustainability not only involve the lack of strategies and scheduled tasks, or their incompatibility or contradiction, but in the lack of both institutional controls and mechanisms that help to take action; in other words, that action is taken in accordance with that agreed and scheduled.

To modifying the consumption patterns of society basically means “to persuade the community and the ability to do it”. Changes in consumption patterns and the production of waste “by decree” cannot be expected, as the community has certain rights and liberties in Mexico. Convincing the community and making it aware of its individual responsibility regarding the effects that these patterns have on the environment and natural processes will probably be the key to achieve these changes, providing that people are able to meet their needs in line with their culture, traditions, natural surroundings, and in a legal, economical and viable manner.

**2.5. Possible interested stakeholders who should take part in the process.**

Based on the previous analysis, stakeholders from the government who should participate in the process of defining the strategies on sustainable production and consumption are:

The Ministry of Economy, specifically those areas responsible for providing incentives for the
development of production activity and consumer defense (the Consumer Protection Agency). The objective is that they accept that it is necessary to change the incentives mechanisms of providing incentives, removing its assistance condition in order to promote real sustainable production and consumption patterns. So as to extend consumer protection with regard to their environmental rights, counteracting against deceitful advertising and giving strength to their rights about their consumption.

The Ministry of Energy, responsible for establishing the country’s energy policy within the current framework of the Constitution, to guarantee a competitive supply, sufficient, high quality, economically viable and environmentally sustainable for the development of the country. The Department also has a decentralized body, the National Commission for the Efficient Use of Energy, whose purpose is to promote the efficient use of energy and to act as a technical advisory body with regard to the sustainable use of energy.

The Ministry of Agriculture, Farming, Rural Development, Fisheries and Food that, instead of providing funds to assist in production, should provide assistance for sustainable production.

The Department of Education plays a fundamental role in communicating and publicizing the values regarding sustainability, such as the use and care of resources, decrease in emission and waste, and more intelligent consumption, by providing a suitable educational system.

The Federal Legislative Power. A decentralized public body needs to be set up, with technical and financial autonomy, to assess sustainability policies and to assist the legislative power in reviewing the National Development Plan and the programs emanating from. On the other hand, legislation will have to be introduced about the involvement of the community in the planning for the development and to give individuals the opportunity to contest either the inactivity of government bodies or their illegal actions, not only to make sure that public officials are penalized, but also to encourage the right attitude.

Likewise, other sectors of the community, such as academia, community groups and the industrial/business sector should cooperate with the government by means by which opportunities may be found and action may be taken to encourage the transition towards sustainability of current production and consumer patterns. Academia, through research centers, will play an important part in innovation and in the development of technology that may be used for production processes and to design new products that meet sustainability guidelines.

Community groups should aim for a lower consumption and unlink consumption from lifestyles.

2.6. Good practices related to the development of the program and policy responses.

A review of good regional and international practices will allow to identify that most of them are being applied in Mexico, particularly by local governments.

For example, quick transport systems have been set up in Mexico City and other cities, using fuel-efficient vehicles that use dedicated lanes. Electric-powered vehicles are also used.

With regard to the handling of waste, Mexico and local governments have established the Comprehensive Waste Management and Prevention Act that orders the introduction of various types of
waste management programs. By these programs and laws that back them, it is ordered to separate waste in organic and inorganic waste at source, and also include programs for reducing, reusing and recycling waste, although these are at an early stage.

The National Water Commission has set up programs to improve water supply and drainage infrastructure.

It is a national priority to make tourism more sustainable. The federal government must promote ecological tourism.

Although there is no specific movement towards the use of alternative sources of energy, one of the national priorities includes a strategy that is now complemented with energy savings programs and programs to replace household appliances with more than ten years old.

Although the use of eco-labels is still not properly controlled, there are systems for certifying goods and services that are compatible with technical specifications, the purpose of which is to decrease the impact on the environment. Technical regulations should be broadened and incorporate building and construction into the certification process.

The federal government and the states have set up environmental education programs to increase community awareness of the need for sustainability.

There are a large number of support programs for communities who live in forest and jungles, so as to encourage them to take part in protecting natural resources.

2.7. Identifying and discussing possible priority areas and policy responses.

The aim of the National Roundtable will be to link activities related to the Green Economy to identify those areas and opportunities that may lead to benefits in the short and medium term and, at the same time, lead to the reduction of emissions that affect environmental problems reflected in climate change, with the involvement of various players and based on the analysis of the most representative sectors of the economy that most consume resources and produce waste.

At the same time, there are coincidences in barriers that have reduced the effectiveness of public policies and programs, and the following actions as well as others that could be identified during the National Roundtable, could help to get over these barriers:

Re-orientate the economic incentive system for manufacturing and industrial transformation, conditioning them to the conservation of natural resources, the use of energy and the reduction of effluents and discharge into the water, soil and air.

Extend the identification of activities, instruments, policies, measures and specific controls, and means of evaluation (national indicators and lifecycle analysis) in order to determine progress.

Apply policies and measures that have the purpose of encourage sustainable production and consumption by implementing, among others, the principle “who pollutes pays”.
Develop programs that make ware of the importance of sustainable production and consumption models.

Create and introduce means of information that are effective, transparent and provable for the consumers and that are not discriminatory or deceitful, so as to provide information on sustainable consumption and production, including health and safety aspects.

Increase ecological efficiency by providing public and private funding so as to increase capacity, improve technology transfer and the exchange of technology with developing countries and countries whose economy is in transition.

Create an efficient system to evaluate the application of policies and strategies regarding sustainable production and consumption in particular, and on overall sustainable development, to ensure that the sectors involved meet their responsibilities and achieve the objectives of the Constitution.

Increase the involvement of the community in creating and approving government policies, strategies and action with regard to overall and sustainable development, and introducing the means to ensure that these are complied with.

When reviewing priority areas identified in other countries about sustainable production and consumption, there is a certain coincidence of sectors, such as energy, waste management, transport, cleaner production and agriculture. When comparing the themes to be discussed at the National Roundtable regarding sustainable production and consumption, it may be inferred that many of these priorities will be the same as those for Mexico. Nevertheless, actions and opportunities will be different, and will be based on the conditions of Mexico and the viability of developing and proposing policies to encourage a fast transition towards sustainable production and consumption patterns, and favoring development and social equality by creating “green jobs”.

**2.8. Suitable conditions to perform sustainable production and consumption in the local context and possible barriers that may have to be overcome its development and its application.**

As already mentioned, sectorization, the lack of sustainable view in public policies, insufficient means to control and monitor programs and the lack of involvement of the community have been identified as possible barriers.

One particular barrier is the lack of will to take an active part in the elaboration process and in putting the strategy into action.

This lack of will not only rests in a lack of interest in the subject, but in the current dynamics that nowadays exist on public administration and in the manufacturing sectors; and of course, in the prejudice towards the environment, as an obstacle to economic development.

On the other hand, the progress of the action taken by the government may assume the unviability of the proposal and the limited involvement of those interested parties.
What is true is that all those involved will have to be told that defining and applying strategies regarding sustainable production and consumption has an official support, because virtually everything is covered by the National Development Plan and sector programs. In addition, the constitutional mandate points to sustainability.

Practically all tasks and action must be within the scope of the Mexican Constitution and the National Development Plan.
3. **DESIGN THE INSTITUTIONAL FRAMEWORK.** Means of coordination for government organizations and the effective involvement of stakeholders, and the base of policies required for the development of the National Strategy.

- **Means of cooperation** between government departments and other stakeholders so as to contribute to and become involved in developing, performing and monitoring the program.

The Cooperation Agenda of the Federal Public Administration should be updated to coordinate the responsible areas of each Ministry involved in sustainable production and consumption.

- **Means to ensure the effective participation** of all stakeholders throughout the process (including the means for public information and public enquiries).

To achieve this, it is proposed to set up a National Sustainable Production and Consumption Network that will serve as an electronic platform for exchanging ideas, comments, success cases and information on the part of those interested sectors, emphasizing the sustainable practices of the country’s most representative manufacturing sectors.

There are currently a number of initiatives for private companies that do not have any external communication, and it is important to bring this information together so that it may be made known to any party interested in the subject.

At the same time, this network may be used to establish the view of consumers with regard to their consumption patterns, the influence of business on their purchasing decisions, and the need for products or possible improvements that consumers themselves may recommend.

By means of the network, contact will be maintained with various sectors of the community that are interested in the subject.
4. **IDENTIFY PRIORITY AREAS.** Establishing specific priority areas according to development needs and the specific conditions of each country.

**NATIONAL ROUNDTABLE ON SUSTAINABLE PRODUCTION AND CONSUMPTION**

The United Nations Environment Programme, through regional meetings, has been able to identify regional priorities and needs in the area of sustainable production and consumption. The process in the region has concentrated on a number of initiatives that include specific projects, developing production and consumption strategies and implementing plans of action at international, regional and national level, with the participation of those agencies involved in sustainable production and consumption.

Nevertheless, more specific actions are required at a national level to find solutions to improve the quality of life of the community and to gear production and consumption patterns towards sustainability.

The General Direction of Industry of the Under Ministry of Environmental Regulation and Promotion of the SEMARNAT has been designated as focal point for sustainable production and consumption under the Marrakech Process, and is responsible for conducting the National Sustainable Production and Consumption Strategy and, to do so, it has set up a team of officials and specialists to establish the links required with other departments, institutions and relevant sectors.

By applying the “Planning for Change” guideline, which considers the development of the strategy as a “multi-stakeholder” process, the National Roundtable on Sustainable Production and Consumption has been planned with the coordinated involvement of representatives of all sectors of the community: the
three levels of government, the business sector, academia and research, community groups, the financial sector and consumers.

The National Roundtable on Sustainable Production and Consumption, linked to the principles of a Green Economy and taking into account environmental problems reflected in Climate Change, will identify the priority areas and specific needs of Mexico where sustainable production and consumption practices could be promoted.

With the contribution of each person involved, the purpose will be to establish priorities in themes related to the Marrakech Process, the Green Economy Initiative, Climate Change and Individual Consumption in which the Strategy may be developed, and identify any barriers or activities that have delayed or that may delay the changes required, and what needs to be done to speed up this process.

This will help to establish the basis to set sustainable production and consumption objectives and targets, and the action needed to accomplish them; this is the reason that this process counts on with thematic definitions and participation from representatives of all sectors of the community.
V. THEME LINES

Over 30 countries have established public policies to develop both sustainable production and consumption and Mexico has decided to join this effort and to adopt and adapt the methodology of the UNEP to its specific conditions. Mexico considers that trade is a fundamental market link between production and consumption, so this has been included. In Mexico, Sustainable Production and Consumption includes Sustainable Trade.

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<tr>
<th>SUSTAINABLE PRODUCTION AND CONSUMPTION PRIORITIES</th>
<th>PREVIOUS ROUNDTABLES</th>
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<tbody>
<tr>
<td>Priority Areas</td>
<td>Argentina</td>
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<tr>
<td>Clean/Eco-efficient Production</td>
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<td>Consumption Patterns</td>
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<td>Public Procurement</td>
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<td>Sustainable Building and Construction</td>
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<td>Tourism</td>
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<td>Education/Information</td>
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<td>Local Initiatives</td>
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<td>Market Conditions</td>
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<td>Social Needs</td>
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National initiatives are very diverse with regard to their priorities and how to tackle them. All constitute national frameworks that include programs, action plans and strategies that modify current...
unsustainable patterns. National frameworks are often incorporated into current plans and programs focused on promoting development and combating poverty.

Mexico already has a number of public policies, programs and action in various areas that are compatible with and, to certain extent, support the conceptual targets of sustainable production and consumption; however, there are certain gaps that need to be filled and opportunities for action to be taken that may be included or reinforced in all sectors of the community.

Sustainable production and consumption are closely related to public policies already established in Mexico, so the initiative should not be repeated nor should tasks be duplicated, but complements to this policy should be identified and put in place, so as to achieve the strategy objective: altering current production, trade and consumption patterns so that they come within the limits and capacity of ecosystems to sustain them indefinitely.

There is no single recipe to achieve this. As a matter of fact, the challenge is great, as other initiatives and concerns regarding the environment, the community and the economy have shown that making positive and long-lasting changes are not only responsibility of the government, but also requires certain activity of the state, in other words, the government, the community in general and the handling of the territory that assures the well being of the community in the long term.

The Special Climate Change Program (SCCP), set up by the Mexican government, is closely linked to the sustainable production and consumption strategy, as if the latter is successful, the emission of greenhouse gas will be reduced considerably supporting the goals established in the SCCP.

Similarly, the Green Economy and Green Growth Initiatives driven by Europe, Asia and the OECD are highly compatible and complementary with regard to the SCCP and sustainable production and consumption.

The following subjects will be discussed at the National Roundtable on Sustainable Production and Consumption, plus those established by the Working Groups of the Marrakech Process:

V.1 RELATIONSHIP WITH CLIMATE CHANGE

The environmental problems referred to Climate Change have been originated from unsustainable production and consumption practices derived from various anthropogenic activities that have governed the world economy during the last few centuries.

Mexico contributes with 1.6% of the total emission of greenhouse gases around the world, putting it in 12th place. In 2006, emission amounted to 715MtCO₂eq.6

This emission causes climate change, which must be attended to multilaterally so as to reduce the effects of emissions on the environment, the community and the economy. This creates the need to seek

6 Special Climate Change Program 2009-2012
activities that stabilize the concentration of emissions into the atmosphere in the short and medium term, and the ability to achieve these effects depends on the cooperation of various sectors.

Through the 2009-2012 Special Climate Change Program (SCCP), Mexico has established national targets linked to mitigation and adaptation processes, so as to contribute to the overall international effort to reduce emissions, and restrict the rise in the surface temperature of the Earth to less than $3^\circ$ C. Its main objective originates from the need to reduce emissions in Mexico by 20% by 2020, and 50% by 2050.

In order to achieve this reduction, the SCCP establishes 105 objectives and 294 mitigation and adaptation targets through a vision that will boost sustainable development, the use of energy, innovation in clean manufacturing processes, and the use and conservation of natural resources, without compromising economic benefits.

The aim of these adaptation targets is to reduce vulnerability to face the effects that climate change have on the community and to the environment in general, by establishing a new dimension of risk management.

It is also the aim of the mitigation targets established in the SCCP to encourage “decarbonization” of the country’s economy by taking action in those sectors in which there is high emission, such as power generation, agriculture, forestry, soil use and waste.

It is in these types of targets in which changes to production and consumption patterns may speed up the estimated reduction of emissions. When analyzing and categorizing the mitigation targets established in the SCCP, it is possible to identify the following unit application targets that are directly related to sustainable production and consumption and to the viability of encouraging the desired reduction of emission of greenhouse gas, by facilitating their performance and by various sectors working together.

### Clean/Eco-efficient Production

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<th>MITIGATION</th>
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<tbody>
<tr>
<td>M.19</td>
<td>Carrying out 1,090 tasks to achieve energy efficiency and to use renewable energy in projects in the agricultural and fishing sector:</td>
<td>0.53</td>
</tr>
<tr>
<td>M.45</td>
<td>Reducing the emission of greenhouse gas by introducing FIDE programs in industry and SMEs, in order to achieve savings of 1,229 GWh between 2008 and 2012, and 176 GWh/a year by 2012:</td>
<td>0.12</td>
</tr>
<tr>
<td>M.46</td>
<td>Reducing the emission of greenhouse gases by introducing CONUEE programs in the industrial sector, to achieve a saving of 20 PJ between 2008 and 2012, and 6.7 PJ/a year in 2012:</td>
<td>0.4</td>
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7 Drafted by the General Direction of Industry and the General Climate Change Policy Directorate.
# Sustainable Building and Construction

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<tr>
<td>M.10</td>
<td>Encourage and promote the installation and commissioning of 1.7 million square meters of solar water heaters between 2008 and 2012, which will save 635 millions of LP gas during the same time, and 259 million litters by 2012: 0.95 MtCO2e (2008-2012); 0.39 MtCO2e (in 2012):</td>
<td>0.39</td>
</tr>
<tr>
<td>M.39</td>
<td>Reduce the emission of greenhouse gases using eco-technology financed by “green mortgages” for 800,000 new houses. 2.10 MtCO2e (2008 – 2012) and 1.20 MtCO2e/a year (in 2012):</td>
<td>1.2</td>
</tr>
<tr>
<td>M.43</td>
<td>Install 600 thousand wood-burning stoves as part of the project to replace open fires with ecological stoves:</td>
<td>1.62</td>
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# Energy

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<tr>
<td>M.36</td>
<td>Save electricity in business and municipalities amounting to 521 GWh between 2008 and 2012, and 46 GWh/a year in 2012. 0.35 MtCO2e (2008-2012); 0.03 MtCO2e/a year (in 2012):</td>
<td>0.03</td>
</tr>
<tr>
<td>M.37</td>
<td>Save 7,871 GWh of electricity between 2009 and 2012, by replacing 1,928,916 refrigerators and air-conditioning units and replacing 47.2 incandescent light bulbs for compact fluorescent light bulbs, or others that are more efficient:</td>
<td>2.68</td>
</tr>
<tr>
<td>M.44</td>
<td>Save electricity in the buildings of the APF, amounting to 375 GWh between 2008 and 2012, and 125 GWh/a year in 2012:</td>
<td>0.08</td>
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# Transport

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<tr>
<td>M.24</td>
<td>Reduce the emission of greenhouse gas by saving on the use of gasoline by introducing a fuel performance and CO2 emission standard for new light vehicles, to be published in 2010:</td>
<td>0</td>
</tr>
<tr>
<td>M.25</td>
<td>Reduce the emission of greenhouse gas by saving on the consumption of diesel and gasoline, equivalent to 16 PJ of the transport program of the National Commission for the Efficient Use of Energy (Conuee):</td>
<td>0.4</td>
</tr>
<tr>
<td>M.26</td>
<td>Reduce the emission of greenhouse gas by incorporating passenger and freight transport companies and freight service users into the “Clean Transport” program, by which the Semarnat promotes improvements to freight transport:</td>
<td>0.9</td>
</tr>
<tr>
<td>M.29</td>
<td>Reduce the emission of greenhouse gas as by scrapping 15,100 federal land transport vehicles: 1.1 MtCO2e /a year (in 2012):</td>
<td>1.1</td>
</tr>
<tr>
<td>M.32</td>
<td>Under the PROTRAM of FONADIN, increase from 36% in 2006 to 100% in 2012 the proportion of metropolitan areas and cities with more than 100 thousand habitants, with public transport modernization projects, including developing transport systems comprising quick bus services that run in dedicated lanes.</td>
<td>0.0</td>
</tr>
<tr>
<td>M.34</td>
<td>Withdraw 400 shrimp vessels from the fishing fleet, thus cutting down on overfishing and saving 77.3 million litters of diesel ever year: 0.60 MtCO2e (2009-2012); 0.22 MtCO2e (in 2012).</td>
<td>0.22</td>
</tr>
<tr>
<td>M.35</td>
<td>Support the replacement of 15,500 fishing vessel engines for new engines, resulting in annual saving of 53.3 million litters of gasoline: 0.13 MtCO2e (2009-2012); 0.05 MtCO2e (2012).</td>
<td>0.05</td>
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**Water**

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<tr>
<td>M.83</td>
<td>Treat of 60% of waste water collected between 2008 and 2012.</td>
<td>0</td>
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<tr>
<td>M.84</td>
<td>Irrigate 5,000 hectares using treated waste water between 2008 and 2012.</td>
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**Agriculture**

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<tbody>
<tr>
<td>M.58</td>
<td>Sowing grass on 188,000 hectares of the industrializable surface area of sugar cane between 2008 and 2012:</td>
<td>0.14</td>
</tr>
<tr>
<td>M.60</td>
<td>Produce bio-fertilizers for use in an area of two million hectares in 2012, saving 15% of fertilizers:</td>
<td>0.12</td>
</tr>
</tbody>
</table>
According to the SCCP, the following activities should be taken into account in order to achieve these objectives:

- **Foreign Policy.** Favoring agreements, encouraging multi-lateral financial means for the development of projects and programs.
- **Reinforcing Institutions.** Strengthening the structure of the Federal Public Administration to align substantive public policies as a function of national priorities regarding mitigation and adaptation.
- **Education, communication and participation.** Include the theme of climate change in formal education, broadening the publicizing of information on the climate and supporting the states.
- **Technological research and development.** Develop a research and innovation facility for manufacturing processes based on neutral or low-carbon technologies, in the area of the carbon cycle and risk management.
- **Climate change economy.** Introduce means to assess the involvement of carbon in the national economy, such as national carbon markets and their link with tax regulations and the trading of emissions.

### V.2 GREEN ECONOMY INITIATIVE

In view of the economic and financial crisis of 2008, which caused a major recession in many countries and, therefore, affected companies, the creation of new jobs, a shortage of goods and services, particularly regarding energy resources and food, and added to growing social inequality, the food crises, the demand for natural resources, the generation of emission and waste, and unsustainable production and consumption patterns that have characterized the technological revolution in the last 100 years, it was identified at international level that investment systems that have been used in the international economy have not met objectives concerning sustainable development.

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Therefore, the United Nations Environment Programme launched the Green Economy Initiative (GEI) in October 2008, in order to support a plan that encourages a transition towards a Green Economy.

The aim of the GEI is to help governments to concentrate their policies, investment and spending on “greening” some economy sectors by reconfiguring business and fair trade models, along with production and consumption patterns, transforming infrastructure and institutions, promoting sustainable economic growth that benefits the creation of jobs, reduces poverty and social inequality, and at the same time decreases the extraction and use of natural resources, thus reducing the generation of greenhouse gas and production of waste.

The tasks under the Green Economy initiative regarding the development of macro-economic models and the quantitative analysis that assess the impact of green investment and identifies facilitating conditions and policy options to create a transition towards a green economy, are based on the following main elements:

- **Green Economy Report.** Economic models and analyses show that investing in making the economy “green” in certain sectors may lead to an economic recovery and create future prosperity and jobs, while accomplishing social and environmental objectives.

- **The Economics of Ecosystem & Biodiversity TEEB.** Initiative to deal with the global economic benefits of biodiversity, underlining the cost of degradation of ecosystems and loss of biodiversity, and seeking to attract expert advice in the areas of science, economics and politics.

- **Green Jobs.** Towards Decent Work in a Sustainable, Low-Carbon World. A global transition to a sustainable and low-carbon economy may create a large number of green jobs in various sectors of the economy, and that may become a catalyst to development.

In addition, as a response to the GEI, the UNEP, together with other areas of the United Nations, has drafted the “Global Green New Deal” report\(^9\) that encourages governments to take the opportunity during the crisis to concentrate on introducing tax incentives as an alternative to be included in recovery policy.

The Green Economy Report examines the action that governments may take to facilitate the transition towards a Green Economy, taking into account the key tools of support policy and infrastructure that may influence investment and consumption decisions.

It also lays down parameters that allow better directing placement of private capital in low-carbon sectors that favor the efficient use of resources, and underlines the need to adapt local and international policy and regulatory frameworks, to a Green Economy.

This report\(^10\) considers the following sectors as priority for encouraging this transition:

- **Agriculture.** Sustainable agriculture may be the road to increasing the number of agricultural workers, and activities related to the supply chains and infrastructures needed to gain access to markets.

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\(^9\) Global Green New Deal (GGND). UNEP
\(^10\) Green Economy Report: A Preview. UNEP
• **Building.** The refurbishment of current buildings and building new buildings with reduced energy consumption, at low investment, represent a potential market niche for creating jobs.

• **Cities.** The urban development of cities may combine the efficiency of resources with social and economic aspects, bringing the population closer to urban activities and making the infrastructure of public services more efficient as far as energy is concerned.

• **Energy.** The use of renewable energy to meet the demand for energy will lead to health benefits, ensure the supply of energy and support economic activity.

• **Fishing.** The fishing sector is not currently being used correctly and its use has been reduced. The replenishment of fishing reserves through effective handling programs may lead to an increase in fishing around the world.

• **Forestry.** The coverage of forest has decreased due to overexploitation of soil due to agriculture and farming. A number of actions geared to protecting and preserving forestry areas are an option for creating jobs and a way of living for local communities, by providing forestry supervisory services.

• **Manufacturing.** The manufacturing sector is responsible for one third of the use of energy and for 25% of the emission of greenhouse gas around the world. It is also responsible for most of the primary extraction of resources. Opportunities are geared towards the use and efficiency of resources in various industrial sectors.

• **Tourism.** The option of investing in sustainable tourism may contribute to development of the sector and its transformation at both local and international level.

• **Transport.** Investing in green transport may help cities to reduce their environmental problems by cutting down on traffic and other associated costs, by creating jobs related to the development of public transport systems.

• **Waste.** Assessing waste and reincorporating it into the production chain, promoting its reduction, reuse and recycling, represents the opportunity for new market niches and at the same time reduces environmental and health problems caused by this trend.

• **Water.** The current availability in infrastructure of water resources is reducing the number of opportunities for social and economic development in some areas. Policy needs to be introduced to encourage adaptation to the conditions of changing supply and to affect the consumption patterns of water.

The Economics of Ecosystems and Biodiversity is the result of an analysis of the economic benefits created by biological diversity, the costs for incorrect use and loss of biodiversity, and identifies the absence of conservation measures in the face of the costs required for effective conservation.  

The various reports included in this document make a number of recommendations derived from the link between the economy and the use of ecosystems. The most important are listed below:

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• Human dependence on eco-systemic services must be better integrated with public policy. It is important to define how policy, either directly or indirectly, has an influence on the future availability and distribution of eco-systemic services.

• Local accounting bodies should introduce methods, means and standards for sustainable management and the integrated accounting of biodiversity and eco-systemic services, together with conservation groups.

• Certain principles, such as “who pollutes pays” or “the beneficiary pays” constitute a manner of reorganizing tax incentives and reforms. The purpose of positive incentives, such as payment for environmental services, tax exemptions and other tax transfers must encouraged to public and private organizations to provide eco-systemic services.

• Assessing ecosystems may help to identify financing and investment opportunities and to establish conservation priorities.

• The conservation and restoration of ecosystems should consider an option to support government objectives in the areas of food safety, urban development, purification of water, treatment of waste water, regional development, and mitigation and adaptation to the effects of climate change.

• Demonstrating the values of environmental services may help to increase awareness and commitment to sustainable management of biodiversity. Incorporating these values into economic, commercial and development policy should be routine.

Green jobs are those that reduce the environmental impact caused by companies and economic sectors, until achieving levels of sustainability. Various sectors of the international economy have begun to create green jobs, and it is assumed that this trend will increase in the next few years as a catalyst to development of local economies.

Both current green jobs and those that will be created in the future as new sustainable production and consumption patterns are implemented, must be differentiated by suitable working conditions, with suitable salaries, safe working conditions, fair labor rights and career advancement.

Green jobs must help to reduce social inequality, poverty and unfair distribution of wealth.

It will be easier to create green jobs in sectors that have a major effect on the emission of greenhouse gases and the use of natural resources in their manufacturing processes and that, at the same time, represent a major contribution to local economies, and in those that provide the basis to protect and restore biodiversity and ecosystems.

The results in this area will depend on the changes that each sector makes and the adaptation of each company to sustainable patterns, and on the available support for financing green projects.

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12 Green Jobs. Towards Decent Work in a Sustainable, Low-Carbon World. UNEP 2008
Nevertheless, by encouraging the economy to move towards sustainability, the labor market will be altered as follows:

- Creation of additional green jobs.
- Replacement of type of jobs (for example, changing from fossil fuel to renewable energy).
- Elimination of jobs (for example, due to the decrease in demand for unsustainable products).
- Transformation of jobs in working methods.

Therefore, in order to create green jobs, innovation becomes an incentive for various companies when seeking to retain current jobs and create new jobs. At the same time, professional training is a tool that may be used to improve performance level. Without qualified and informed businessmen and specialized workers, the resources and technology available may not be used or lead to environmental and economic benefits.

During this transitional stage, it should be taken into account that the change towards a green economy will benefit workers and communities. Employment policy must be established so as to identify and reduce any possible adverse effects on the workforce. Dialogue with unions is fundamental in order to design new sustainable production systems and working practices, establishing a collaborative relationship in the areas of health and occupational safety. This must be coordinated by government, companies and workers.

The road towards a green economy goes hand in hand with realizing the large number of opportunities that there are to bring about this change. Creating jobs, developing renewable energy, energy conservation practices, investment in research and development, transport infrastructure, consumption alternatives, etc., are an example of this.

Nevertheless, in order to boost this transition, a number of substantial changes are required, both locally and internationally, along with parallel structural changes to institutions.

The changes needed include defining policy in regulatory and tax areas, by coordinating measures that are complementary to one and other and that do not counteract each other.

Tax reforms play a major role in the Green Economy, as the manner of earning revenue has a direct effect on the structure of incentives aimed at business and homes, both in consumption and investment decisions. At the same time, how the government uses this perception may create support, for example, technological innovation and development, research, or to improve the infrastructure of public services.13

Complementary pricing policies may be used to improve the effectiveness of certain measures. These policies may include new types of taxes, saleable licenses or any other types of means based on markets to establish the correct incentives to reduce dependence on carbon and the ecological degradation and

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13 Driving a Green Economy through Public Finance and Fiscal Policy Reform. UNEP DTIE.
that at the same time reduces unfair subsidies that prevent the objectives of the Green Economy from being accomplished.

Other means, in addition to economic-tax means, that may bring about change to the paradigms of production and consumption patterns may be categorized as follows:

- Regulatory policy (product standards, regulations, laws)
- Voluntary tools (ISO, voluntary initiatives)
- Planning means and instruments to educate and increase awareness and publicizing information (labeling)
- Public procurement policy

V.3 FAMILY CONSUMPTION

There is no doubt that the involvement of the community in Sustainable Production and Consumption is fundamental in the actions required to improve the performance of the society regarding conservation of the environment. Society must be informed of matters such as climate change, use of resources, disposal and assessment of waste, influence of the environment on consumption that, in general, are controlled by values and trends that impose social structures.

Various day-to-day activities go hand in hand with unsustainable consumption practices, not only related to goods and services, but also natural or energy resources that in most cases are not given importance as there is no direct cost that leads to payment for these resources.

Changes may be made in the following areas at either individual or family level:

- Housing (Building). Developing and designing houses that incorporate ecological technology, make better use of natural resources and optimize the use of services.
- Transport. Transport is one of the main activities that creates atmospheric emission. Reducing the use of vehicles and encouraging non-motorized transport, and the use of public transport systems are alternatives that everyone should encourage.
- Food and Drink. This sector represents 30% of the environmental impact caused by the community. Being aware of the use of resources and materials during manufacturing, transport, consumption and disposal of associated waste, may lead to better decisions at the time of buying.
- Energy efficiency. The use of energy is synonymous with the use of resources, so steps should be taken to reduce the use of household appliances to a minimum, or to use them efficiently, and artificial sources of light.
• Urban Development. Promotion of cities in which there is a public services infrastructure geared to conservation of the environment and use of resources, although meeting the needs of the community, creating social welfare and developing more humane communities in a sustainable environment.

Each of these areas requires initiatives so that they may be developed, and action so that they may be performed.

VI. LATER ACTIVITIES

Once the priority areas on which Mexico should concentrate in order to obtain benefits (win-win) in the short and medium term have been identified, the National Strategy must be created by taking the following steps, according to the method established in the “Planning for Change” Guidelines.

5. DEFINING OBJECTIVES AND ESTABLISHING TARGETS. Clearly defined objectives established with short, medium and long-term targets, which may be verified in the future. Targets must be specific and realistic.

6. SELECTING POLICY AND INITIATIVES. These should be selected on the basis of assisting in the accomplishment of the objectives and targets established.

7. OFFICIAL APPROVAL OF THE PROGRAM. The higher the level of political approval, better its implementation will be. This should be done with a participative approach.

8. IMPLEMENTATION OF THE PROGRAM. Implementation of the program after it is approved and implementation of activities.

9. DOCUMENTING, MONITORING AND ASSESSING. The strategy may be monitored according to the correct selection of quantitative indicators in line with the targets and objectives established.

10. CONSERVING AND IMPROVING. Introducing a means to review the process from time to time so that it may be adapted and approved systematically.
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