

Ministry of Environment and Energy Costa Rica



Summary of the National Climate Change Strategy

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Summary of the National Climate Change Strategy

A. The climate change problem

The contribution of the Intergovernmental Panel for Climate Change (IPCC), created by the United Nations, has been fundamental in evaluating the climate change problem faced by the world today, as well as its main causes. In its Fourth Assessment Report (published in 2007), the IPCC summarizes its findings as follows:¹

- Global warming is unequivocal and is affecting world climate in an unprecedented way, due to rising concentrations of Greenhouse Gases (GHG), such as CO₂ (carbon dioxide), CH₄ (methane) y N₂O (nitrous oxide).
- Since the XVIII century, human activities have been likely causes of global warming, with visible effects in the atmosphere for over the last 50 years. Increases in temperature and sea levels are inevitable, even with existing GHG concentrations.
- Long term unmitigated climate change would likely exceed the adaptation capacity of natural and human systems.
- Poor countries and economically disadvantaged groups will be the most vulnerable to warming, sea level rise, precipitation changes and extreme hydrometeorological phenomena. Most socioeconomic sectors, ecosystems and human health will suffer consequences.
- Adaptation measures must be identified, prioritized and developed systematically.
- Less carbon intensive technologies are available, but better conditions are needed in order to achieve their potential commercially.
- Integrating climate change policies into national sustainable development strategies is the most effective solution.

The Report also highlights some disturbing trends in GHG emissions between 1970 and 2030. Since 1970, GHG emissions have increased by about 70 percent, whereas carbon dioxide levels in the atmosphere have grown 80 percent. Furthermore, it is projected that from 2000 to 2030, GHG emissions will rise between 45 and 110 percent with current policies. Two thirds of this growth will come from developing countries, but per capita emissions in developed countries will remain three to four times higher.

Even if mitigation policies are applied, GHG levels will continue to increase during the following decades. Depending on the future emission path of GHG, the temperature increase will be between 1.7°C y 4.4°C for average temperatures. The hot extreme would be located at 6.4°C.

The IPCC draws several stabilization paths and points out that carbon dioxide equivalent gas levels in the atmosphere should not exceed 445-490 (ppmv). This is the most benign

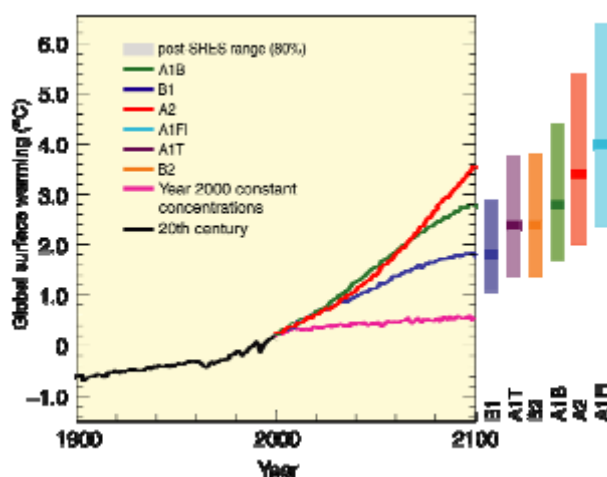
¹ Munasinghe, Mohan. "The Way Forward: A Practical Framework to Address Climate Change and Sustainable Development Challenges Together". Plenary keynote speech presented at the Opening Session of the UNEP Governing Council Meeting. Monaco, 20 February 2008.

trajectory, in which the effects of climate change are minimal but the required emissions reduction is highest. This implies that by the year 2050, GHG emissions should be reduced between 50 to 85% in comparison with the year 2000. Under this scenario, it is estimated that global temperatures will have risen between 2 and 2.4°C since the preindustrial era, while the sea level will have risen between 0.4 and 1.4 meters due to thermal expansion. The following table, published by the IPCC in its Fourth Assessment Report, summarizes the characteristics of these paths:²

Table SPM.6. Characteristics of post-TAR stabilisation scenarios and resulting long-term equilibrium global average temperature and the sea level rise component from thermal expansion only. (Table 5.1)^a

Category	CO ₂ concentration at stabilisation (2005 = 37.9 ppm) ^(b)	CO ₂ -equivalent Concentration at stabilisation including GHGs and aerosols (2005 = 37.5 ppm) ^(b)	Peaking year for CO ₂ emissions ^(a,c)	Change in global CO ₂ emissions in 2050 (% of 2000 emissions) ^(a,c)	Global average temperature increase above pre-industrial at equilibrium, using "best estimate" climate sensitivity ^(d,e)	Global average sea level rise above pre-industrial at equilibrium from thermal expansion only ^(f)	Number of assessed scenarios
	ppm	ppm	year	percent	°C	metres	
I	350 – 400	445 – 490	2000 – 2015	-85 to -50	2.0 – 2.4	0.4 – 1.4	6
II	400 – 440	490 – 535	2000 – 2020	-60 to -30	2.4 – 2.8	0.5 – 1.7	18
III	440 – 485	535 – 590	2010 – 2030	-30 to +5	2.8 – 3.2	0.6 – 1.9	21
IV	485 – 570	590 – 710	2020 – 2060	+10 to +60	3.2 – 4.0	0.6 – 2.4	118
V	570 – 660	710 – 855	2050 – 2080	+25 to +85	4.0 – 4.9	0.8 – 2.9	9
VI	660 – 790	855 – 1130	2060 – 2090	+90 to +140	4.9 – 6.1	1.0 – 3.7	5

The following graph shows the increase in global temperature for each one of the possible scenarios:



² IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Other irreversible impacts are foreseen, including the risk of extinction of 20 to 30 percent of world species, reductions or increases in precipitation of up to 40 percent, and many others.

As a result of climate change and the social polarization that comes associated with it, it is also feared that conflict, rivalry, and competition for resources may overwhelm all efforts to impose order.

The IPCC also indicates that adaptation must be a first priority for developing countries most vulnerable to climate change. Climate change is likely to have a disproportionate impact upon the poorest regions, exacerbating inequalities in access to adequate food, water, and health facilities, among others. Although the net economic effect will be negative in most developing countries, the impact will be worse; many areas are already flood and drought prone, and economic sectors are climate sensitive. Finally, developing countries have a lower capacity to adapt because of a lack of financial, institutional and technological resources, in addition to limitations on access to knowledge.

B. New solutions for an old accumulative problem

Climate change is one of the greatest challenges that humanity has faced, but appropriate action has not been taken. We also have to recognize that although the causes of climate change are country specific, their consequences are global and cumulative. Time is running out and we cannot wait any longer. No one can predict the consequences of climate change with complete certainty, but we have enough scientific evidence now.

Global human-induced climate change has been happening for many years, and an immediate international collective action will be critical in driving an effective and equitable response. In 2007, the scientific community confirmed again its grim forecast, but with more certainty and scientific evidence this time. Knowledge of the anthropogenic influence on climate change has improved greatly over the last years, which leads us to assess, with a high level of confidence that the gross medium effect of human activities since 1750 has resulted in the global warming of our planet.

Furthermore, the Stern Report (2006) contributes to the data evaluation and to the promotion of a greater understanding on the economic aspects and impacts of climate change. These reports allow us to understand that the benefits of a strong, early action clearly outweigh the great costs and risks of inaction.

Climate change is also about a complex group of interlinked catastrophes (environmental, economic, human, social, health, moral, political, ethical, equity and justice) which are also at the center of the problem, and about the relationship between developing and developed countries.

Since GHG emissions have a long lead-time effect on the climate, our actions (or inactions) during the next two decades will have a profound impact on the climate during the second half of this century and beyond. The effects of climate change are now being felt in dramatic ways, and they will worsen over time.

If we want to have different results, policies should be modified at country and global levels. We cannot expect to reverse the current trends with the same policies and mechanisms that created them in the first place. To get different results, we have to stop resorting to the same course of action. We need to devise creative and innovative ways of addressing the problem. Business as usual and the status quo are not an alternative.

The climate efforts should commit the world's major developed and developing economies to stronger actions consistent with the principle of common but differentiated responsibilities. Countries should pursue strategies according to their responsibility. However, the definition of an equitable set of responsibilities, the linkages among strategies and the development of an effective global governance system, are key parts of the puzzle yet and need to be urgently defined. We must learn how to best align our countries' priorities with global climate action.

The United Nations' global governing system and its mechanisms will be put to test in the following years to try to solve one of the greatest challenges in the history of mankind. Such local and global governing systems and mechanisms, which allowed the current climate change crisis, must be reviewed. We will not achieve different results by doing the same things and by relaying on the old way of thinking which created the current situation. An agreement will be needed among the different countries, especially those that are the major emitters.

The development of new technologies to move to a low-carbon or carbon-constrained economy and the stabilization of carbon dioxide in the atmosphere is a priority that must be integrated into the puzzle. Country strategies must agree with the new and more effective global governing system to be developed. This is another necessary step to deal with climate change.

In order to break the current stalemate, product of the abysmal differences among countries on the problem should be approached, it will be important to show leadership in building a new international climate regime with the necessary targets and time frames to safely and intelligently take us into the future.

From a developing country perspective, an adaptation policy will be crucial for dealing with the unavoidable and severe impacts of climate change. Let us remember that climate will disproportionately impact some countries, particularly developing countries with less capacity and resources to adapt, and which historically have contributed the least to climate change. Therefore, near term action is needed on both fostering emission reductions as well as strengthening resilience to the adverse effects of a changing climate.

Defining new and additional commitments and breaking the current atmosphere of mistrust and suspicion between developed and developing countries will ensure a true and global solution under the principle of precaution and equity.

After intense negotiations, in December 2007, the Bali Action Plan was adopted initiating a process to build a new post-2012 international climate regime, when the Kyoto Protocol expires.

The Plan will allow, during the XV Conference of Parties under the Convention in Copenhagen 2009, the convergence of two parallel negotiation processes. One is the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG), and the other, the Ad Hoc Working Group on Long Term Cooperative Action under the Convention (AWGLCA) which shall establish the foundations for a new international climate regime, with the participation of the United States, big absentee during the Protocol, and developing countries.

The focus of the negotiations, which must conclude by 2009, are the goals and commitments of the post-2012 climate regime. With regard to such commitments, developing countries agreed to carry out appropriate mitigation actions in the context of sustainable development, but contingent on technology transfer, financing and support from developed countries. In addition, both commitments and cooperation must be measurable, reportable and verifiable.

One of the core aspects of the Bali Action Plan was the inclusion of market incentives for Reducing Emissions by Deforestation and Degradation (REDD), as well as the conservation and sustainable management of forests for carbon fixation.

This was a Costa Rican thesis in Bali. Costa Rica is one of the only developing countries that has managed to revert a process as complex as deforestation. Hence, we were strongly interested that our early actions, put in practice since the nineties, be acknowledged and that this acknowledgement be carried out through market mechanisms.

In adaptation, countries agreed to increase the financial resources for the assessment of vulnerabilities and the identification of strategies to strengthen resilience and reduce vulnerability, as well as their integration into national and sectorial development plans. Furthermore, this agreement will allow building risk assessment and disaster reduction strategies, particularly in more vulnerable countries.

Regarding technology transfer, the decision was oriented towards the establishment of mechanisms for barrier removal, financing and other incentives to promote technology development, deployment, diffusion and transfer in developing countries.

Regarding financing, it was agreed to increase access to new and additional resources, including official and concessional funds, as well as the availability of public and private resources for investment in less carbon intensive technologies, capacity building and the establishment of national strategies on adaptation and mitigation.

In Bali it was recognized, including by the United States, that a long-term global action is urgent; this is the Plan's great achievement. Likewise, developing countries, especially large emerging economies such as India, China, Korea, Mexico and Brazil, recognized the necessity to no longer hide behind the excuse of historical responsibilities.

The Bali Action Plan also broke the old rhetoric North-South debate, which impeded a global response since the universal approval of the Convention.

Bali is the road map that keeps us temporarily from falling off the cliff, reflecting the new ethics on common good and allowing us to confront the climatic debacle. The time has come for us to act accordingly and perform as promised.

C. Climate change from the perspective of a developing country: The case of Costa Rica

The world has fallen too far behind in the fight against global warming. We cannot afford further delays. Even though the developed countries and the rapid growth economies of large developing countries have an important responsibility in addressing climate change and should act as soon as possible, this is no excuse for smaller countries.

Costa Rica has decided to act now and unilaterally, by declaring its goal to become a climate neutral country. We have designed an integrated climate change strategy to achieve climate neutrality within the economy, in such a way that this complex goal may be replicated in other countries with similar characteristics.

The first step was to put climate change at the top of the government agenda. The Administration included climate change as a priority in its National Development Plan. Both at the national and international levels, the government has announced its commitment to transform Costa Rica into a leader in the battle against climate change. Important segments of the private and academic sectors, as well as the media, have already shown enthusiastic support for this government goal. The vision of a climate neutral (C-Neutral) economy as a competitive economy is starting to be shared by our society.

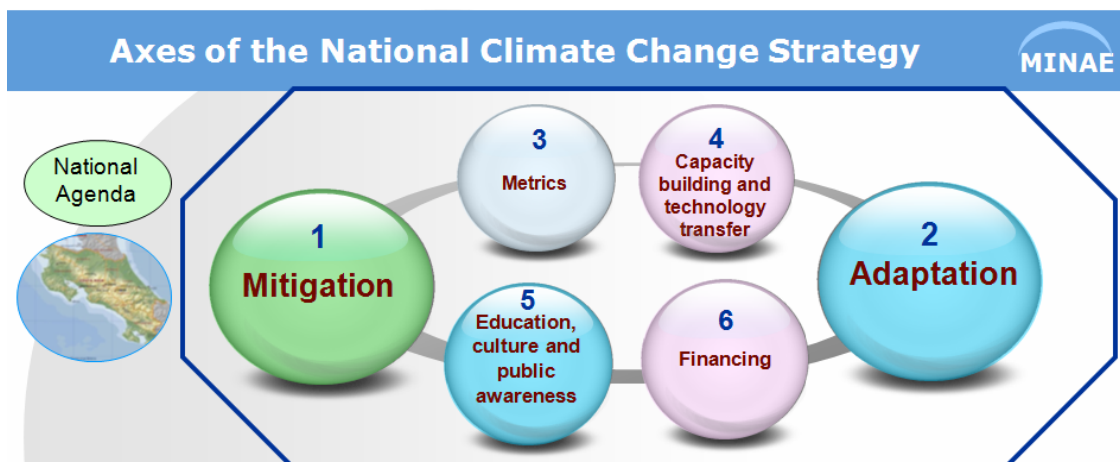
The strategy was designed after a careful analysis of economic, social, and environmental factors and their complex interactions.

The Costa Rican National Strategy on Climate Change integrated into the Sustainable Development Strategy develops two complimentary agendas: the National Agenda and the International Agenda. In order to assess the appropriate development of the strategy, both agendas must be implemented jointly, in accordance with their strategic axes, as shown below.



I. National Agenda

The climate change strategy, with a clear orientation towards action, was defined around six strategic axes or components, the main of which are Mitigation and Adaptation; the other four transversal components are: Metrics, Capacity Building and Technology Transfer, Education, culture and public awareness, and Financing. The National Agenda is represented by the following graph:



Each strategic axis has its primary objective. The objectives of the National Agenda are the following:

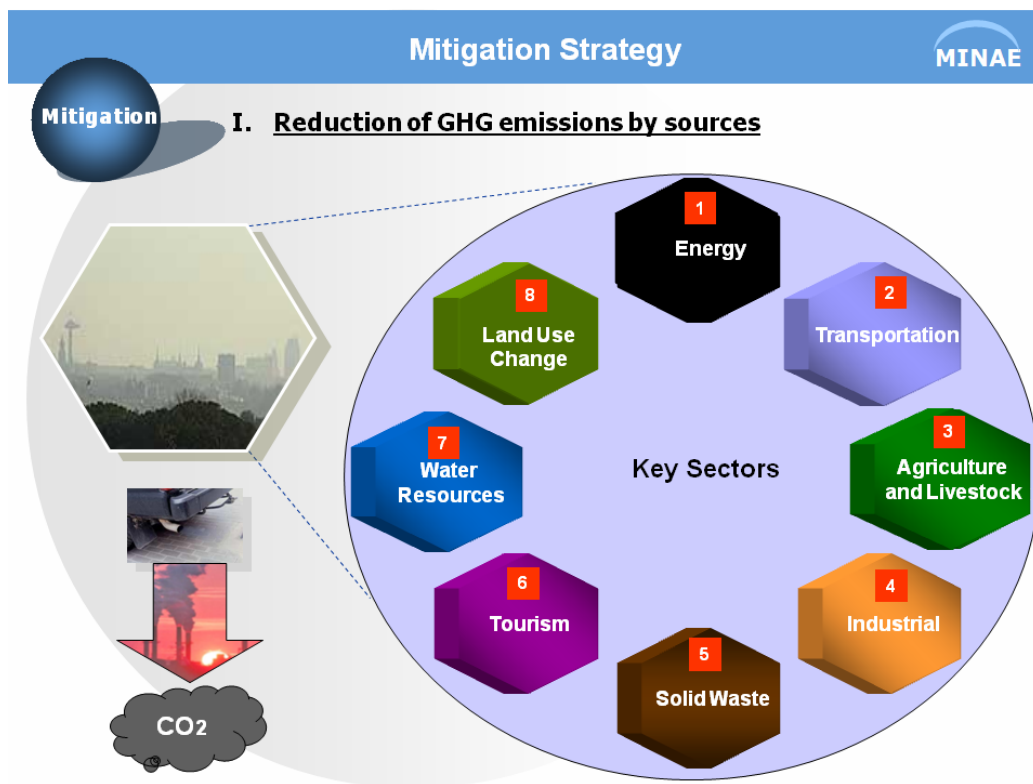


1) Mitigation

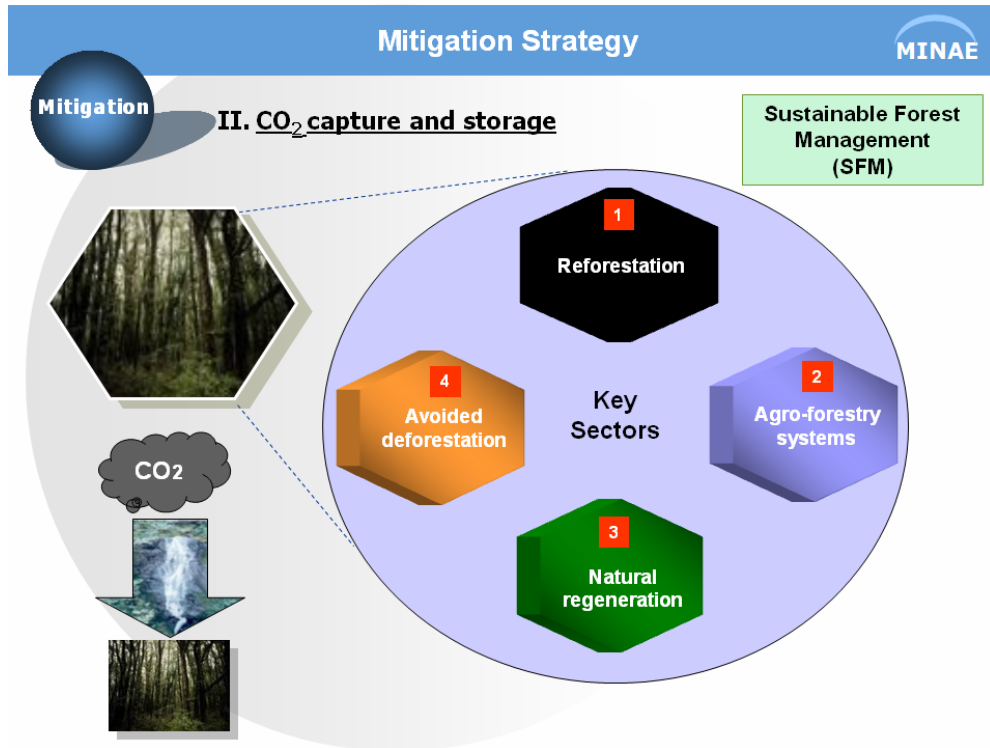
The mitigation strategic component focuses on becoming a C-Neutral country with a vision integrating the complex environmental, economic, human, social, moral, cultural, educational, and political issues, as well as national competitiveness. The promotion of C-Neutral companies, regions and communities, among other stakeholders, will provide incentives for action and an additional differentiation factor in the country's competitive strategy.

Mitigation actions have included the following three elements:

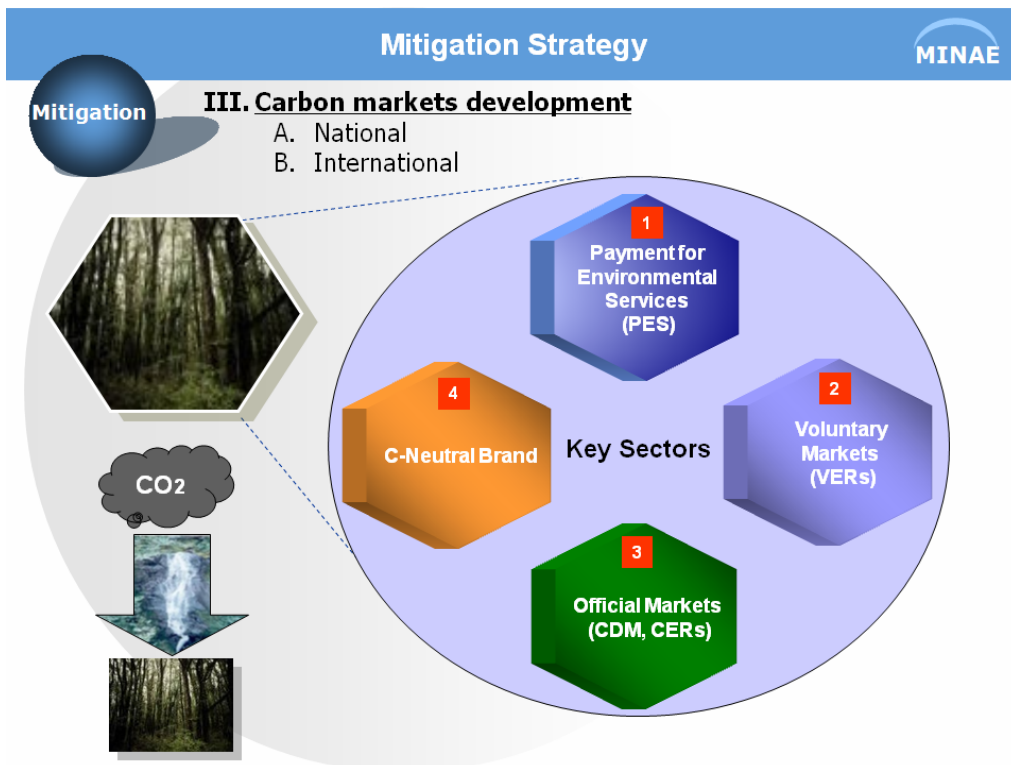
- a) Emission reductions by source, which include, among other sectors, the following: Energy, Transportation, Agriculture, Land Use (including land use change and the reduction of deforestation), Industry, Solid Waste Management and Tourism (and its associated international air travel).



- b) Carbon sinks enhancement through reforestation and natural forest regeneration, as well as avoided deforestation.



- c) Carbon markets development at the local and international levels.



The Costa Rican Climate Neutrality Strategy is defined as a balanced zero or negative national inventory of emissions by sources and absorption by sinks of all anthropogenic activities from the different sectors considered by the IPCC Guidelines on Inventories of Greenhouse Gases. This strategy seeks to have zero impact on the climate.

Besides taking our own shared climate change responsibility with the world, the strategy also seeks to develop the necessary capabilities to turn the challenging mitigation goals into opportunities of change to increase our human sustainable development potential and transform them into a reality for the well being of our people.

The avoided deforestation program (which includes our participation in the Coalition for Rainforest Nations –CFrN-) and a new tree planting campaign (“...A que sembrás un árbol”, a Spanish phrase which translates into English as: “We dare you to plant a tree”), linked to Wangari Maathai’s - UNEP campaign, are part of our mitigation strategy. For 2008, the tree planting campaign will have a target of 7 million trees. This figure represents approximately 1.5 trees per capita. If we were a country of 100 million inhabitants, we would be planting 150 million trees in 2008.



Costa Rica’s learning experience in reforestation will be strengthened through this new campaign. In 1986, Costa Rica had a forest cover of 21 % of its territory. Through a system of various mechanisms, including the payment of environmental services for the protection of forests and the enhancement of forest cover recovery, the country managed to increase its current forest cover to 51 %. The tree planting and forest protection efforts will continue to be focused on high quality environmental services (including, among other elements,

biodiversity conservation, water resource conservation and protection, soil protection, local community development and scenic beauty, in addition to carbon fixation).

On the other hand, at the Conference of Parties 13 and the Meeting of Parties 3 (COP13/MOP3) in Bali (2007), Costa Rica insisted, along with Papua New Guinea and various other African and Asian countries, on the importance of the subject of forest conservation in the future regime of compensation for emissions through a reduction in deforestation, following the bases of the United Nations Framework Convention on Climate Change (UNFCCC). The only way to guarantee the reduction in permanent and long-range emissions is through the conservation of areas with forest cover.

Link between the climate change strategy and the economic competitiveness strategy in the new emerging context, in the Mitigation axis

The relationship between climate change and the country's competitive strategy is an important part of our design. Climate change, along with its associated degradation of the environment, energy, health and food security, will have a profound effect on sustainable economic growth.

The evolving national and international business context will create conditions where the value of companies, as well as their profitability and growth, will be associated, among other factors, with climate change risks and opportunities.

a) Risks

It is now accepted by the international business community, as has been recognized by the companies that make up the Carbon Disclosure Project, that the economic, financial and competitive climate change risks of companies are major³:

- Competitive risks, due to future consumers' shift in the demand of products and services, from high intensity carbon to low carbon or carbon neutral services and products. The last set of products and services will eventually create a consumer preference. Carbon and climate differentiation will be an important quality differentiator. Clean products, services and processes will provide in the future a significant competitive advantage.
- Reputation risks, due to consumers' perceived inaction from the part of the companies.
- Regulatory risks, due to exposure to potential local and international regulations regarding GHG delimitation and reduction.
- Economic and financial risks, due to impact on assets and infrastructure caused by extreme climate events (geographic vulnerability, among others).

³ Source: Carbon Disclosure Project (www.cdproject.net)

b) Opportunities

Climate change also has major opportunities associated with innovation, consumers' perceptions and preferences, investors' preferences and rapid technological change in existing sectors of the economy, as well as the development of new sectors related to climate change issues.

Climate change will have a deep impact on most segments of the economy and society in general. The way a nation and its companies respond to climate change, will determine their future economic, financial and human sustainable development, in addition to their environmental and social well being. Future human sustainable development will depend on how we respond to climate change.

Regarding the economic and business element of the strategy, it is a consumer-driven competitive strategy based on future consumers' perceptions and preferences, and on the evolution of the top-of-mind growing concerns on climate change and its consequences.

In order to take advantage of the opportunities and face the risks, the mitigation axis has been thus linked with the country's competitive strategy and the companies that operate within it. The central objective of a competitive strategy is the sustained creation of value for target customers in the market or segment of interest, which proves to be superior to the value offered by the competition.

Trends indicate that in the future, many consumers will prefer products and services that have a reduced carbon footprint and preferably zero impact on the climate (C-neutral).

In addition to the quality characteristics offered by a product or service, "climate quality" will be added as a key factor which will have an impact on consumer's preferences. "Climate quality" will become an important differentiator in the marketplace.

In order to establish a competitive strategy, the factors that constitute it must be well understood:

- the factors that differentiate the company and its competition, in those elements that target customers value (e.g. "climate quality")
- the factors determining the established cost between the company and its competition

C-Neutral Competitive Strategy

ONCE THE TARGET MARKET HAS BEEN DEFINED, COMPANIES MUST:

- ❑ **Differentiate products and services by adding value with regard to their carbon footprint.**

“Climate quality” (zero impact)

- ❑ **Establish an appropriate (competitive) cost establishment with regard to its carbon footprint.**

Cost structure

The following are some examples of improvements in competitiveness through differentiation:

Examples of improvement of competitiveness through C-Neutral Differentiation



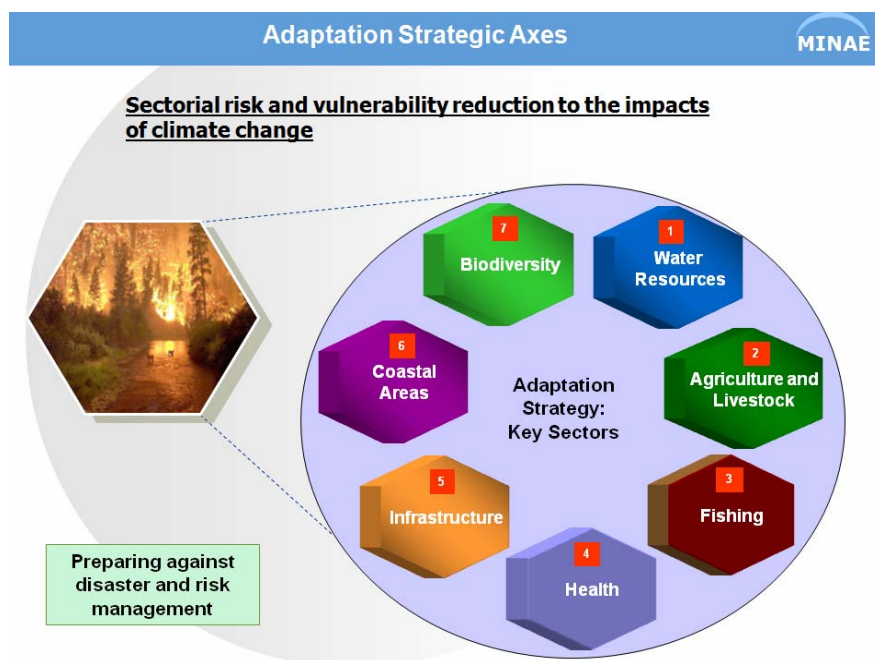
- ❖ **Tourism:** “C-Neutral trips to Costa Rica”
 - To promote emission compensation activities through a **clean trip** initiative.
- ❖ **Production of goods and services:** “Made C-Neutral in Costa Rica”
 - To promote emission reduction and emission reduction in processes, goods and services activities for exportation.
 - To attract **compensated investments** through a policy of emission compensations.
- ❖ **Energy:** “C-Neutral Electricity in Costa Rica”
- ❖ **Emission compensation** for companies outside Costa Rica: “Made C-Neutral in Costa Rica” (**“C-Neutral” distinguishment to foreign companies with production outside Costa Rica**):
 - To promote compensation activities through a clean vehicle (“compensated vehicle”) initiative. An example is the Toyota Prius: 15,000 km/year, 4 ton CO₂/year, 10 year life span.
- ❖ **C-Neutral Banking**
- ❖ **C-Neutral University**
- ❖ **C-Neutral Government**

2) Adaptation

Adaptation seeks to reduce the vulnerability of economic growth, social development, and ecosystems to the threats of climate change.

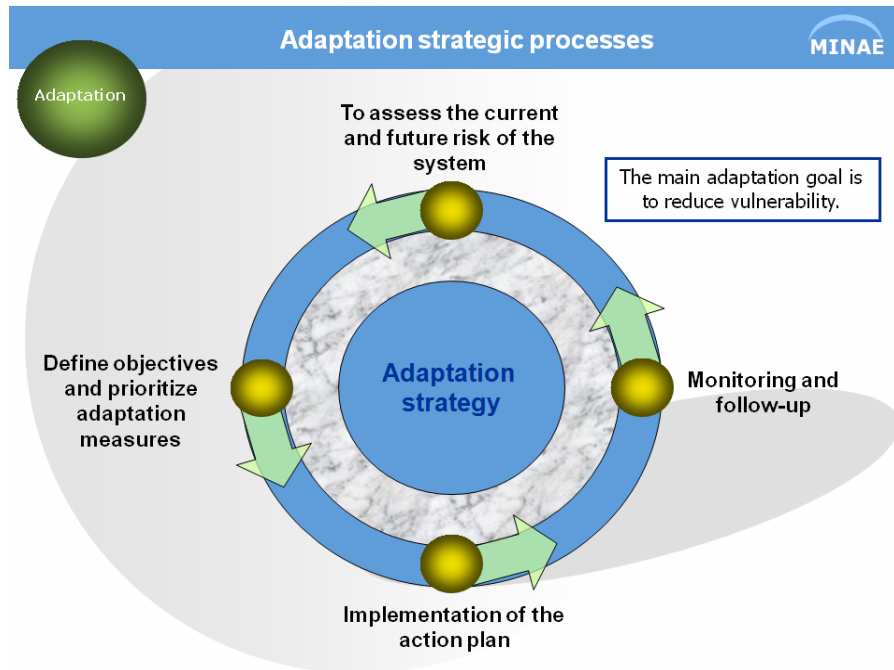
The objective is to identify the economic, social and environmental risks of climate change by geographic zone and sector (energy, transportation, etc.). Based on this information, the adaptation measures can be prioritized and an action plan developed to reduce the effects of climate change. These include research and monitoring, early warning systems, strengthening of capacity to improve in an integrated way the country's economic, social, environmental and biophysical capacity to adapt. A strengthening of the national adaptation capacity is crucial to reduce impacts and vulnerability.

Water resources, health, agriculture and livestock, infrastructure, coastal areas, fishing, land and marine biodiversity and ecosystems will be, among others, key components of the adaptation strategy, as well as disaster preparedness and risk management, as shown below:

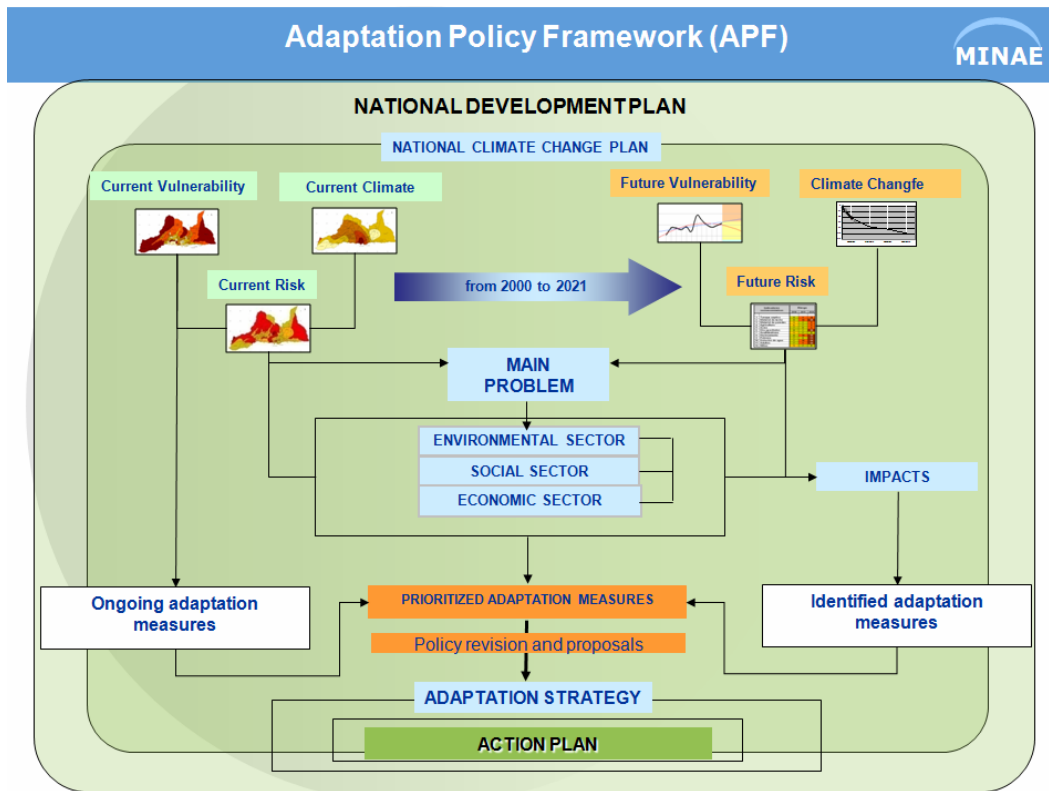


Studies on adaptation are related to a monitoring and follow up process, allowing the identification, definition and prioritization of adaptation options to judge if activities proposed in the Action Plan have permitted a better protection of the various sectors, regions and communities against the devastating effects of extreme events and climate change in general.

Risk management and disaster preparedness need to be reviewed to effectively confront the increasing climate crisis and extreme hydrometeorological events that create devastation.



A specific example is the evaluation case of the water resources sector in the northwest region of the Great Metropolitan Area in Costa Rica, where a study was performed to analyze the adaptation of the water resources against climate change, under the following Adaptation Policy Framework:



3) **Metrics**

All the components of the strategy need to develop a metrics system that is accurate, reliable and verifiable, with built-in mechanisms for monitoring. Any plan requires a good measuring system (“If you cannot measure it, you cannot manage it”).

4) **Capacity building and technology transfer**

In order to become a nation capable of implementing an integral climate change strategy, it is necessary that we build society-wide capabilities that respond to climate change, that measure and mitigate its causes in order that we can communicate how to adapt to its consequences at all levels of society.

5) **Education, culture and public awareness**

With this strategic component, the country seeks to involve, engage and commit its population to fight climate change, and thus build a social system of decision making for the implementation of its climate change strategy. Individual habits, consumer preferences, and patterns of consumption must also be made compatible with climate change imperatives. Responsible and sustainable consumption is a key point of the strategy.

We want an informed, aware, and knowledgeable population, thus enabled to have an active and more effective participation with debating skills in climate change issues, and a better capacity to influence decision makers to take the necessary actions that will finally make the difference.

6) **Financing**

The objective of this axis is to finance the strategy through two main focal points:

- Secure resources that will allow to finance the Strategy.
- Guarantee the effective and efficient use of these resources.

Costa Rica has a carbon tax (3.5% of the price of oil derivatives) with the aforementioned objectives and has consolidated this mechanism in an efficient and transparent way. This strategy will be enhanced with access to international carbon markets, (both voluntary and official) while developing a voluntary national carbon market, which will in itself contribute to the climate neutrality goal.

II. International Agenda

The climate change strategy on the International Agenda was defined also around six strategic components or axes, the key of which are the two following: Exert international influence and Attract foreign financial resources. The other four components are transversal: Leadership, Legitimacy, Presence in multilateral and binational forums, and International capacity building. Graphically, the International Agenda of the National Climate Change Strategy can be better depicted below:



The following are the main objectives of the axes:



1) Exert international influence

Climate change is a challenge that must be faced with a global response. A ton of Greenhouse Gases (GHG) emitted anywhere in the world will have an impact in Costa Rica as if they were emitted in the country. Our internal efforts are not therefore sufficient to reduce the devastating and critical consequences in our different sectors (water resources, agriculture, health, etc.), regions and communities.

Given the asymmetry in the world, a more flexible action framework is required in order to adjust future agreements to the diverse national circumstances. This will allow for a global and common action according to the principle of “common but differentiated responsibilities”.

It is our responsibility to contribute further in all dialogues and within negotiations, for example, in the processes and negotiations that will eventually lead to a post-2012 international climate regime. Our strategy answers to an integrated view of climate change and also endeavors to be replicable in other countries with similar national circumstances. It is a joint effort by the different sectors of society, and seeks to act under the principles of equality, urgency, transparency and cost-effectiveness.

International influence has been successful because the country has won leadership and global presence in the topic of climate change through a series of proposals. For example, during the 10th Special Session of the UNEP Governing Council / Global Ministerial Environment Forum, which took place in Monaco from 20 to 22 February 2008, the establishment of the Climate Neutral Network⁴ (CN Net) was announced. This was a Costa Rican proposal. The initiative is to influence internationally with an exchange of ideas, successful experiences, best practices in reducing GHG emissions, and actions towards a zero emissions society. The aim is a truly global information exchange network open to all sectors of society. The leadership exerted by our country has enabled other countries, cities, regions and companies to join the initiative, encouraging the transition to a reduced-carbon world.

The pioneering countries to have joined the network so far are: Costa Rica, Iceland, Norway and New Zealand. Four cities also announced their joining to the CN Net. These are Arendal, Norway; Rizhao, China; Vancouver, Canada and Växjö, Sweden. Additionally, five companies also joined the Network: Co-Operative Financial Services, UK; Interface Inc, United States; Natura, Brazil; Nedbank, South Africa and Senoko Power, Singapore.

2) Attract foreign financial resources

In order to implement the strategy, an access to new and additional financial resources is required, including official funds, concessions towards developing countries, and carbon markets. Appropriate financial instruments and carbon markets provide effective incentives for developing countries.

We visualize a more flexible future climatic regime, oriented towards expanding and joining the different financial mechanisms and carbon markets, in order to guarantee a more effective application in terms of cost and necessary resource deployment, and to thereby offer incentives to developing countries. Furthermore, carbon markets are an opportunity to establish links between the climate change and the competitiveness of national strategies. Products and services with a low carbon footprint, and eventually carbon free, will be competitive in the different markets because of the cost reduction and the differentiation in function of the carbon footprint (climate quality).

The initiative has international support. The Spanish Cooperation Agency donated 160 thousand euro to MINAE to finance the National Strategy on Climate Change. There exist,

⁴ www.climateneutral.unep.org

furthermore, several opportunities of obtaining support to elaborate the National Development Plan.

3) Leadership

Costa Rica, through the framework of the presidential initiative “Peace with Nature” has, unilaterally and voluntarily, taken the decision to implement its national strategy on climate change. The objective is to promote sustainable development in agreement with our responsibility to induce collective actions in the international arena, and to procure that this initiative may be replicated in other countries with similar national circumstances.

Costa Rica, in accordance with this strategic axis, has positioned itself as a leading member of the United Nations Environment Programme (UNEP) which, through its forum, allows and encourages the international community to discuss and act on the leading and emerging environmental policy issues. The Minister of Environment and Energy, President of the Governing Council during the 19th Session of the UNEP Governing Council / Global Ministerial Environment Forum, announces Costa Rica’s national initiative to achieve carbon neutrality, received with much enthusiasm by the international community.

During the Conference of Parties 13 and the Meeting of Parties 3 (COP13/MOP3) in Bali (2007), the UNEP’s Secretary General invited to a press conference the Ministers of Environment of New Zealand, Norway and Costa Rica, to announce their commitment with striving for carbon neutrality. This activity was of great international importance.

4) Legitimacy

Costa Rica is implementing a climate change strategy consistent with its local and global responsibility. This is an initiative that seeks to respond to global concerns, taking into account national needs, with broad participation of different stakeholders and sectors, allowing to generate credibility and trust towards the emission reduction by sources and absorption by sinks, supported by a legal institutional framework, and under a precise, reliable, and verifiable metrics system.

This means that the Government will implement the necessary decrees, laws, incentives and budget to make all environmental protection actions in the country, reliable and verifiable by any international agency.

5) Presence in multilateral and bilateral forums

Presence in these forums is essential to have an influence at an international level and to attract financial resources for a full implementation of our national climate change strategy, under a comprehensive climate change outlook.

MINAE has built an inter-institutional and inter-sectorial working group, which participates actively in events held by State institutions, academies, companies, and associations, and through which the National Strategy on Climate Change has been promoted, in order to

enhance public awareness and seek a good practices trade. This has allowed to open a dialogue with the interested parties, and to consider popular uncertainties and suggestions.

We are aware of the importance that the National Strategy on Climate Change has on society; thus, it is convenient to maximize our efforts to obtain and maintain presence in both national and international forums. We have put to good use our presence in international forums, announcing our goal to become climate neutral by the 200th anniversary of our independence. In other words, we have projected its disclosure both inside the country and abroad.

6) International capacity building

The development of a multidisciplinary team with international negotiation skills is a key part of the implementation of the national strategy on climate change. Such a team must support the building of international negotiation capacities both in carbon markets and to enhance our participation in other activities that may allow us to develop a competitive stance in emissions reduction and offer services with high added value. That is, industries and all commercial activities should use carbon neutrality as a business tool, improving competitiveness, profitability, management, and customer service quality.

The National Forestry Financing Fund (FONAFIFO), the Costa Rican Office on Joint Implementation (OCIC) and the National Strategy on Climate Change (ENCC) will make up a virtual on-line community to offer maximum visibility to the Clean Development Mechanism (CDM) projects, carbon markets and emission compensation, project profile presentation, web sites, and commercial opportunities.

This virtual community will receive, through electronic bulletins, real-time business opportunities as well as information on other commercial novelties and new technologies applicable on carbon neutrality, both locally and internationally. This will allow its members to obtain opportunity alerts on an ongoing and timely basis.

D. Further reflections: Merit as a fund-attracting mechanism

The target of carbon neutrality will not be reached without a combination of national efforts and international support. The Bali agreement recognizes the need for this combination by stipulating that developing countries would undertake “*nationally appropriate mitigation actions in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner*”.

With regard to mitigation actions that would move the country in the direction of neutrality and based on the already completed emissions inventory, Costa Rica will perform an analysis of the sectors in which we can competitively take reduction measures, (e.g. energy efficiency, transport, waste management, agroindustry, and reduction of deforestation) as well as the sequestration of carbon via the planting of trees. The potential volume of reductions and its estimated associated cost will be analyzed with the purpose of defining a trans-sectorial strategy that will allow us to maximize the impact and minimize the cost. In a collaborative effort among the respective Ministries, Costa Rica will launch policies and

measures that provide incentives for the process of emission reductions in each identified sector.

These national policies and measures are necessary but not sufficient to achieve the intended emission reductions. While after an arduous process of awareness raising and broad consultation, both public and private sectors are willing to invest, it is also evident that the totality of the cost cannot be covered domestically. It will be critical to have access to international funds to cover the differential between national investment and total cost.

In this context Costa Rica supports the creation of an International Fund on Climate Change with the purpose of supporting mitigation efforts in developing countries. International negotiations have already mobilized initial resources of this nature.

Costa Rica notes with concern that these resources are being earmarked for mitigation in the high emitting emergent countries with the highest potential for volume of reductions. However, it is entirely possible that, with the proper international financial support, smaller countries may be able to achieve reductions more quickly than the large countries, with the associated benefits that are afforded by early reductions. Furthermore, leaving small and medium sized economies out of the global transformation process toward low carbon development paths condemns these countries to the continued use of soon-to-be obsolete technologies, perpetuating already unacceptable poverty levels.

Costa Rica calls for the international funds that are mobilized in support of mitigation in developing countries to operate according to each country's own merits, privileging those that have launched and implemented a climate friendly regulatory framework. It is evident that disbursements of these resources cannot be made based on the mere existence of the policies, but rather will have to be made once the reductions have been nationally measured and reported, and internationally verified.

It is in this manner that Costa Rica interprets the Bali agreement, and declares itself ready to face up to its common but differentiated responsibility with the strategy described in this document.

E. Conclusion

Global greenhouse gas concentrations are projected to reach levels which could have serious negative effects on the economy, social sectors, ecosystems, natural environment, global security, food security, public health, and society in general. To avoid this and to meet the ultimate objective of the UNFCCC, which is to stabilize the concentration of GHG at a level that prevents dangerous anthropogenic interferences on the climate, major cuts in global emissions are required. All countries need to develop in a way consistent with a low-carbon, climate friendly society.

Many of our choices today and in the near future will determine our emissions' pathways for decades to come. Urgent action is therefore required to achieve the magnitude of cuts required. Delaying our action today will increase the cost and burden of climate change impact, as evidenced through the Stern Report. Time is running out and we can not further delay serious action. Climate change action is not only the responsibility of major

countries, it is the responsibility of all countries under the principle of “common but differentiated responsibilities.”

A combination of short, mid, and long-term actions will be required, including technological innovation, policy implementation, and institutional and behavioral change, as well as a change in consumption and production patterns, among others. Measures must not only be local; a global perspective is required. This is why the National Strategy on Climate Change must include two parallel agendas, one National and the other, International.

Actions should not be treated separately and must be viewed in an integrated way, consistent with the national development of priorities and with existing policies to address other social goals such as poverty and hunger eradication, food security, access to clean water, healthy environment, safe shelter and housing, sustainable development, reduction of flooding and hurricane risks, reduction of diseases, energy security, competitiveness, land use change and others.

Efforts to mitigate and adapt to climate change must be held in context with the need to reduce poverty and reach a sustainable development. A strategy to combat poverty cannot be built without a clear strategy on climate change, as the poorest sectors are precisely the ones which will suffer the most from the impacts of global warming.

Even though adaptation to climate change is an expensive task, requiring great efforts and investment, it is necessary to confront the devastating effects of global warming on human activities and the ecosystems that sustain life on our planet. Costa Rica, acting within the framework of the National Climate Change Strategy, recognizes adaptation activities as a priority, which must necessarily go hand in hand with mitigation efforts as the only way to achieve our goal of fighting against climate change.

An ineffective response to climate change will undermine our efforts on both flanks. We are preparing to travel the route that will turn us into a carbon neutral country on the day we celebrate the bicentennial of our independence (2021). We are a country capable of showing the world that it is not only possible for economic growth to be hand in hand with the environment, but that the route to reach development is precisely that which uses its natural resources with wisdom. We have developed a strong international standing, through leadership and by exerting international influence, as a country prepared to combat the adverse effects of climate change and seek their mitigation.

But win-win options necessarily require international collaboration. Carbon markets and appropriate financial instruments provide effective incentives to developing countries, and trade regimes could encourage technologies, products and services that will enhance sustainable development while reducing carbon emissions. In turn, the addition of “climate quality” to goods and services as a differentiating factor in a competitive strategy will be another key issue to assist us on our road towards climate neutrality.

Although much of the (still insufficient) international aid is being devoted to the support of large emerging countries, it should be emphasized that, with the help of adequate financial

and technological support, smaller economies may attach the problem of climate change more quickly. Small and medium sized economies cannot be excluded from the global effort; financial channels should act as well in accordance with each country's merits.

To achieve the goal of climate neutrality, Costa Rica is implementing a national climate change strategy which is consistent with its local and global responsibilities. "Fewer emissions and more sinks" is an appropriate strategy. Since climate change is already a crude reality and will unfortunately continue deteriorating until a global agreement stabilizes GHG in the atmosphere, adaptation measures to reduce the vulnerability of systems, regions, communities, and ecosystems should have the highest priority.