

THE GREEN ROUTE

ESTRATEGY 2015 - 2020



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CANAL DE PANAMÁ



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INTRODUCTION

The Panama Canal Authority (ACP for its Spanish acronyms) has outlined this strategy with the aim of guiding efforts for environmental management and energy efficiency in its operations as well as the sustainable development of the Panama Canal Watershed and areas of responsibility. It is expected that this document be reviewed and updated every year, taking into consideration institutional requirements, best practices in the industry, social and environmental management, issues of national and international interest and the contribution to face climate change.

The Panama Canal, since its conception, has aimed to close the gap in the maritime industry, offering a route with a shorter navigation time, resulting in cost reductions, supplies, fuel and consequently, in less carbon dioxide (CO₂) emissions from ships that use this route. For example, routes from the East Coast of the United States to Asia, the West Coast of South America to the East Coast of the United States and Europe; and the West Coast of North America to Africa and Europe have resulted in a reduction of approximately 650 million tons of carbon dioxide in the last 100 years using the Canal Route.

From this perspective, the Panama Canal has been a Green Route since its opening in 1914. Moreover, ACP has incorporated as an essential element of its vision and mission, the integrated management of the Panama Canal Watershed (PCW), as this “territory” is managed in a participatory manner, to conserve and protect hydric resources and improve environmental quality of the area and therefore of the people who lived there. Integrated management of the PCW is of paramount importance as this is the source of potable for almost 50% of the country’s population, also it makes possible the operation of the Panama Canal.

Approximately 183,000 people live in the PCW (according to 2010 National Census) in more than 450 rural, urban and peri-urban settlements; also commercial, industrial, agricultural and recreational activities take place in the area. This potential physical distribution require an integrated management with emphasis in a social and environmental approach to consider sustainable development as the best method to provide a healthy environment, conserve the natural resources and promote the economic development and welfare of all the residents of the area. In this respect, the process of consultation and participation is a key element.

ACP has operational areas where all activities associated with the operation of the Canal are developed. In these areas where logistics, maintenance and administrative facilities of the institution are located is applied an environmental management system targeted to prevent, reduce and control adverse environmental impacts; in addition to this task, units are responsible to identify more efficient and environmentally appropriate ways to perform the activities required for operation of the Canal.

BACKGROUND

The Constitution of Panama in Title XIV, Article 316, states that ACP has the responsibility for the management, maintenance, use and conservation of water resources in the Panama Canal Watershed, encompassing the waters from lakes system and their tributary streams, in coordination with state agencies designated by law.

The Organic Law of ACP in its Chapter VII, Environment and Canal Watershed, assigns to ACP the authority to adopt regulations that consider the protection of water resources in the watershed and the protection, preservation, maintenance and improvement of the environment, in the areas of compatibility with canal operations and its system of lakes, in coordination with competent authorities.

In compliance with these mandates, the ACP has made progress in regulating aspects related to water and environmental resources protection, considering the participation and coordination with stakeholders; and the use of best practices that contribute to continuous improvement of its operations. In this regard, the following regulations and directives provide guidelines for environmental management:

Agreement No. 116, 2006. Regulation of Environment, Watershed and Inter-Institutional Commission of the Watershed.

Directive AD-2006-02 by which establishes the ACP Energy Saving Program.

Directive AD-2012-05 which mandates the use of green sustainable design specifications for renovation and new constructions in ACP.

Directive ACP-AD-2009-06 which establishes the Interdepartmental Green Route Committee (CIRV - for its Spanish acronym) to coordinate the activities of the Panama Canal Authority in order to maintain the Panama Canal as the maritime green route.

Directive ACP-AD-2012-02 for Corporate and Social

Also, programs and strategies that guide actions planned to achieve goals and objectives that position the ACP as a leader in energy saving and efficiency initiatives, water conservation and environmental management have been developed; however, some of these programs have not been continued in an integrated way; therefore its monitoring, scope and/or goals are being evaluated. Among the plans that are being reviewed are: Air Emissions Control Program (PCEA - for its Spanish acronym) and the Energy Management Plan for decade AF 2011 to AF 2020.



OBJETIVE

Reaffirm by 2020 the Panama Canal as the Green Route in services for the maritime industry and the sustainable development of the Panama Canal Watershed, promoting and establishing best practices in social and environmental management and maritime industry quality, to conserve hydric resources, increase operational efficiency and support global efforts to face climate change.

The specific objectives to achieve are:

Reduce emissions of greenhouse gases (GHG) through the development of more efficient generation projects and the execution of energy efficiency measures that allows lower emissions per unit of production.

Enhance environmental management in the operations of the Panama Canal through the identification, evaluation, implementation and monitoring of best practices to avoid and reduce environmental impacts.

Comply with the social and environmental commitment for sustainable management of the Canal Watershed through the integrated management of natural resources that allows to conserve and protect hydric resources.

Contribute to global efforts to reduce emissions of greenhouse gases in the maritime industry through recognition and promotion of best practices executed by its clients.

LINES OF ACTION

As an institutional policy tool that guides ACP environmental objectives, the strategy of the Green Route bases its lines of action on identification, evaluation and continuous analysis of best practices implemented in each area and the results achieved. In this sense, the strategy considers institutional, social, environmental and cost-benefit elements in the short, medium and long term.

The strategic lines identified are:

1. Low Carbon Operation: Involves optimization of daily Panama Canal working operations, aimed to reduce emissions in a sustained and systematic way, and transform the Canal into a low carbon entity.

This operation involves a progressive plan for renewable energy generation, energy efficiency actions and measures for sustainable construction in new buildings and renovations, considering the carbon footprint of Canal operations. Carbon Footprint will be used as a reference element to measure results and request process certification.

2. Socio Environmental Management: Development of initiatives in the Watershed and Canal operational areas to ensure continuous improvement of the territory environmental conditions, social and environmental development and participation of stakeholders.

This component includes evaluation and management initiatives of all activities taking place in the watershed and operational areas, promotion of projects for hydric resources management that contribute to carbon fixation and represent economical alternatives for economic and sustainable development of the area and its inhabitants; and mechanisms of consultation and participation that allow planning and management actions required in different areas.





REQUIREMENTS

3. Emissions reduction and environmental management of Canal clients: Consist in the development and evaluation of alternatives to recognize environmental management and emissions reduction actions of Canal clients and the promotion of market mechanisms that encourage compensation and/or emissions reduction of its operations through the implementation of best practices.



The execution of this strategy requires a close consultation and participation process with the stakeholders, considering the inhabitants of the PCW, economic and institutional actors as well as the establishment of early warning and monitoring systems to assess conditions of the resources and processes, and the outcome of the implemented actions.

The review, adaptation and/or periodic development of policy, procedures and guidelines to encourage and promote initiatives under the action lines of the strategy to facilitate their execution in operational areas is necessary. In other areas of responsibility of the ACP, as the PCW, it is applied the national legal framework in aspects related to the natural resources management and environmental policies, so it will be necessary to coordinate and participate in policy and national strategies development processes to encourage environmental management, incentives promotion and low-carbon operation nationwide. Going forward, and according to the strategy of climate change and low carbon development established by the country, ACP should establish its reduction targets.

Other important element to facilitate the strategy execution is fundraising. The strategy execution and projects implementation should include operating and investment funds of the Canal Authority, funds from different institutions and organizations with responsibility and initiatives inside the PCW, private funds for the execution of mitigation and adaptation actions, institutional funds for monitoring and following-up; and management of regional and global funds to support environmental and emissions management that contribute to face climate change.

Additionally, specific aspects to be further developed with the participation of stakeholders directly involved in this process to have the necessary and sufficient elements to execute the strategy of the Green Route, and encouraging fundraising are being detailed below:

A.

Identification of alternatives for energy efficiency

1. Renewable energy, energy reduction, technological improvement, replacing of fossil fuels and conventional energy sources.

Identify feasible alternatives in short, medium and long term to improve energy efficiency and/or use of energy production forms with renewable or clean energy.

Evaluate project execution period and progressiveness in the implementation of alternatives.

Calculate IRR and B/C to support execution by ACP. Develop BAUs (Business as Usual) scenarios and projects to evaluate the mitigation potential and application for other funds.

B.

Identification of models and alternatives for socio-environmental management

1. Evaluate carbon fixation potential (REDD) and feasibility of the project.

Identify areas for project development: evaluate feasibility in specific areas.

2. Identify water resource management alternatives, involve stakeholders and define strategic alliances.

Evaluate management options considering the characteristics of different areas, such as protection of hydric catchment areas and water courses, restoration of degraded areas, actions to preserve the water quality, implementation of best practices in production activities, community involvement, massive environmental communication campaigns , among others

Each options must be validated with stakeholders including the scope of the activities and the time to reach the goals.

Act in partnership with institutions, organizations and sectors that affect or will be affected positively and negatively with the proposed measures.

3. Evaluate expanding the payment for environmental services program in the Canal Watershed

Identify different forms, rates and execution periods.

Investment analysis (costs and benefits)

Adjust records, monitoring and management systems.

Identify funding sources, in coordination with other institution as the Ministry of Environment (MiAmbiente).

C.

Recognition options - Shipping Companies and clients

1. List of positive actions

Consultancy services to evaluate a potential incentive scheme to recognize Canal clients' with high environmental performance.

Evaluation of alternatives.

Evaluation and monitoring systems for the incentive scheme.

Coordination with MiAmbiente to develop voluntary offset markets for potential clients.

D.

Monitoring and Alert System

1. Energy efficiency

Development of monitoring protocols for reporting emissions reductions by the projects implemented. The protocols must consider international guidelines and/or required by applicable verification standards as well as the requirements of the funds who support has been obtained.

2. Socio-environmental management

Integrated monitoring system to following-up environmental conditions and effectiveness of the initiatives executed (vegetation cover, hydric resources, land use, water quality, among others).

Monitoring and verification of actions framed in socio-environmental management, including principles, criteria and social indicators (safeguards) that must be reported in those projects subject to certification and/or national report.

3. Recognition of customers

Development of procedures and/or protocols for recognizing environmental contribution of clients that meet the minimum requirements to be verified.

