CIP Inter-American Committee on Ports

Guide for Environmental Certification and for the Preparation of Sustainability Reports for Ports of the Americas

AGENDA

Inter-American Committee on Ports

1. Critical Elements of Environmental Management of Ports

2. Catalogue of Green Port Management Best Practices

3. Certification of SGA 14.001, Ecoports or other environmental certifications

4. Commercial, Social and Environmental Benefits and Advantages of Being a Green or Ecological Port

AGENDA

Inter-American Committee on Ports

5. Successful Experiences of Latin American Ports with ISO 14001 Environmental Management Systems, Ecoports Certification and other Internationally Recognized Environmental Certifications

6. Global Reporting Initiative (GRI) Sustainability Reporting Guidelines

7. Commercial, Social and Environmental Benefits and Advantages to a Port in Sustainability Reporting

8. Successful Experiences of Sustainability Reporting in Latin American Ports

9. Useful references

CRITICAL ELEMENTS OF ENVIRONMENTAL MANAGEMENT OF PORTS

CRITICAL ELEMENTS OF ENVIRONMENTAL MANAGEMENT OF PORTS

CIP Inter-American Committee on Ports

ENVIRONMENTAL POLICY

Public document emanating from senior management => commitment to achieve proper environmental management and promotion of sustainable development

CRITICAL ELEMENTS OF ENVIRONMENTAL MANAGEMENT OF PORTS

CIP Inter-American Committee on Ports

ENVIRONMENTAL POLICY

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ENVIRONMENTAL PROGRAM

Documented description in which the actions for the achievement and fulfillment of environmental objectives and goals are detailed, responsible parties are defined and the economic and technical resources are established for their achievement.

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ORGANIZATION AND TRAINING

Top management must define the organizational structure and responsibilities that will regulate the implementation and control of the environmental management and equip it with the necessary resources.

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IMPLEMENTATION OF AN ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

Structured system for continuous improvement: planning, implementing or doing, reviewing or verifying and action or performance, ensuring compliance with its environmental objectives.

CRITICAL ELEMENTS OF ENVIRONMENTAL MANAGEMENT OF PORTS

CIP Inter-American Committee on Ports

Identification of Environmental Aspects

SIGNIFICANT

CRITICAL ELEMENTS OF ENVIRONMENTAL MANAGEMENT OF PORTS

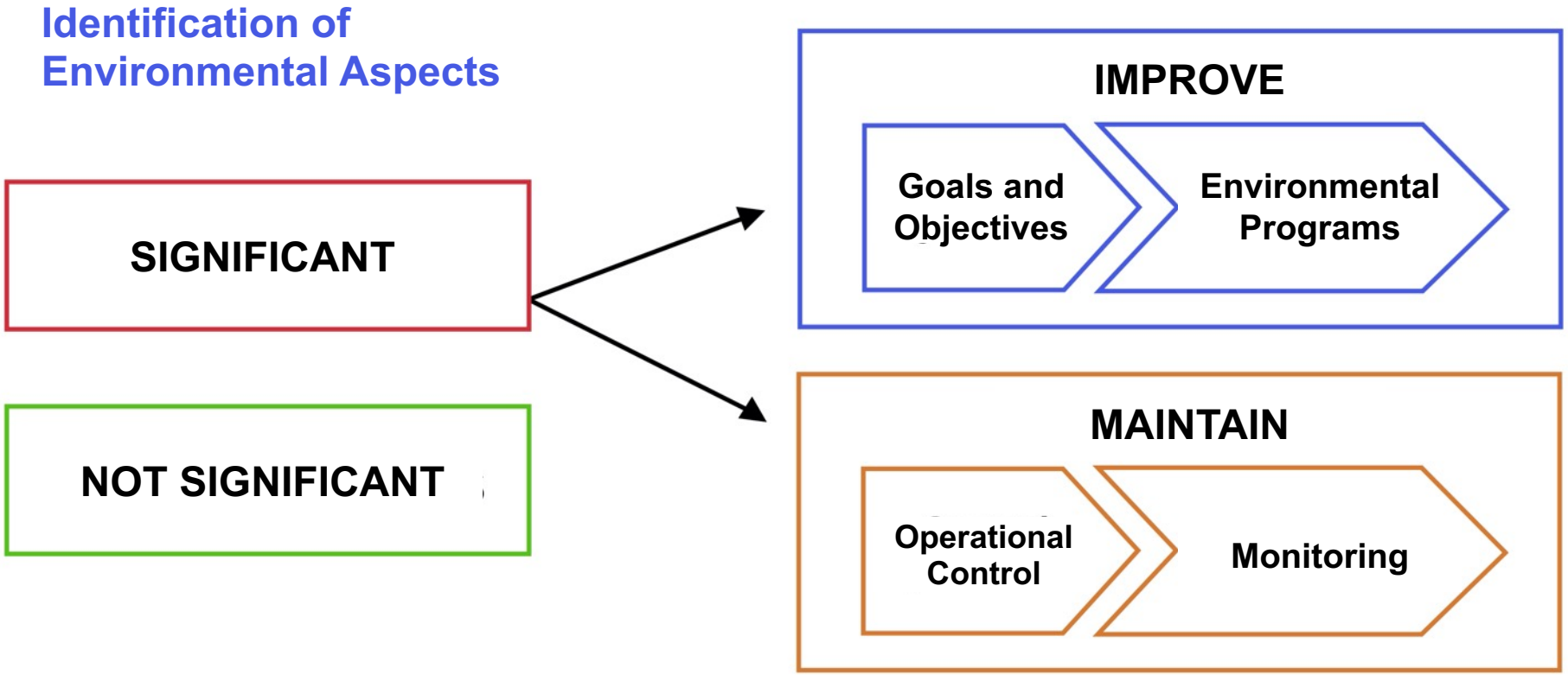
CIP Inter-American Committee on Ports

Identification of Environmental Aspects

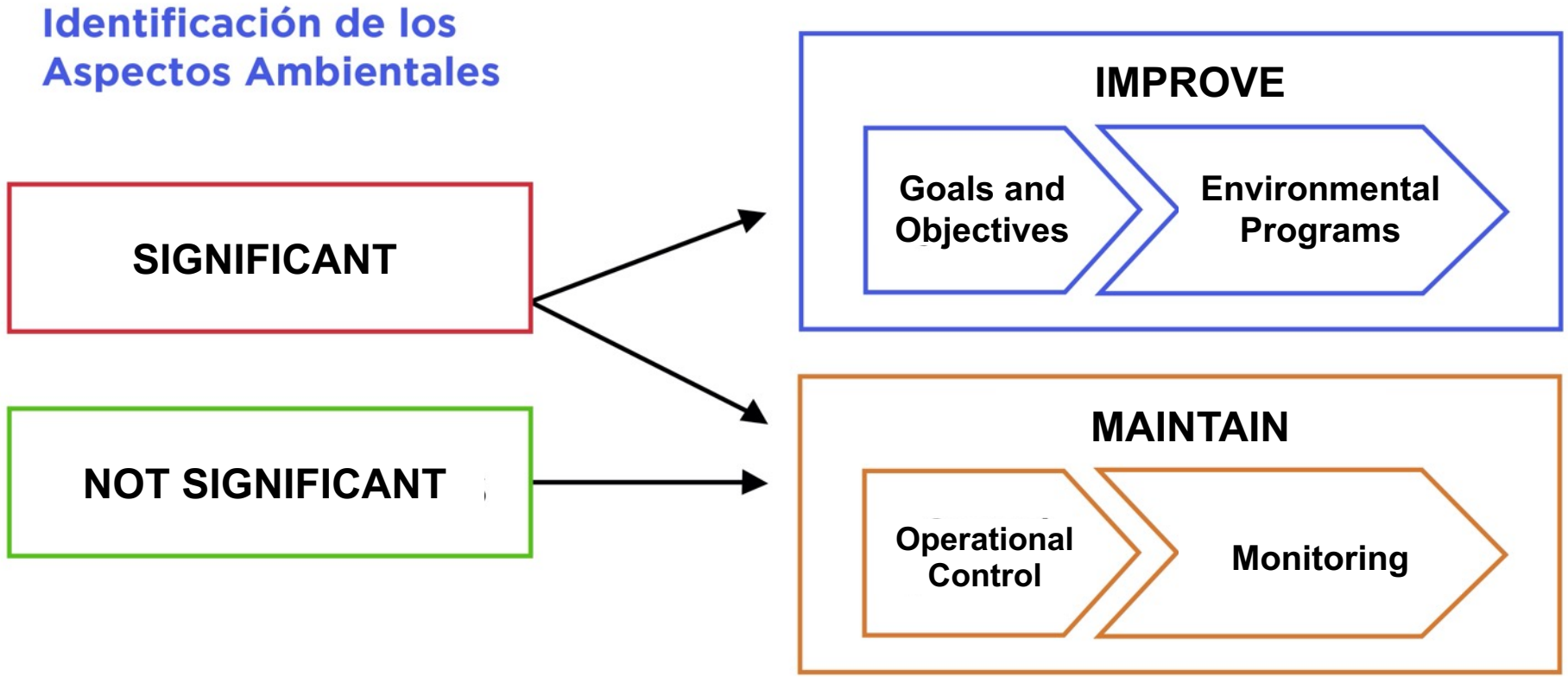
SIGNIFICANT

NOT SIGNIFICANT

CRITICAL ELEMENTS OF ENVIRONMENTAL MANAGEMENT OF PORTS



CRITICAL ELEMENTS OF ENVIRONMENTAL MANAGEMENT OF PORTS



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CURRENTLY, THERE ARE TWO NORMS FOR THE IMPLEMENTATION OF AN EMS.

REQUIREMENTS	ISO 14.001:2015	EMAS III
Application	For all types of organizations.	For all types of organizations.
Initial Environmental Evaluation/Revision	Recommended, if you do not have an EMS.	Required, if you do not have an EMS.

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Audit Cycle	There is no established periodicity.	At least every 3 years.
Scope of the Audit	The Environmental Management System (EMS)	In addition to the EMS, the policy, the program and compliance with applicable legislation.

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Audit Cycle	There is no established periodicity.	At least every 3 years.
Scope of the Audit	The Environmental Management System (EMS)	In addition to the EMS, the policy, the program and compliance with applicable legislation.
Declaración Ambiental	Not a requirement.	It is a requirement and must be public.
Validez	It is ideal that it be accredited by an external auditor.	Must be accredited by an external auditor.
Registro	Not necessary.	Registration required.

CATALOGUE OF GREEN PORT MANAGEMENT BEST PRACTICES

SPECIFIC ANALYSIS OF THE ENVIRONMENTAL IMPACTS RELATED TO PORT ACTIVITY[1]

COMPONENT	IMPACT	DESCRIPTION
LANDSCAPE	Aesthetic and recreational impact on the beaches	Impact on beauty and recreational perception of beaches.
	Landscape and visual alteration	Structural or functional impact on landscape, which causes a decrease in its environmental and visual quality.

(1) Port Terminals Environmental Guide. Agreement No. 370-2016 MADS-INVERMAR (2016), p. 105-107.

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FLORA	Dust accumulation	Effects on vegetation and fauna
	Loss of vegetation cover	Total or partial removal of vegetation

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FLORA	Dust accumulation	Effects on vegetation and fauna
	Loss of vegetation cover	Total or partial removal of vegetation
FAUNA	Plague or invasive species	Ocupación de poblaciones biológicas, no propias de la región.
	Deterioration of water quality	Detrimento de las características de los ambientes.
	Reduction of fish species due to deterioration of water quality	Alteración de las diferentes comunidades biológicas.

(1) Port Terminals Environmental Guide. Agreement No. 370-2016 MADS-INVERMAR (2016), p. 105-107.

SPECIFIC ANALYSIS OF THE ENVIRONMENTAL IMPACTS RELATED TO PORT ACTIVITY[1]

COMPONENT	IMPACT	DESCRIPTION
WATER	Pollution from bilge water	Increased concentration of oil residues in the water, caused by discharge of bilge water in vessel operations.
	Pollution by potentially hazardous and toxic substance spills	Changes in the quality of the sea floor or river bed sediments due to polluting agents.
	Pollution by solid and liquid discharges	

(1) Port Terminals Environmental Guide. Agreement No. 370-2016 MADS-INVERMAR (2016), p. 105-107.

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	Pollution by solid and liquid discharges	Increased concentration of solid or liquid waste in the water
AIR	Pollution by increased gas concentration	Increased concentration of gases such as SO2, CO, volatile organic compounds, nitrogen oxide, CO2, methane (CH4) and Chlorofluorocarbons (CFC) in the atmosphere
	Increased concentration of particulate matter	Increased concentration of particles suspended in the air

(1) Port Terminals Environmental Guide. Agreement No. 370-2016 MADS-INVERMAR (2016), p. 105-107.

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AIR	Pollution by increased gas concentration	Increased concentration of gases such as SO2, CO, volatile organic compounds, nitrogen oxide, CO2, methane (CH4) and Chlorofluorocarbons (CFC) in the atmosphere
	Increased concentration of particulate matter	Increased concentration of particles suspended in the air
SOIL	Silting, accretion, erosion, and undermining	Solid material building up on the sea floor or river bed, growth by addition of smaller objects, removal or wearing away of the soil and/or deep excavation caused by water.
	Pollution by potential fuel, grease, and oil spills	Change in soil quality due to increased concentration of fuel, greases, and oils.
	Solid waste generation	Presence of solid waste in the soil.

(1) Port Terminals Environmental Guide. Agreement No. 370-2016 MADS-INVERMAR (2016), p. 105-107.

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BEST PRACTICES OBSERVED IN LATIN AMERICAN PORT TERMINALS

PRACTICE

ATMOSPHERIC EMISSIONS CONTROL

DESCRIPTION

- Equipment modernization.
- Preventive maintenance of equipment.
- Moistening and application of additive biodegradable substances.
- Wind barriers.

ACTION

- Environmental surveillance system of air quality and particulate material.
- Measuring Carbon Footprint.
- Airtight seals freight trucks.

EXPECTED RESULTS

- Compliance with applicable Law.
- Decreased concentration of particulate material.
- Plan of action in the event of surpassing permitted limits.
- Decreased greenhouse gas effect (GGE).

BEST PRACTICES OBSERVED IN LATIN AMERICAN PORT TERMINALS

PRACTICE

NOISE CONTROL

DESCRIPTION

- Perform periodic measurements of the perimeter noise level generated by the port facility.

ACTION

- **Conducting regular measuring of perimeter noise levels caused by the port facilities.**

EXPECTED RESULTS

Compliance with applicable Law.

Plan of action in event of surpassing permitted limits.

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BEST PRACTICES OBSERVED IN LATIN AMERICAN PORT TERMINALS

PRACTICE

WATER

DESCRIPTION

- Minimize consumption and make efficient use of the resource.
- Staff training.
- Leak control programs.

ACTION

- **Efficient use and savings.**
- **Oil separator system.**
- **Waste water treatment plan.**

EXPECTED RESULTS

- **The use of biodegradable chemical products.**
- **Reuse of water.**
- **Zero discharge into the sea.**

BEST PRACTICES OBSERVED IN LATIN AMERICAN PORT TERMINALS

PRACTICE	ACTION	EXPECTED RESULTS
ENERGY	▪ Decreasing consumption. ▪ Implementing ISO 50001 energy efficiency management system. ▪ Measuring Carbon Footprint	Compliance with regulations. Decreased levels of consumption and generating savings. Use of efficient systems. Decreased GGE.

DESCRIPTION

- Minimize consumption and generate savings.
- Regeneration of energy.
- Use of more efficient systems or low consumption (lighting)
- Training and sensitization courses for all personnel

BEST PRACTICES OBSERVED IN LATIN AMERICAN PORT TERMINALS

PRACTICE

LANDSCAPE MANAGEMENT

DESCRIPTION

- Vegetation mitigation and improvement inside and outside the port.
- Planting local species inside and outside the port.
- Elimination of waste.
- Erosion control.

ACTION

- **Permanent vegetation maintenance plan.**
- **Reforestation of lands.**
- **Beach cleaning campaigns.**

EXPECTED RESULTS

- **Minimized visual impact caused by cargo and equipment.**
- **Land reclamation.**
- **Improved port image and awareness.**
- **Decreased trash, especially plastics.**
- **Improvements in marine wildlife and aquatic vegetation.**

BEST PRACTICES OBSERVED IN LATIN AMERICAN PORT TERMINALS

PRACTICE

SEA (SEAWATER)

DESCRIPTION

- Sediment sampling.
- Water column sampling for component analysis.

ACTION

- **Measuring benthos and marine silt**
- **Quality monitoring of water column profiling**

EXPECTED RESULTS

Analysis of biodiversity.

Observing changes in the physical-chemical quality of the seawater

BEST PRACTICES OBSERVED IN LATIN AMERICAN PORT TERMINALS

PRACTICE

SOLID WASTE MANAGEMENT

DESCRIPTION

- Minimize waste.
- Promote waste segregation to facilitate recycling.
- Reduction of paper consumption.
- Verify agreements for removal and final disposal.
- Beach cleaning.

ACTION

- Managing waste.
- Training personnel and contractors.
- Recycling.
- Sorting waste.
- Adequate final disposal.
- Control of hazardous waste.

EXPECTED RESULTS

- Compliance with laws.
- Residue sorting that goes into garbage dumps.
- Outreach and awareness raising.
- Less garbage and especially plastics.
- Improvements to conditions of marine flora and fauna

BEST PRACTICES OBSERVED IN LATIN AMERICAN PORT TERMINALS

PRACTICE

SOIL

DESCRIPTION

- Taking soil samples for component analysis.

ACTION

- **Environmental monitoring of soils.**
- **(Re)forestation.**

EXPECTED RESULTS

- **Compliance with laws.**
- **Pollution monitoring.**
- **Erosion control.**
- **Air quality.**

EMS ISO 14001 CERTIFICATION , ECOPORTS AND OTHER INTERNATIONALLY RECOGNIZED ENVIRONMENTAL CERTIFICATIONS

ADVANTAGES OF IMPLEMENTING AN EMS IN A PORT.

Competition

(improves the image)

ADVANTAGES OF IMPLEMENTING AN EMS IN A PORT.

Competition
(improves the image)

+

Costs Reduction
(residue control and treatment)

ADVANTAGES OF IMPLEMENTING AN EMS IN A PORT.

Competition
(boosts image)

+

Costs Reduction
(residue control and treatment)

+

A Committed Organization

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ADVANTAGES OF IMPLEMENTING AN EMS IN A PORT.

Competition
(boosts image)

+

Costs Reduction
(residue control and treatment)

+

A Committed Organization

+

Risk identification and control
(regulatory compliance, communication)

FACTORS THAT DRIVE THE IMPLEMENTATION AND CERTIFICATION IN A PORT.

Obtaining
Competitive Advantages

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FACTORS THAT DRIVE THE IMPLEMENTATION AND CERTIFICATION IN A PORT.

Obtaining **Competitive Advantages** + **Market and customer** requirements

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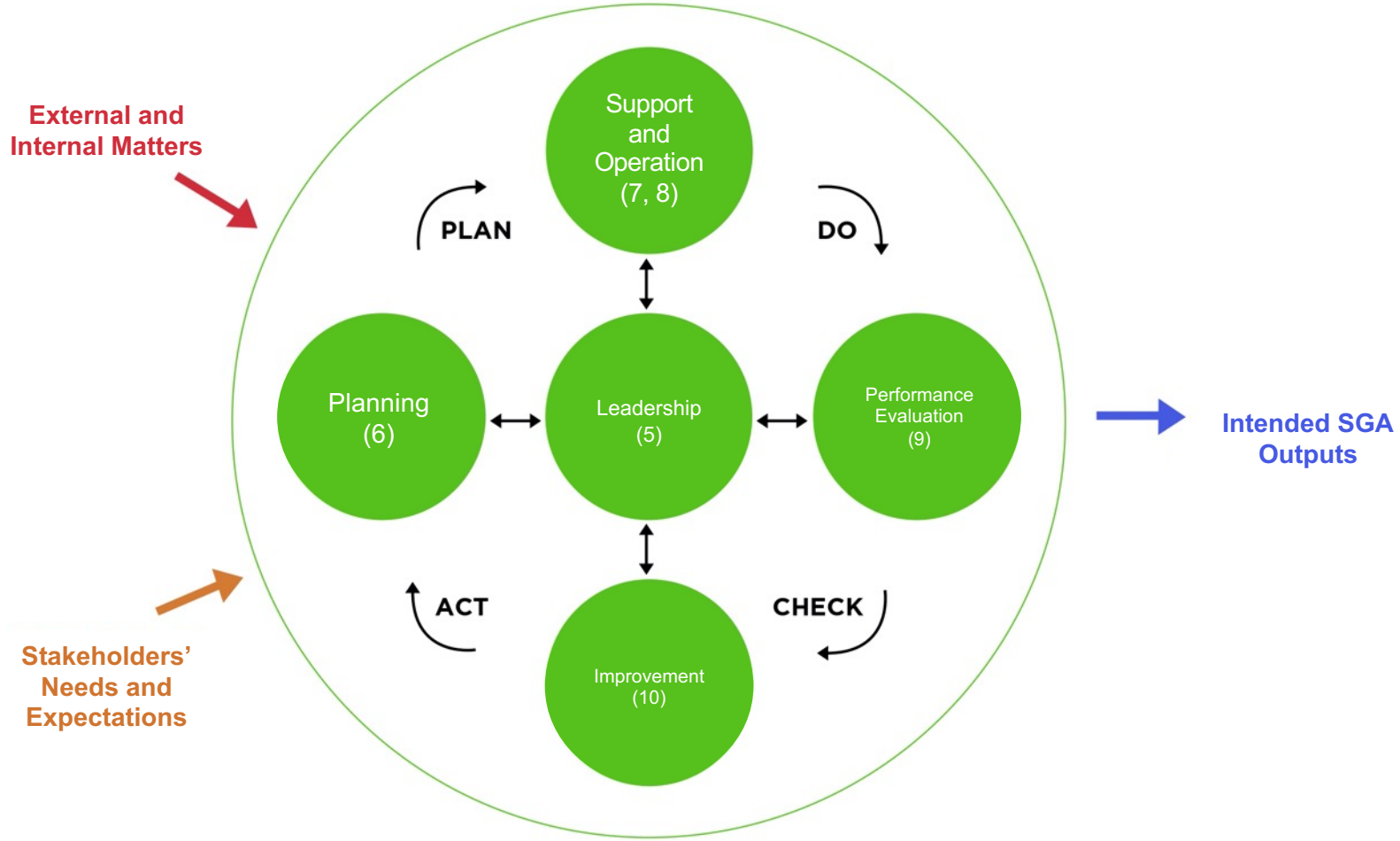
FACTORS THAT DRIVE THE IMPLEMENTATION AND CERTIFICATION IN A PORT.

Gaining **Competitive Advantages** + **Market and client** requirements + **Environmental** awareness, **surrounding community and society**

BENEFITS OF OBTAINING AN ISO 14.001:2015

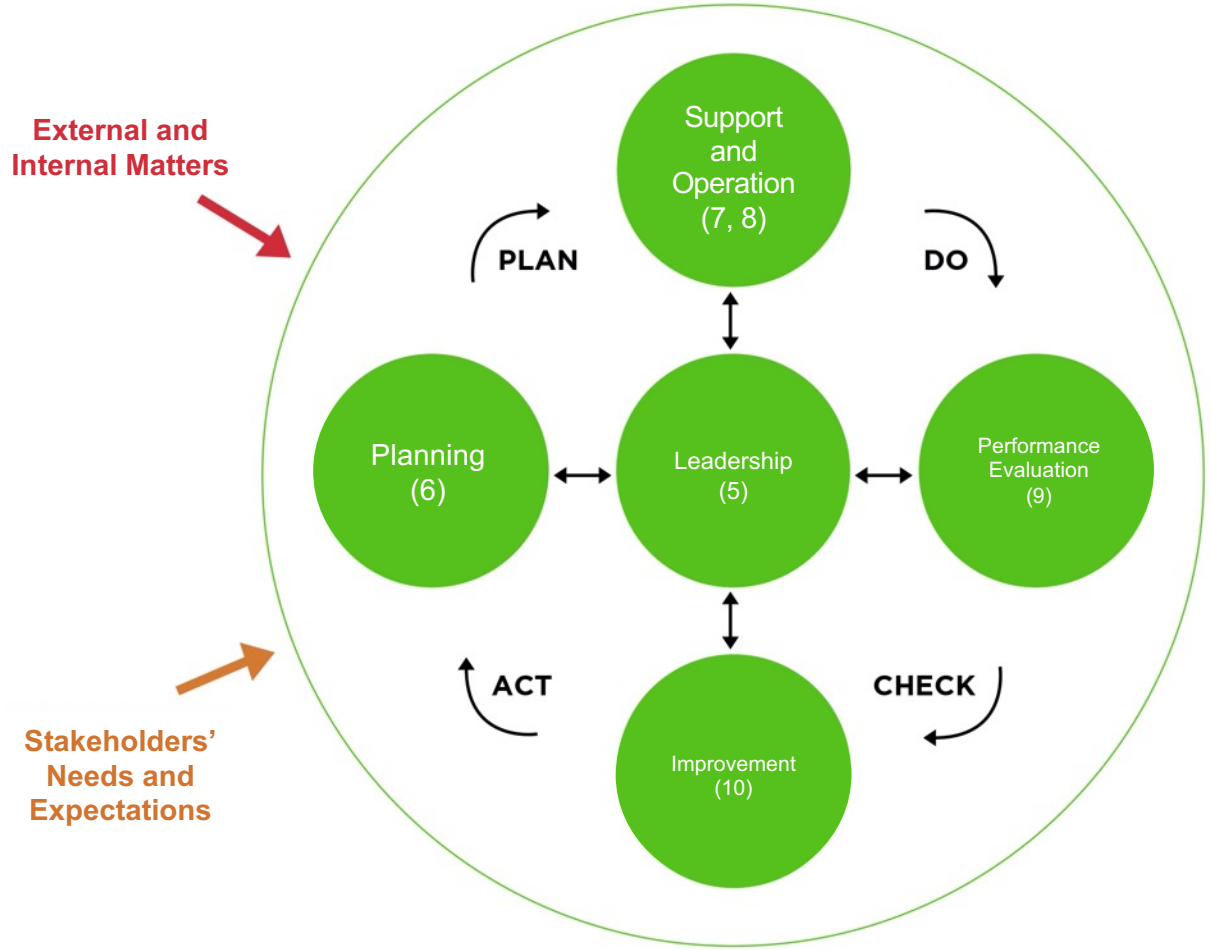
- Protecting the environment through prevention or mitigation of adverse environmental impacts;
- Complying with statutory requirements;
- Controlling how the organization designs, manufactures, distributes, consumes and carries out final provision of products and services
- Making it easier to gain financial and operational benefits that can result from implementing environmentally respectful alternatives that strengthen the organization's market position;
- Successfully communicating environmental information to stakeholders.

SCOPE OF THE EMS 14.001.



Plan: identification of environmental objectives and processes

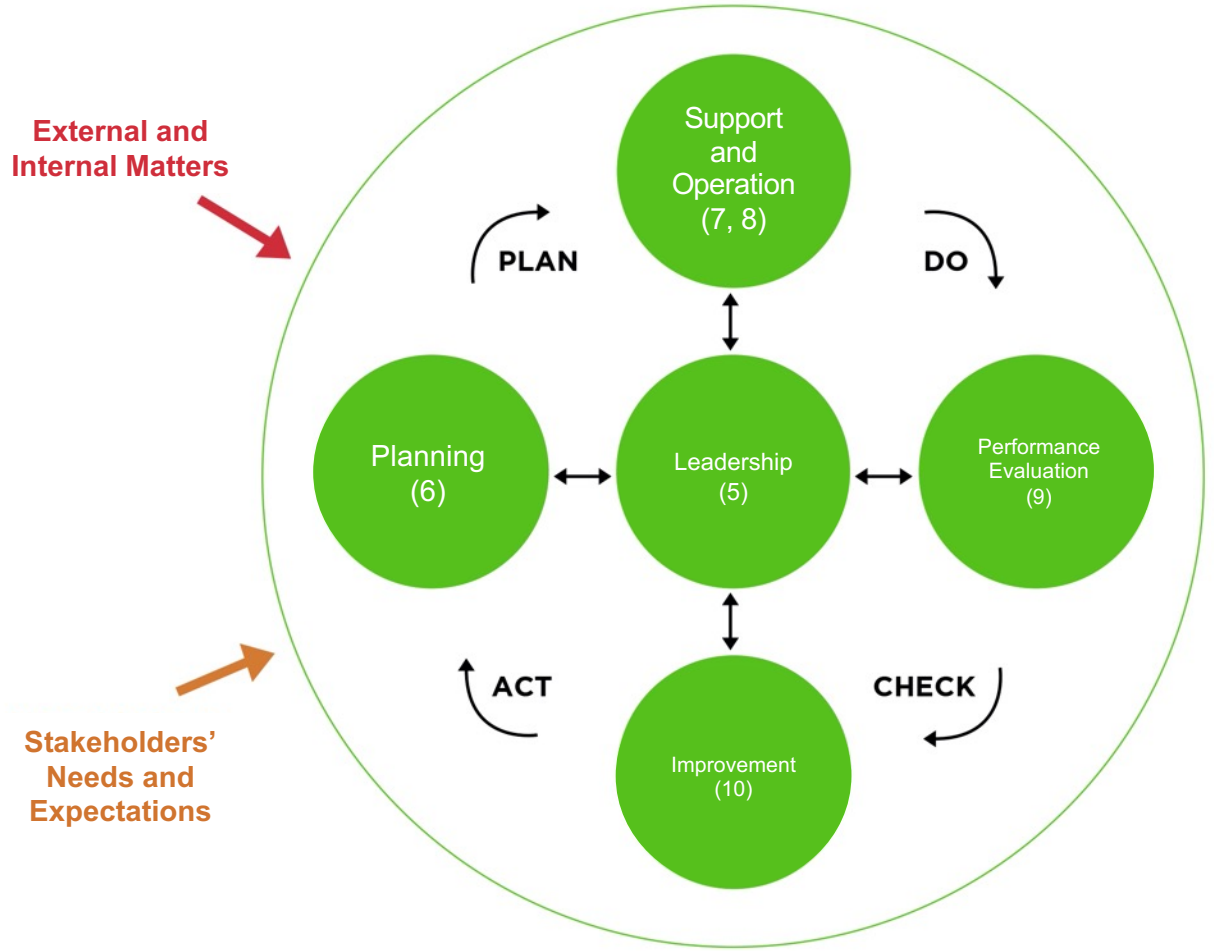
SCOPE OF THE EMS 14.001.



Plan: identification of environmental objectives and processes.

Do: actions to achieve improvements.

SCOPE OF THE EMS 14.001.

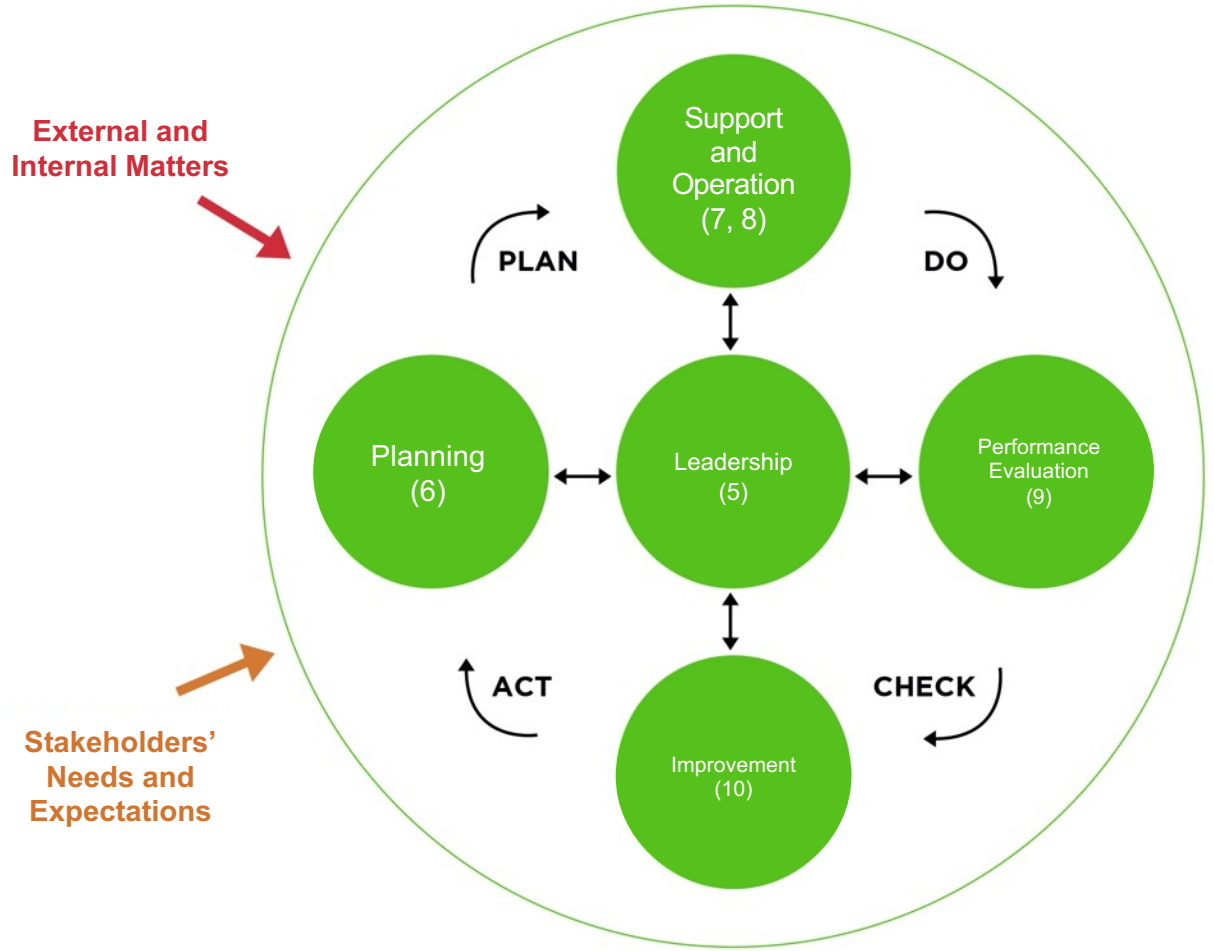


Plan: identification of environmental objectives and processes.

Do: actions to achieve improvements.

Check: monitoring, regulation and adjustment.

SCOPE OF THE EMS 14.001.



Plan: identification of environmental objectives and processes.

Do: actions to achieve improvements.

Check: monitoring, regulation and adjustment.

Act: continuously improve.

EMS ISO 14001 CERTIFICATION.

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P (Plan)	D (Do)	C (Check)	A (Act)
PLANNING	IMPLEMENTATION AND OPERATION	CONTROL AND CORRECTIVE ACTION	REVISION UPPER MANAGEMENT

COMMITMENT

EMS ISO 14001 CERTIFICATION.

Inter-American Committee on Ports

P (Plan)	D (Do)	C (Check)	A (Act)
PLANNING	IMPLEMENTATION AND OPERATION	CONTROL AND CORRECTIVE ACTION	REVISION UPPER MANAGEMENT
Environmental Aspects			
Legal and other requirements			
Objectives and goals			
Environmental Management Program			

COMMITMENT

EMS ISO 14001 CERTIFICATION.

Inter-American Committee on Ports

COMMITMENT

P (Plan)	D (Do)	C (Check)	A (Act)
PLANNING	IMPLEMENTATION AND OPERATION	CONTROL AND CORRECTIVE ACTION	REVISION UPPER MANAGEMENT
Environmental Aspects	Structure and Responsibilities.		
Legal and other requirements	Training, Awareness Raising and Professional Competencies.		
Objectives and goals	Communication.		
Environmental Management Program	Documentation of Environmental Management System.		
	Control of Documentation.		
	Control of Operations.		
	Emergency Plans.		

EMS ISO 14001 CERTIFICATION.

Inter-American Committee on Ports

COMMITMENT

P (Plan)	D (Do)	C (Check)	A (Act)
PLANNING	**IMPLEMENTATION AND OPERATION**	**CONTROL AND CORRECTIVE ACTION**	**REVISION UPPER MANAGEMENT**
Environmental Aspects	Structure and Responsibilities.	Monitoring and Measuring.	
Legal and other requirements	Training, Awareness Raising and Professional Competencies.	Non-conformity, corrective action and preventive action.	
Objectives and goals	Communication.	Records.	
Environmental Management Program	Documentation of Environmental Management System.		
	Control of Documentation.		
	Control of Operations.		
	Emergency Plans.		

EMS ISO 14001 CERTIFICATION.

Inter-American Committee on Ports

COMMITMENT

P (Plan)	D (Do)	C (Check)	A (Act)
PLANNING	**IMPLEMENTATION AND OPERATION**	**CONTROL AND CORRECTIVE ACTION**	**REVISION UPPER MANAGEMENT**
Environmental Aspects	Structure and Responsibilities.	Monitoring and Measuring.	Continual improvement.
Legal and other requirements	Training, Awareness Raising and Professional Competencies.	Non-conformity, corrective action and preventive action.	
Objectives and goals	Communication.	Records.	
Environmental Management Program	Documentation of Environmental Management System.		
	Control of Documentation.		
	Control of Operations.		
	Emergency Plans.		

EXPECTED RESULTS

Improvement in environmental performance

EXPECTED RESULTS

Improvement in environmental performance

+

Compliance with legal requirements

EXPECTED RESULTS

Improvement in environmental performance

+

Compliance with legal requirements

+

Achievement of environmental **objectives**

STAGES OF IMPLEMENTATION AND ISO 14.001 CERTIFICATION

POLICY →

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STAGES OF IMPLEMENTATION AND ISO 14.001 CERTIFICATION

Inter-American Committee on Ports

STAGES OF IMPLEMENTATION AND ISO 14.001 CERTIFICATION

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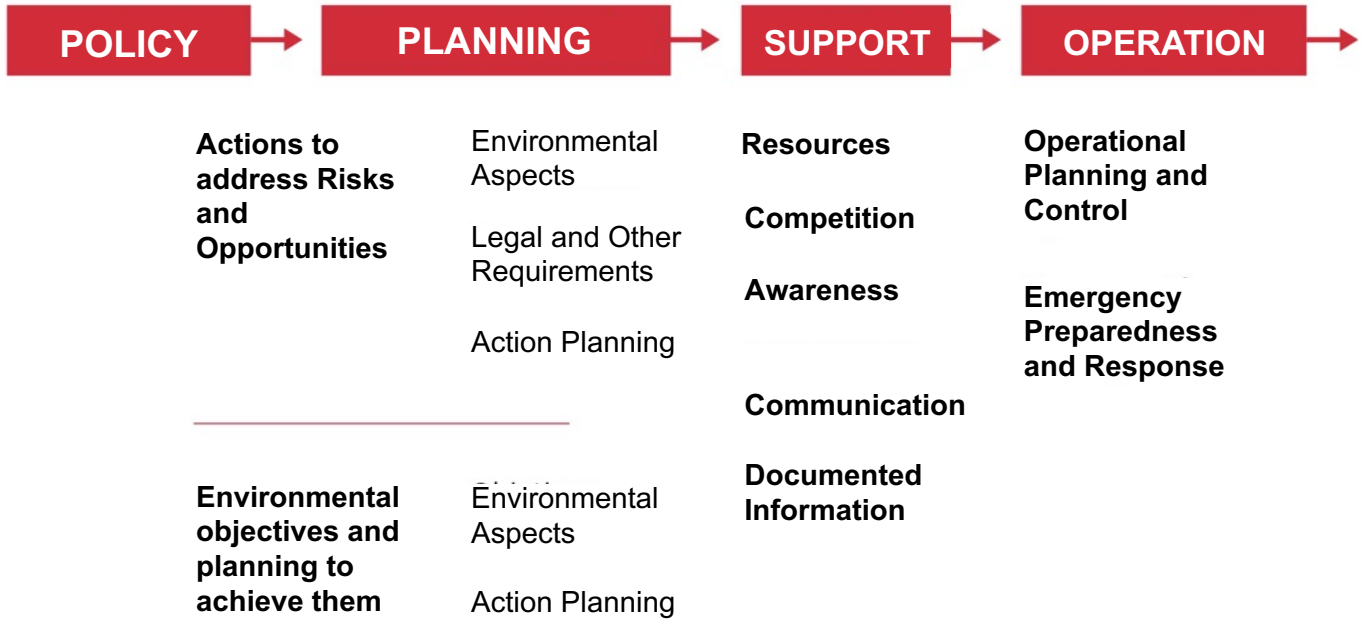
STAGES OF IMPLEMENTATION AND ISO 14.001 CERTIFICATION



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STAGES OF IMPLEMENTATION AND ISO 14.001 CERTIFICATION

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STAGES OF IMPLEMENTATION AND ISO 14.001 CERTIFICATION

POLICY	PLANNING	SUPPORT	OPERATION	PERFORMANCE	IMPROVEMENT	CERTIFICATION
	Actions to address Risks and Opportunities Environmental Aspects Legal and Other Requirements Action Planning	**Resources** **Competence** **Awareness** **Communication** **Documented Information**	**Operational Planning and Control** **Emergency Preparedness and Response**	**Compliance Evaluation** **Internal Audit** **Review by the Organization's Upper Management**	**Review by the Organization's Upper Management** **Continual Improvement**	**Preliminary Evaluation** **Evaluation of Documentation** **Initial Evaluation or Audit** **Principal Evaluation or Audit** **Certification** **Control or oversight Audits**
	Environmental objectives and planning to achieve them Environmental Aspects Action Planning					

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OBJECTIVES OF AN EMS EMAS (III).

Like ISO 14.001, EMAS allows to guide and manage the improvement of environmental performance on a continuous basis; its objectives are[2]:

- The establishment and implementation of an environmental management system.
- The systematic, objective, and periodic evaluation of the performance of such a system.
- The provision of information on the environmental performance of the organization.
- Open dialogue with the public and other interested parties.

ADVANTAGES OF OBTAINING AN EMS EMAS (III).

- **Environmental benefits**: improved environmental management, fewer environmental impacts and stimulation of ecological innovation in production processes.
- **Benefits of leadership and corporate image**: reinforcement and improvement of corporate image of the company, credibility and confidence in the eyes of public authorities, citizens, shareholders, employees, and other clients.
- **Economic and social benefits**: when you're certified, you may see increased business and, by optimizing management of environmental aspects, economic benefits will be obtained in the medium and long term.

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STAGES OF IMPLEMENTATION AND EMAS (III)^3 CERTIFICATION

INITIAL ENVIRONMENTAL REVIEW →

Identifying all environmental aspects that have a significant environmental impact

Identifying environmental compliance obligations that have been entered into by the company

Inter-American Committee on Ports

STAGES OF IMPLEMENTATION AND EMAS (III)^3 CERTIFICATION

INITIAL ENVIRONMENTAL REVIEW → **IMPLEMENTATION OF AN EMS (ISO 14.0001)** →

Identifying all environmental aspects that have a significant environmental impact

Identifying environmental compliance obligations that have been entered into by the company

Implementation of an Environmental Management System, based on the ISO 14.001 Norm.

Inter-American Committee on Ports

STAGES OF IMPLEMENTATION AND EMAS (III)^3 CERTIFICATION

INITIAL ENVIRONMENTAL REVIEW

Identifying all environmental aspects that have a significant environmental impact

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IMPLEMENTATION OF AN EMS (ISO 14.0001)

Implementation of an Environmental Management System, based on the ISO 14.001 Norm.

ENVIRONMENTAL STATEMENT

Drafting of a Environmental Statement

Identify the steps carried out for the benefit and reduction of its environmental impacts.

Inter-American Committee on Ports

STAGES OF IMPLEMENTATION AND EMAS (III)^3 CERTIFICATION

INITIAL ENVIRONMENTAL REVIEW

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ENVIRONMENTAL STATEMENT

Drafting of a Environmental Statement

Identify the steps carried out for the benefit and reduction of its environmental impacts.

VERIFICATION AND VALIDATION

Revision of the implementation of the ISO 14.001 Norm

Revision of the Environmental Statement

External audit compliance

Inter-American Committee on Ports

STAGES OF IMPLEMENTATION AND EMAS (III)^3 CERTIFICATION

INITIAL ENVIRONMENTAL REVIEW

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ENVIRONMENTAL STATEMENT

Drafting of a Environmental Statement

Identify the steps carried out for the benefit and reduction of its environmental impacts.

VERIFICATION AND VALIDATION

Revision of the implementation of the ISO 14.001 Norm

Revision of the Environmental Statement

External audit compliance

EMAS REGISTRATION (ACCREDITATION)

The organization can request registration to the competent body and use the EMAS logo.

WHAT IS THE ENVIRONMENTAL MANAGEMENT SYSTEM ECOPORTS PERS[4]?

- EcoPorts is the principal environmental initiative of the European port sector.
- The guiding principle of EcoPorts is to raise awareness about environmental protection through cooperation and knowledge exchange between ports and improve environmental management.
- Portal EcoPorts www.ecoports.com - For ports and terminals out of (ECOSLC, ww.ecoslc.edu

(4) ECO SLC Sustainable Logistic Chain – https://www.ecoslc.eu/about

STEPS FOR ECOPORTS PERS CERTIFICATION

1. Registration of the port organization, providing information about its location and port profile data.
2. Completing the SDM (Self Diagnosis Method) consists of a checklist of environmental aspects and risks of the organization.
3. Implementation of the PERS (Port Environmental Review System) in accordance with the system documentation and guidelines.
4. Audit inspection will be conducted by an external agency -hired by EcoSLC.
5. Submission of the report with the most important findings with respect to conformance with the PERS standard. If PERS certification is successfully achieved, the port is formally recognized as a “Certified PERS EcoPorts Port,” which is valid for two years.

ENVIRONMENTAL MANAGEMENT SYSTEM
ECOPORTS PERS CERTIFICATION

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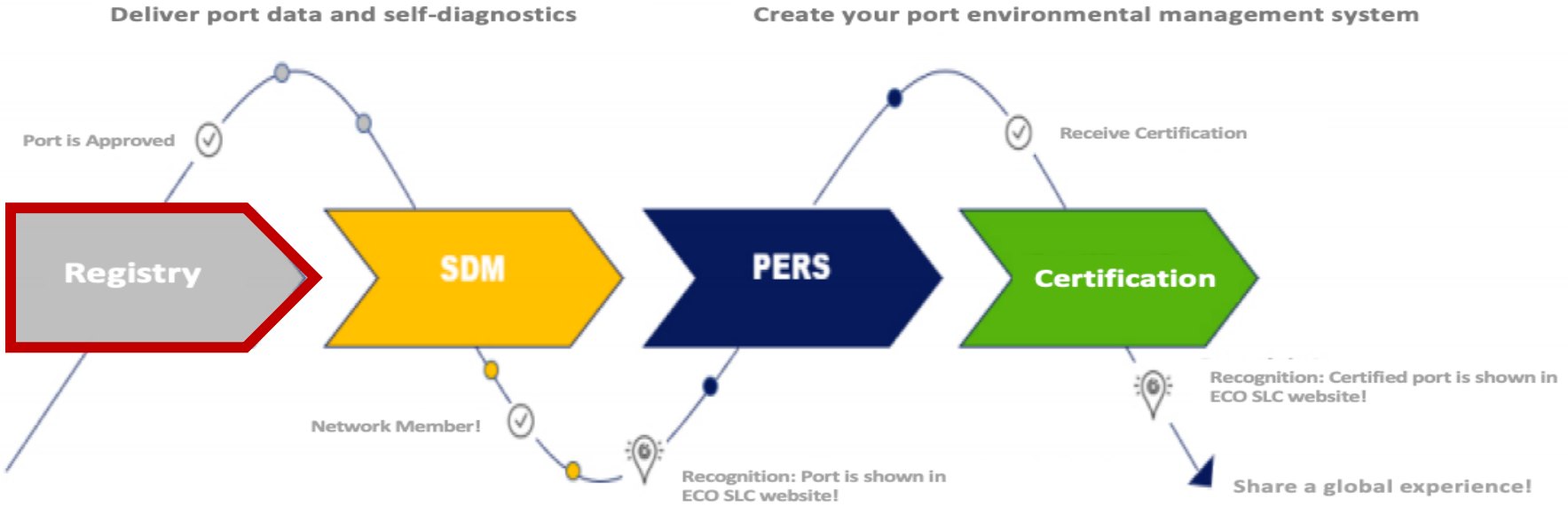
ECOPORTS

ECOSLC CERTIFICATION / ECOPORTS: PROCESS STEPS

ECO SLC
Sustainable Logistic Chain



- Complete: Location Information
- Complete: Port Profile
- Complete and send SDM
- Receive a review of your SDM rating: benchmark, conclusions, recommendations
- Receive PERS guidelines and standards, create and submit your PERS-based Environmental Management System
- The independent auditor Lloyd's Register will review your PERS documents

ENVIRONMENTAL MANAGEMENT SYSTEM
ECOPORTS PERS CERTIFICATION

Inter-American Committee on Ports

A: Environmental Policy

ENVIRONMENTAL POLICY DOCUMENT

A.1	Does the Port have an Environmental Policy?	O Y O N *
	IF YES,	
A.2	Is the Policy signed by Chief Executive / Senior Management?	O Y O N
A.3	Is the Policy communicated to all relevant stakeholders? [A.3]	O Y O N
A.4	Is the policy communicated to all employees? [A.4]	O Y O N
A.5	Is the policy publicly available on the Port's Website?	O Y O N
	Does the Policy include reference to:	
A.6	Major objectives?	O Y O N
A.7	Publication of an Environmental Report?	O Y O N
A.8	The identification and control of the port's Significant Environmental Aspects?	O Y O N
A.9	Continual improvement?	O Y O N
A.10	Prevention of pollution?	O Y O N
A.11	Training employees in environmental issues?	O Y O N
A.12	Introduction/maintenance of an Environmental Management System?	O Y O N
A.13	Reduction of resource consumption?	O Y O N
A.14	Improvement of environmental standards beyond those required under legislation? [A.14]	O Y O N
A.15	Environmental management of main aspects within the port area (including Tenants and Operators)?	O Y O N

ENVIRONMENTAL MANAGEMENT SYSTEM
ECOPORTS PERS CERTIFICATION

CIP Inter-American Committee on Ports

	Gap Analysis:	PERS 60.71%	ISO 48.68%	Answers	SWOT	ANS(%)	YES(%)	NO(%)
A.1	Does the Port have an Environmental Policy?				S1	100,0%	87,8%	12,2%
A.2	IF YES,Is the Policy signed by Chief Executive / Senior Management?				S2	89,8%	90,9%	9,1%
A.3	IF YES,Is the Policy communicated to all relevant stakeholders?				S3	89,8%	88,6%	11,4%
A.4	IF YES,Is the policy communicated to all employees?				O1	89,8%	84,1%	15,9%
A.5	IF YES,Is the policy publicly available on the Port's Website?				O2			
A.6	Does the Policy include reference to:Major objectives?				S4	89,8%	90,9%	9,1%
A.7	Does the Policy include reference to:Publication of an Environmental Report?				O3	87,8%	65,1%	34,9%
A.8	Does the Policy include reference to:The identification and control of the port's Significant Environmental Aspects?				S5			
A.9	Does the Policy include reference to:Continual improvement?				S6	89,8%	93,2%	6,8%
A.10	Does the Policy include reference to:Prevention of pollution?				S7	73,5%	86,1%	13,9%
A.11	Does the Policy include reference to:Training employees in environmental issues?				O4	89,8%	75,0%	25,0%

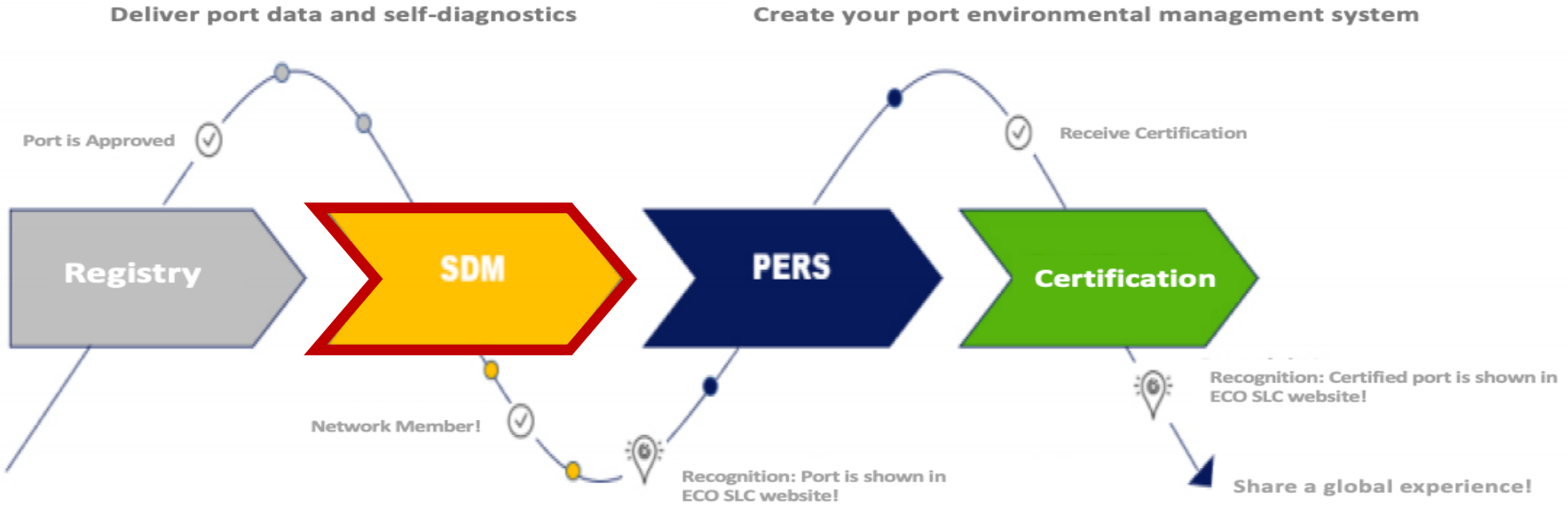
ENVIRONMENTAL MANAGEMENT SYSTEM
ECOPORTS PERS CERTIFICATION

CIP Inter-American Committee on Ports

ECOPORTS

ECOSLC CERTIFICATION / ECOPORTS: PROCESS STEPS

ECO SLC
Sustainable Logistic Chain



- Complete: Location Information
- Complete: Port Profile
- Complete and send SDM
- Receive a review of your SDM rating: benchmark, conclusions, recommendations
- Receive PERS guidelines and standards, create and submit your PERS-based Environmental Management System
- The independent auditor Lloyd's Register will review your PERS documents

ENVIRONMENTAL MANAGEMENT SYSTEM
ECOPORTS PERS CERTIFICATION

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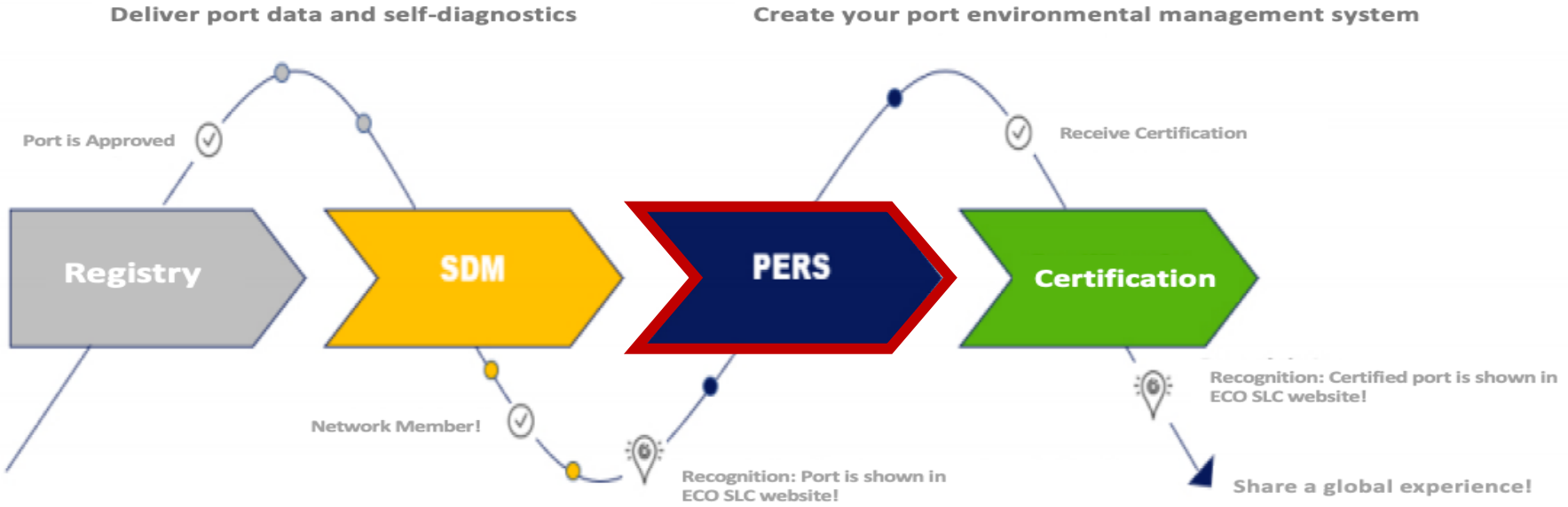

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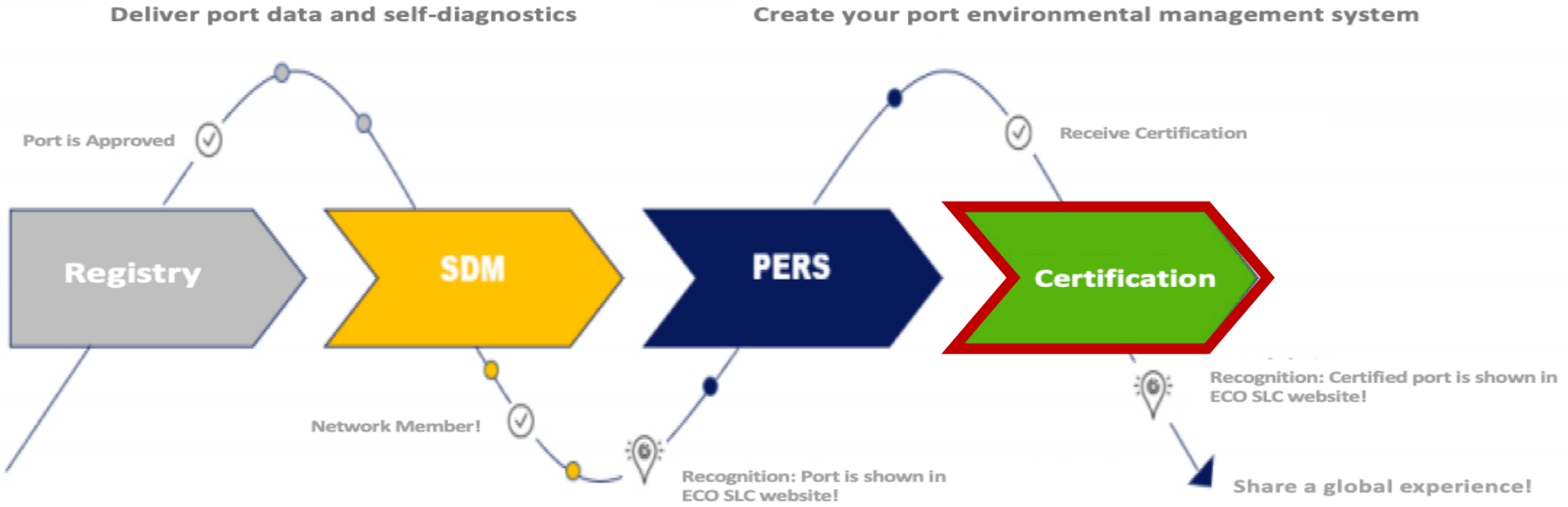

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COMMERCIAL, SOCIAL AND ENVIRONMENTAL BENEFITS AND ADVANTAGES OF BEING A GREEN PORT

COMMERCIAL, SOCIAL AND ENVIRONMENTAL BENEFITS AND ADVANTAGES OF BEING A GREEN PORT

Inter-American Committee on Ports

1. REDUCTION OF WASTE, COSTS, AND INCREASED EFFICIENCY

Energy Efficiency + Water resource management + Waste management + Circular Economy (innovation)

COMMERCIAL, SOCIAL AND ENVIRONMENTAL BENEFITS AND ADVANTAGES OF BEING A GREEN PORT

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2. TIMELY COMPLIANCE WITH LEGAL REQUIREMENTS AND OTHER REGULATIONS

It is essential for ports to comply with environmental regulations, rules and statutory requirements in their places of business

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3. STRENGTHENING REPUTATION

Complying with and ensuring environmental practices and standards in port activities and operations, following the adoption and certification of an environmental management system or of a higher recognition, such as EcoPorts PERS, promotes transparency and improves reputation

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4. INFORMATION AND ENGAGEMENT WITH STAKEHOLDERS

The aim of this engagement is to link environmental actions and projects to the demands and needs of stakeholders or interested parties. This engagement should go hand-in-hand with the port getting into the habit of actively listening on an ongoing basis to the groups that have fundamental issues with, and are impacted by, its operation.

SUCCESSFUL EXPERIENCES OF LA PORTS WITH ISO 14001, ECOPORTS AND OTHERS

Successful Experiences of LA Ports with ISO 14001, Ecoports and others

1. Empresa Portuaria Antofagasta (Chile).
2. Port Group of Cartagena (Grupo Puerto de Cartagena): Regional Port Corporation of Cartagena (Sociedad Portuaria Regional de Cartagena) – Terminal de Contendores de Cartagena (Colombia)
3. Port Authority of Montevideo (Uruguay).
4. Administración Portuaria Integral de Lázaro Cárdenas (Mexico).
5. Administración Portuaria Integral de Ensenada (Mexico).
6. Administración Portuaria Integral de Dos Bocas (México).
7. Porto do Açu (Brazil).

Other ports that are also outstanding in the area of environmental management are: **Sociedad Portuaria Santa Marta** (Colombia), **Puerto Ventanas**, **Terminal Internacional del Sur** y **Terminal Pacífico Sur** (Chile), which will be analyzed later (sustainability strategy).

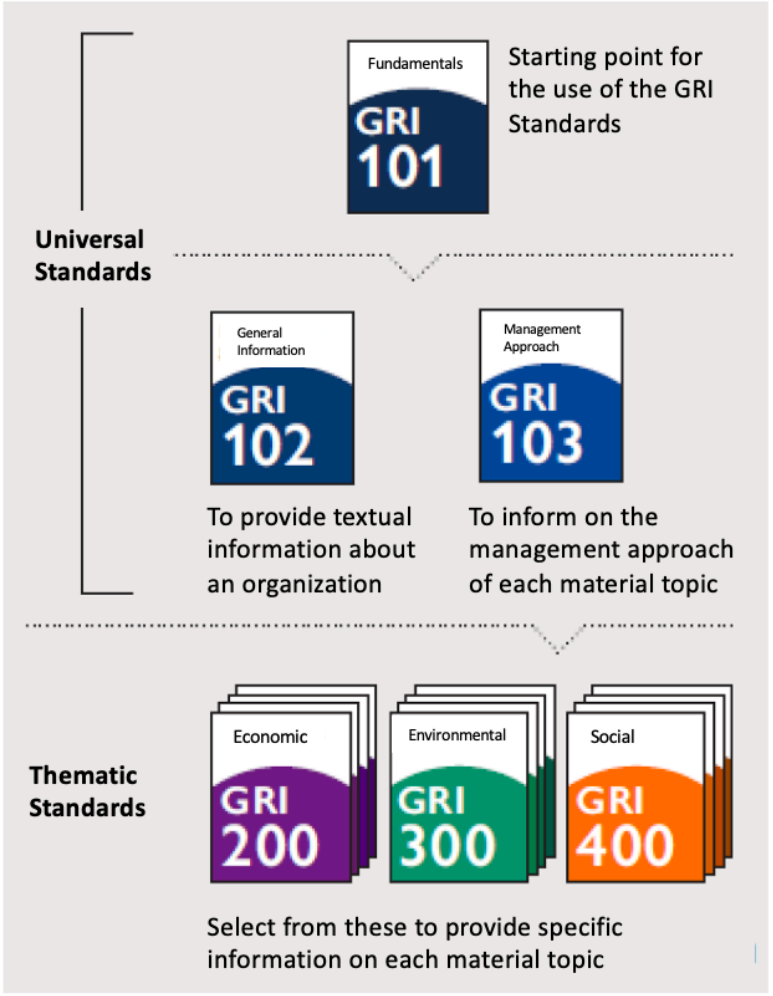
GLOBAL REPORTING INITIATIVE (GRI) SUSTAINABILITY REPORTING GUIDELINES

GLOBAL REPORTING INITIATIVE (GRI) SUSTAINABILITY REPORTING GUIDELINES

CIP Inter-American Committee on Ports

GRI (Global Reporting Initiative) is a non-profit, independent, international organization, founded in the United States in 1997.

Coalition for Environmentally Responsible Economies (CERES), the United Nations Environment Programme (UNEP) and the Tellus Institute.



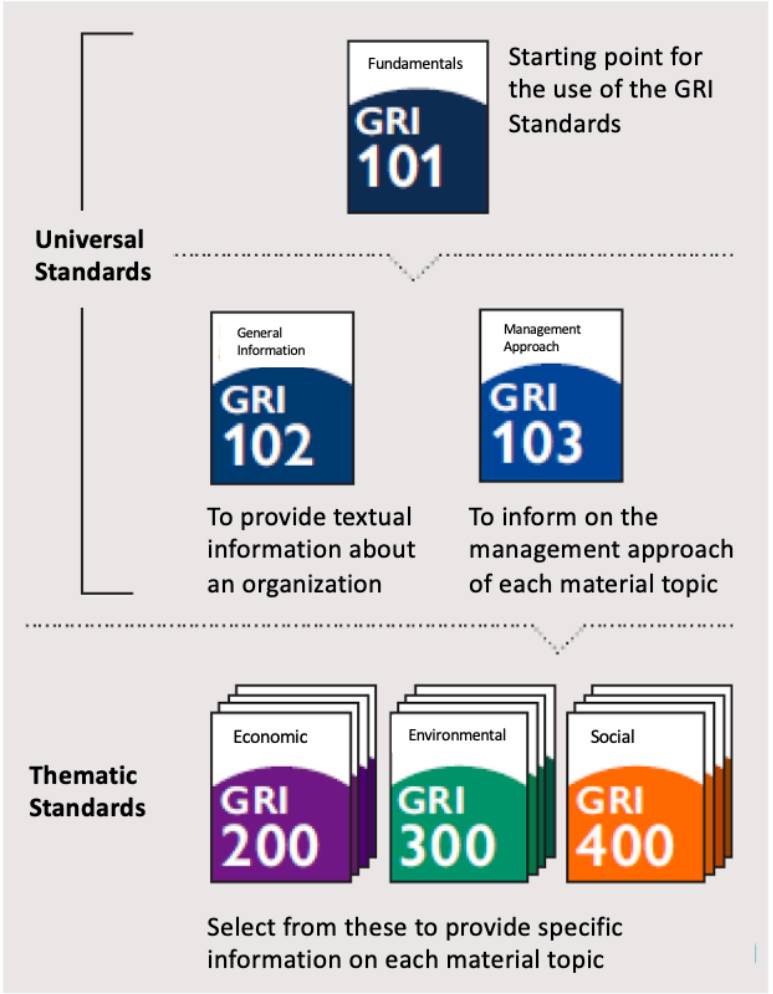
GLOBAL REPORTING INITIATIVE (GRI) SUSTAINABILITY REPORTING GUIDELINES

CIP Inter-American Committee on Ports

The GRI Guide[5] (GRI Standards) was published in October 2016 and it came into effect in June 2018.

The GRI Standards for sustainability reporting are divided into four series grouped in **two modules**:

- Universal Standards Series 100 (contextual information about the organization, the reporting principles, criteria for addressing and managing material topics, among others).
- Topic-Specific Standards Series 200 Economic topics, Series 300 Environmental topics, and Series 400 Social topics.



(5) GRI 101: Fundamentals - Introduction (2016).

GLOBAL REPORTING INITIATIVE (GRI) SUSTAINABILITY REPORTING GUIDELINES

Inter-American Committee on Ports

Reporting principles and core content[6]

Through them, ports can identify their significant impacts on the ”economy, environment and society and make them public in accordance with a globally accepted standard”.

Principles for defining report content

- **Stakeholder inclusiveness**
- **Sustainability Context**
- **Materiality**
- **Completeness**

(6) GRI 101: Fundamentals – Principles for Reporting (2016).

GLOBAL REPORTING INITIATIVE (GRI) SUSTAINABILITY REPORTING GUIDELINES

Inter-American Committee on Ports

Reporting principles and core content[6]

Through them, ports can identify their significant impacts on the ”economy, environment and society and make them public in accordance with a globally accepted standard”.

Principles for defining **report content**	Principles for defining **report quality**
- **Stakeholder inclusiveness** - **Sustainability Context** - **Materiality** - **Completeness**	- **Accuracy** - **Balance** - **Clarity** - **Comparability** - **Reliability** - **Timeliness**

(6) GRI 101: Fundamentals – Principles for Reporting (2016).

COMMERCIAL, SOCIAL AND ENVIRONMENTAL BENEFITS AND ADVANTAGES TO A PORT IN SUSTAINABILITY REPORTING

COMMERCIAL, SOCIAL AND ENVIRONMENTAL BENEFITS AND ADVANTAGES TO A PORT IN SUSTAINABILITY REPORTING

CIP Inter-American Committee on Ports

INTERNAL BENEFITS

1. Strategic Vision.
2. Financial Outcomes.
3. Innovation, waste reduction and efficiency
4. Motivation and loyalty to the persons working under the control of the organization
5. Timely compliance with legal requirements and other rules and regulations

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EXTERNAL BENEFITS

1. Corporate Reputation
2. Competitive Advantage
3. Access to Capital or sources of financing
4. Stakeholder Engagement

CIP Inter-American Committee on Ports

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS

CIP Inter-American Committee on Ports

1. Sociedad Portuaria Santa Marta - SPSM (Colombia)
2. Terminal Pacífico Sur S.A. – TPS (Chile)
3. Puerto Ventanas S.A. – PVSA (Chile)
4. Terminal Internacional del Sur - Tisur (Perú)
5. Terminal Puerto Arica - TPA (Chile).
6. Port Group of Cartagena (Grupo Puerto de Cartagena): Regional Port Corporation of Cartagena (Sociedad Portuaria Regional de Cartagena) – Terminal de Contendores de Cartagena (Colombia)

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS

Inter-American Committee on Ports

1. INTERNAL BENEFITS

- Some reports are released with economic outcomes or financial statements.
- One report follows the model guidelines for integrated reporting of the IIRC (International Integrated Reporting Council).
- The report of Terminal Pacífico Sur (2017-2018) y Terminal Puerto Arica (2019) are written using the basic and complete methodology version of the GRI Standards (Global Reporting Initiative), respectively.
- The reports of Sociedad Portuaria Santa Marta (2018) and of Terminal Internacional del Sur (2015-2016) are written in accordance with the guidelines or principles G4 of GRI (Global Reporting Initiative).
- Another important difference is the reporting years or periods. The most recent ones are Puerto Ventanas (2019) and Terminal Puerto Arica (2019), which report annually. Others do so bi-annually.

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS

Inter-American Committee on Ports

2. REPORT NAMING

- As for the name of the reports of Terminal Internacional del Sur (2015-2016), Terminal Puerto Arica (2019) and Terminal Pacífico Sur (2017-2018), they are called "*Reporte de Sostenibilidad*" ('Sustainability Report').
- That of Puerto Ventanas (2019) is called "Memoria Anual Reporte Integrado" ('Integrated Annual Report'); "Memoria Anual Reporte Integrado."
- That of Sociedad Portuaria Santa Marta (2018), is called "*Informe de Sostenibilidad*," using the synonym and more traditional word in Spanish for 'report' informe.

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS

Inter-American Committee on Ports

3. GENERALITIES AND OUTSTANDING ASPECTS OF REPORTS

- General Description (mission, vision, values, their certifications, among other aspects).
- Corporate Governance Practices. They all mention the ethics and integrity of the governance (Santa Marta).
- Clients (TISUR results of the client satisfaction surveys).
- Collaborators, suppliers and commitment to occupational health and safety (TPS, TISUR and TPA).
- Management and development of the culture of innovation (PVSA and TPA).

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS

CIP Inter-American Committee on Ports

4. COMMUNITY AND ENGAGEMENT

- All reports analyzed contain a special section on engagement and management vis-à-vis the communities living in their area of influence.

5. ENVIRONMENTAL MANAGEMENT

- All port terminals have an Environmental Management System and ISO 14.001:2015 certificate.
- EcoPorts certification (TISUR, SPSM, PVSA, SPRC Y TCC).
- Energy efficiency policies (PVSA - ISO 50.001).
- Analysis of CO_2 emissions, materials consumption, fuel consumption, electrical energy consumption, water consumption solid and liquid waste treatment, and biodiversity.

USEFUL REFERENCES

USEFUL REFERENCES FOR ISO 14.001 CERTIFICATION

Inter-American Committee on Ports

Several Latin American organizations perform or provide:

- Preliminary environmental analysis.
- Support services in implementing the standard.
- Certifications of standard ISO 14.001:2015.

The following organizations may serve as references:

ICONTEC (Colombia) https://www.icontec.org/certificacion-de-sistema/

SGS (Several Latin American countries: Chile, Colombia Mexico, Argentina, Brazil, Peru)

https://www.sgs-latam.com/

TÜV Rheinland (Several Latin American countries: Chile, Colombia, Mexico, Peru, Argentina, sil).

Brazil).

ATR (Mexico) https://americantrust.com.mx/

USEFUL REFERENCES FOR EMAS CERTIFICATION

CIP Inter-American Committee on Ports

The following organizations may serve as references:

CAVALA https://www.cavala.es/

AENOR https://www.aenor.com/certificacion/medio-ambiente/reglamento-emas

ANEXIA https://consultoria.anexia.es/medio-ambiente/certificado-emas

USEFUL REFERENCES FOR ECOPORT CERTIFICATION

CIP Inter-American Committee on Ports

ECO SLC Sustainable Logistic Chain

Herman Journée

President, ECO Foundation Sustainable Logistics Chain/Fundación ECO Cadena Logística Sostenible (ECOSLC)

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AAPA American Association of Port Authorities

Rafaél Díaz-Balart

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