

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

AGENDA



- 1. Critical Elements of Environmental Management of Ports
- 2. Catalogue of Green Port Management Best Practices
- 3. Internationally recognized environmental standards and certifications
- 4. Commercial, Social and Environmental Benefits and Advantages of Being a Green or Ecological Port
- 5. Successful experiences of latin american ports with internationally recognized environmental certifications

AGENDA



- 6. Sustainability internationally standards, reporting guidelines
- 7. Commercial, social and environmental benefits and advantages to a port with sustainability reporting
- 8. Successful experiences of sustainability reporting in Latin American Ports





ENVIRONMENTAL POLICY

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



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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

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



Identification of Environmental Aspects

SIGNIFICANT



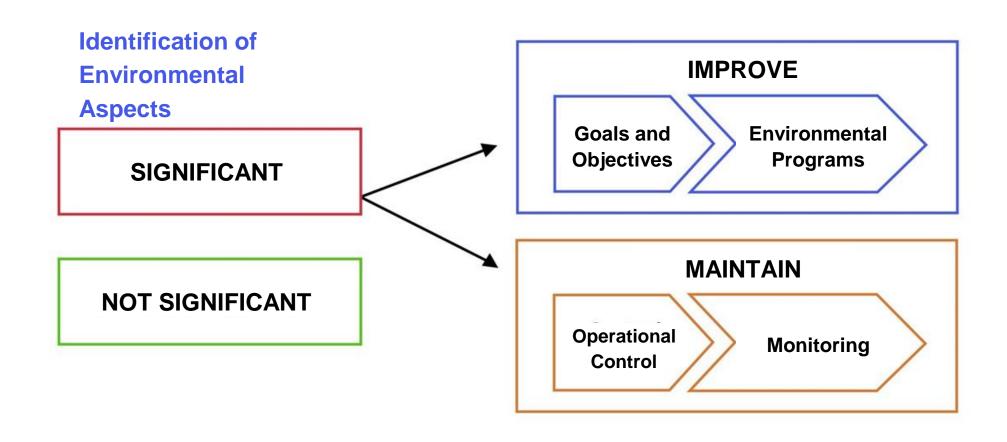
Identification of Environmental Aspects

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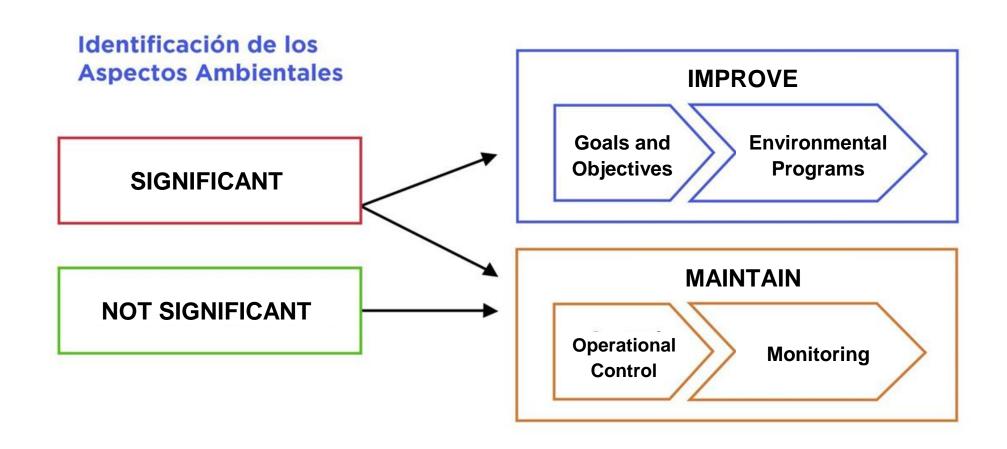
SIGNIFICANT

NOT SIGNIFICANT











CURRENTLY, THERE ARE METHODOLOGIES FOR IMPLEMENTING AN EMS.

REQUIREMENTS	ISO 14.001:2015	EMAS III	ECOPORT PERS
Application	For all types of organizations.	For all types of organizations.	Specific for port terminals.
Initial Environmental Evaluation/Revision	Recommended, if you do not have an EMS.	Required, if you do not have an EMS.	Mandatory, called SDM (Self Diagnosis Method.
Audit Cycle	There is no established periodicity.	At least every 3 years.	At least every 3 years.



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Audit Cycle	There is no established periodicity.	At least every 3 years.	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.	.	
Policy	Not a requirement.	It is a requirement and must be public.	It is a requirement and must be public.	



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Scope of the Audit	The Environmental Management System (EMS).	In addition to the EMS, the policy, the program and compliance with applicable legislation.	In addition to the EMS, the policy, the program and compliance with applicable legislation, to environmental reports and best practices.
Policy	Not a requirement.	It is a requirement and must be public.	It is a requirement and must be public.
Validity	It is ideal that it be accredited by an external auditor.	Must be accredited by an external auditor.	Must be accredited by an external auditor, hired by EcoSLC.
Registration	Not necessary.	Registration required.	Registration required.





SPECIFIC ANALYSIS OF THE ENVIRONMENTAL IMPACTS RELATED TO PORT ACTIVITY¹

COMPONENT	IMPACT
LANDSCAPE	Aesthetic and recreational impact on the beaches
	Landscape and visual alteration

DESCRIPTION

Impact on beauty and recreational perception of beaches.

Structural or functional impact on landscape, which causes a decrease in its environmental and visual quality.



SPECIFIC ANALYSIS OF THE ENVIRONMENTAL IMPACTS RELATED TO PORT ACTIVITY¹

COMPONENT	IMPACT
LANDSCAPE	Aesthetic and recreational impact on the beaches
LANDSCAPE	Landscape and visual alteration
	Dust accumulation
FLORA	Loss of vegetation cover

DESCRIPTION

Impact on beauty and recreational perception of beaches.

Structural or functional impact on landscape, which causes a decrease in its environmental and visual quality.

Effects on vegetation and fauna

Total or partial removal of vegetation



SPECIFIC ANALYSIS OF THE ENVIRONMENTAL IMPACTS RELATED TO PORT ACTIVITY¹

COMPONENT	IMPACT	DE
LANDSCAPE	Aesthetic and recreational impact on the beaches	Impact o
	Landscape and visual alteration	Structura which ca environn
	Dust accumulation	Effects o
FLORA	Loss of vegetation cover	Total or
	Plague or invasive species	Ocupació propias o
FAUNA	Deterioration of water quality	Detrimer ambiente
na ma salam sana	Reduction of fish species due to deterioration of water quality	Alteració biológica

DESCRIPTION

Impact on beauty and recreational perception of beaches.

Structural or functional impact on landscape, which causes a decrease in its environmental and visual quality.

Effects on vegetation and fauna

Total or partial removal of vegetation

Ocupación de poblaciones biológicas, no propias de la región.

Detrimento de las características de los ambientes.

Alteración de las diferentes comunidades biológicas.



SPECIFIC ANALYSIS OF THE ENVIRONMENTAL IMPACTS RELATED TO PORT ACTIVITY¹

COMPONENT	IMPACT
	Pollution from bilge water
WATER	Pollution by potentially hazardous and toxic substance spills
	Pollution by solid and liquid discharges

DESCRIPTION

Increased concentration of oil residues in the water, caused by discharge of bilge water in vessel operations.

Changes in the quality of the sea floor or river bed sediments due to polluting agents.



SPECIFIC ANALYSIS OF THE ENVIRONMENTAL IMPACTS RELATED TO PORT ACTIVITY¹

COMPONENT	IMPACT
	Pollution from bilge water
WATER	Pollution by potentially hazardous and toxic substance spills
	Pollution by solid and liquid discharges
	Pollution by increased gas concentration
AIR	Increased concentration of particulate matter

DESCRIPTION

Increased concentration of oil residues in the water, caused by discharge of bilge water in vessel operations.

Changes in the quality of the sea floor or river bed sediments due to polluting agents.

Increased concentration of solid or liquid waste in the water

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 particles suspended in the air



SPECIFIC ANALYSIS OF THE ENVIRONMENTAL IMPACTS RELATED TO PORT ACTIVITY¹

COMPONENT	IMPACT
	Pollution from bilge water
WATER	Pollution by potentially hazardous and toxic substance spills
	Pollution by solid and liquid discharges
AIR	Pollution by increased gas concentration
	Increased concentration of particulate matter
	Silting, accretion, erosion, and undermining
SOIL	Pollution by potential fuel, grease, and oil spills
	Solid waste generation

DESCRIPTION

Increased concentration of oil residues in the water, caused by discharge of bilge water in vessel operations.

Changes in the quality of the sea floor or river bed sediments due to polluting agents.

Increased concentration of solid or liquid waste in the water

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 particles suspended in the air

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.

Change in soil quality due to increased concentration of fuel, greases, and oils.

Presence of solid waste in the soil.



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).



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.



PRACTICE ACTION ■ Efficient use and savings. ■ Oil separator system. **WATER** ■ Waste water treatment plan. **DESCRIPTION** Minimize consumption and make efficient use of the resource. Staff training. ■ Leak control programs.

EXPECTED RESULTS

The use of biodegradable chemical products.

Reuse of water.

Zero discharge into the sea.



PRACTICE

ENERGY

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

ACTION

- **■** Decreasing consumption.
- Implementing ISO 50001 energy efficiency management system.
- Measuring Carbon Footprint

EXPECTED RESULTS

Compliance with regulations.

Decreased levels of consumption and generating savings.

Use of efficient systems.

Decreased GGE.



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.



PRACTICE ACTION ■ Measuring benthos and marine silt SEA Quality monitoring of water (SEAWATER column profiling **DESCRIPTION** Sediment sampling. ■ Water column sampling for component analysis.

EXPECTED RESULTS

Analysis of biodiversity.

Observing changes in the physicalchemical quality of the seawater



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.

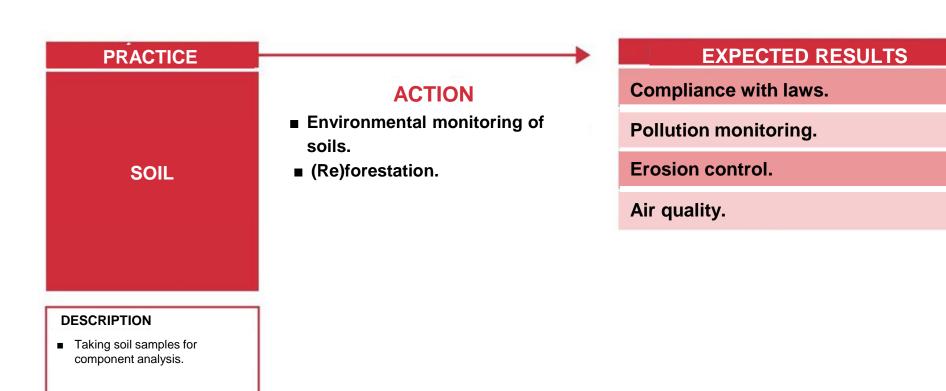
Residue sorting that goes into garbage dumps.

Outreach and awareness raising.

Less garbage and especially plastics.

Improvements to conditions of marine flora and fauna







INTERNATIONALLY RECOGNIZED ENVIRONMENTAL STANDARDS AND CERTIFICATIONS



NORMA ISO 14.001 ENVIRONMENTAL MANAGEMENT SYSTEM



Competition

(improves the image)



Competition (improves the image)



Costs Reduction (residue control and treatment)



Competition (improves the image)



Costs Reduction (residue control and treatment)



A Committed Organization



Competition (improves the 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



FACTORS THAT DRIVE THE IMPLEMENTATION AND CERTIFICATION IN A PORT.

Obtaining Competitive Advantages



Market and costomer requirements



FACTORS THAT DRIVE THE IMPLEMENTATION AND CERTIFICATION IN A PORT.

Obtaining Competitive Advantages



Market and customer requirements



Environmental awareness, surrounding community and society

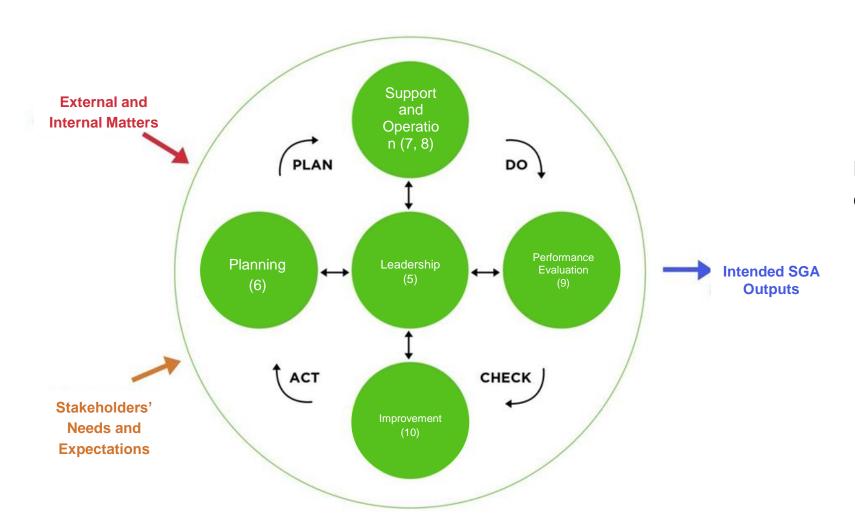


BENEFITS OF OBTAINING AN ISO 14.001:2015

- 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.



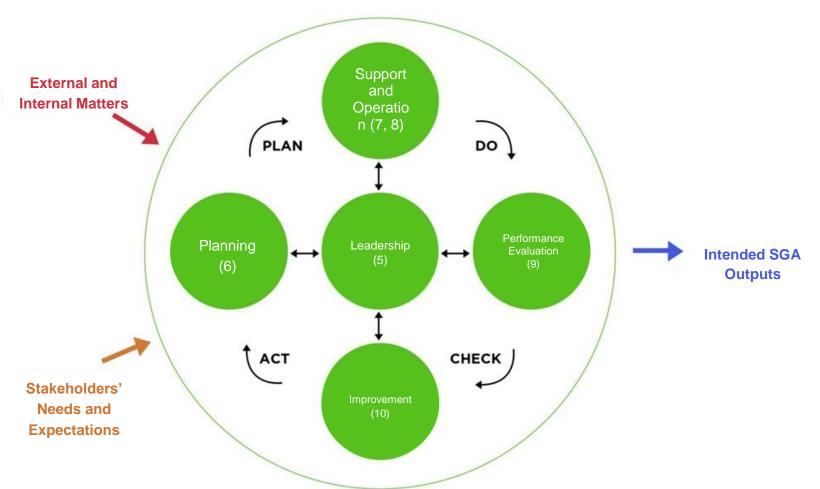
SCOPE OF THE EMS 14.001.



Plan: identification of environmental objectives and processes



SCOPE OF THE EMS 14.001.

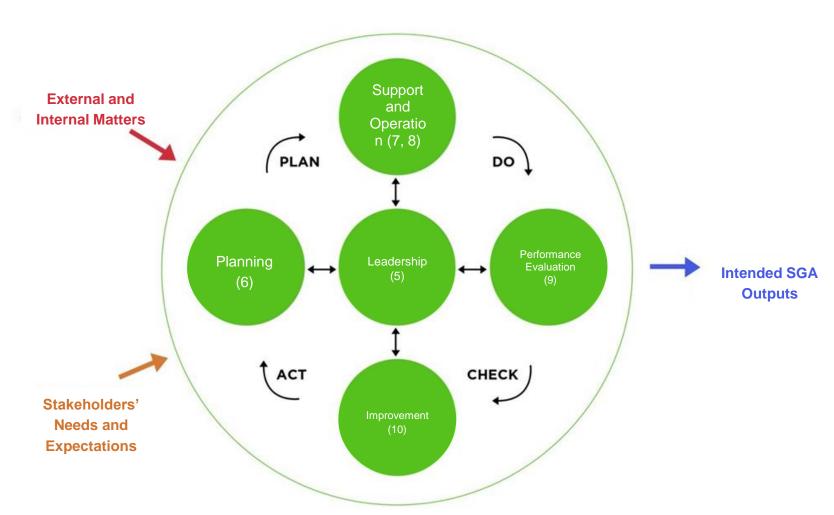


Plan: identification of environmental objectives and processes.

Do: actions to achieve improvements.



SCOPE OF THE EMS 14.001.



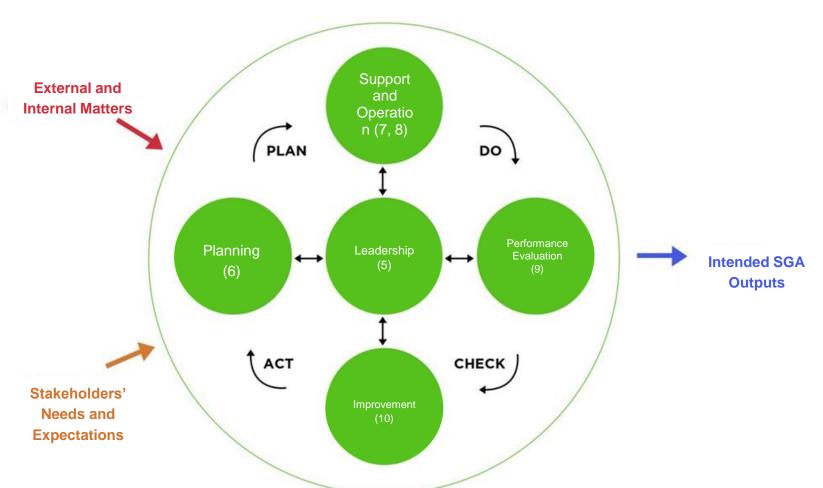
Plan: identification of environmental objectives and processes.

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.



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





	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			
COMMITMENT	Objectives and goals			
	Environmental Management Program			



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



	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.	
COMMITMENT	Objectives and goals	Communication.	Records.	
	Environmental Management Program	Documentation of Environmental Management System.		
		Control of Documentation.		
		Control of Operations.		
		Emergency Plans.		



	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.		

COMMITMENT



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**









Actions to address Risks

and

Opportunities

Environmental Aspects

Legal and Other Requirements

Action Planning

Environmental objectives and planning to achieve them

Environmental

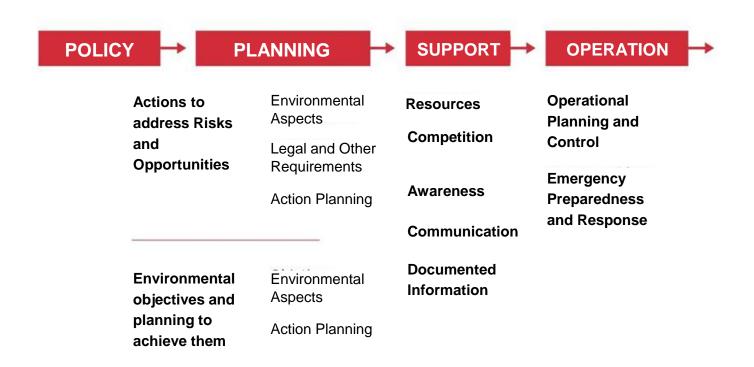
Aspects

Action Planning























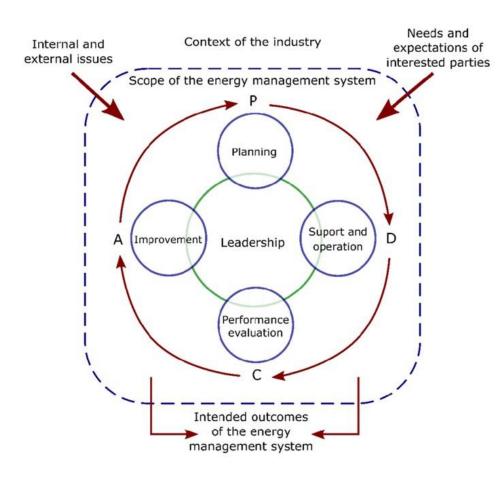
ISO 50.001 STANDARD ENERGY MANAGEMENT SYSTEM (EnMS)



BENEFITS OF IMPLEMENTING AN EnMS ARE:

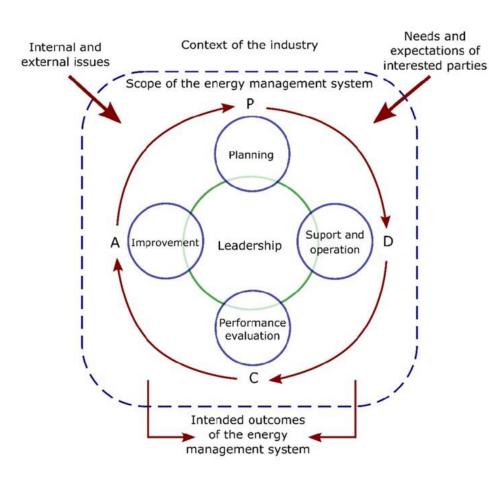
- Continuous improve its energy performance, increase its energy efficiency, and reduce its environmental impact.
- Actively manage energy use and costs and reduce energy costs.
- Reduce emissions without affecting the organization's own operations.
- Continuous improvement of <u>energy use factors</u>.
- Smart use of the organization's resources





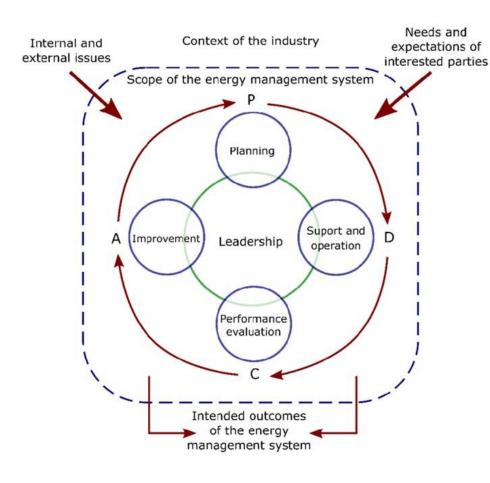
 Plan: understand the context of the organization, establish an energy policy and an energy management team.





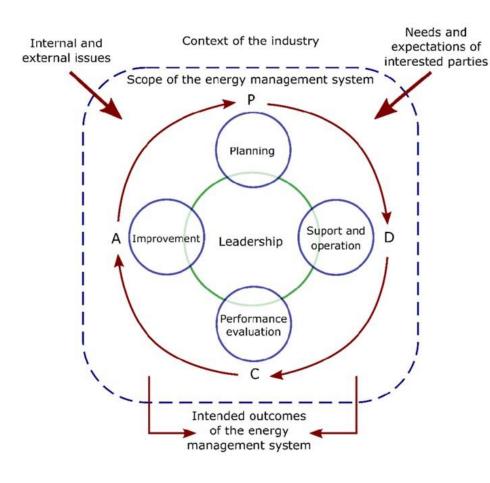
- Plan: understand the context of the organization, establish an energy policy and an energy management team.
- Do: implement the action plans, operational and maintenance controls, and communication.





- Plan: understand the context of the organization, establish an energy policy and an energy management team.
- Do: implement the action plans, operational and maintenance controls, and communication.
- Check: monitor, measure, analyze, evaluate, audit and conduct management review(s).





- Plan: understand the context of the organization, establish an energy policy and an energy management team.
- Do: implement the action plans, operational and maintenance controls, and communication.
- Check: monitor, measure, analyze, evaluate, audit and conduct management review(s).
- Act: take actions to address continually improve energy performance.



ISO 50.001:2018 IMPLEMENTATION AND CERTIFICATION





Planning

Support

Operation

Performance Evaluation

Improvement

Commitment upper management must have in motivating people, as this helps to reduce reluctance and improve energy performance

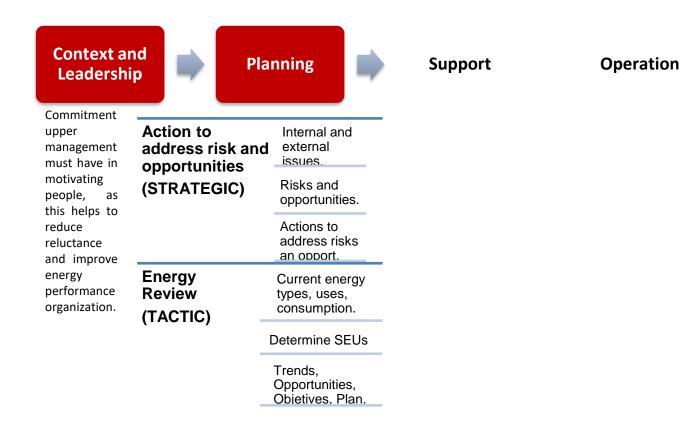
organization.



Improvement

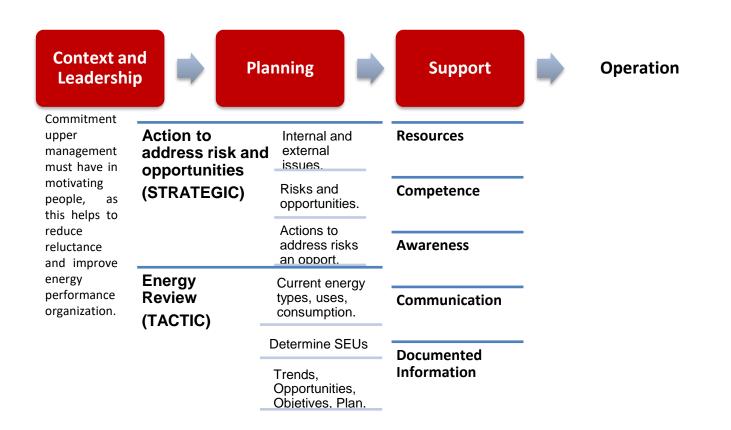
Performance

Evaluation





ISO 50.001:2018 IMPLEMENTATION AND CERTIFICATION

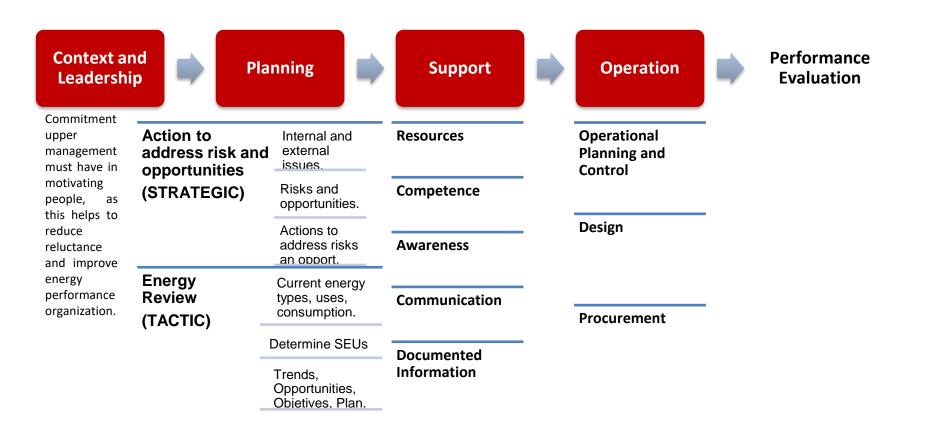


Performance Evaluation

Improvement

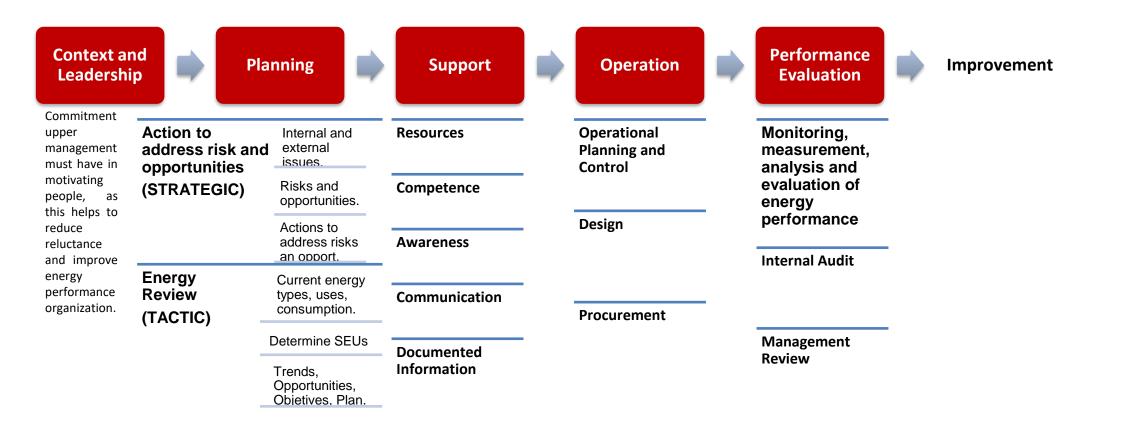


ISO 50.001:2018 IMPLEMENTATION AND CERTIFICATION

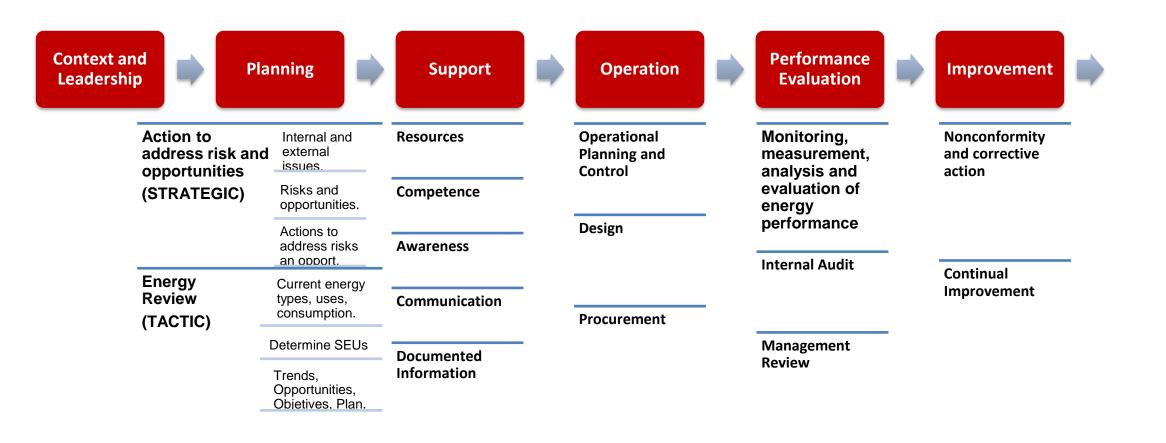


Improvement

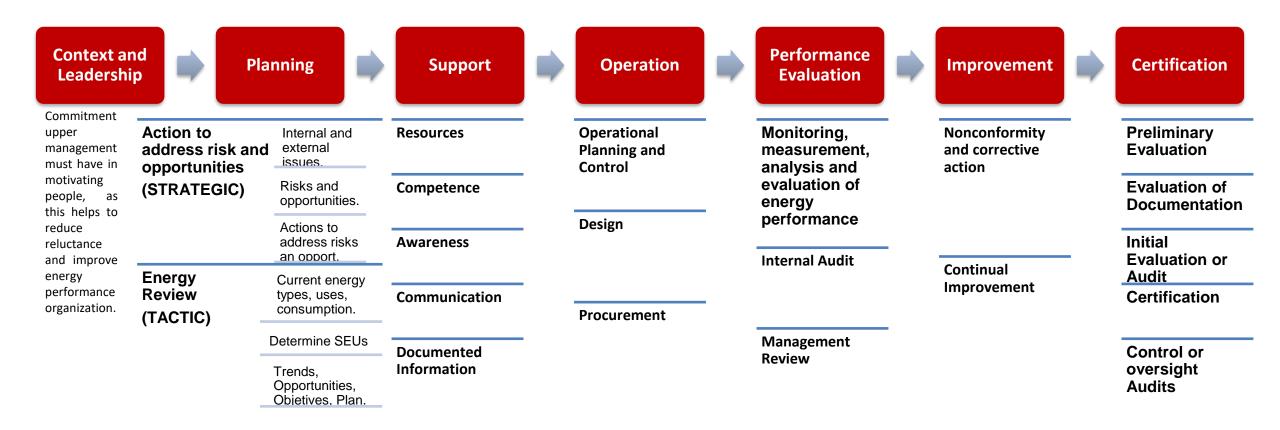














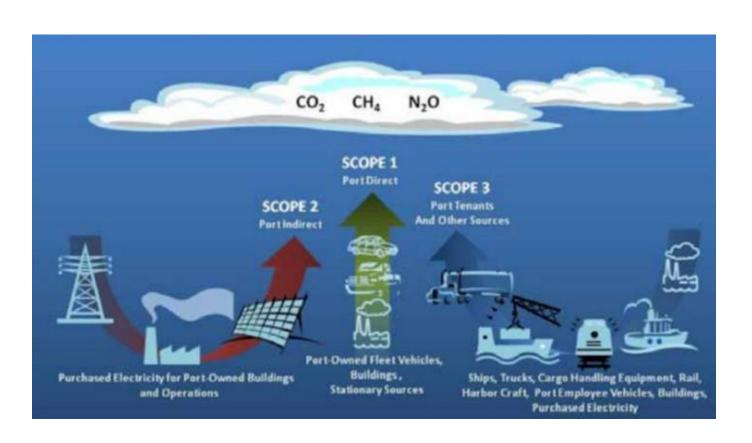


MEDICIÓN, CONTROL Y REDUCCIÓN DE GEI

- IAPH (International Association of Ports and Harbors): " World Port Sustainability Program (WPSP)" previously "World Port Climate Initiative (WPCI)"-, has a publication of a comprehensive guidance tool for identifying and quantifying the carbon footprint of ports.
- Carbon footprint in ports refers to GHG emissions (Greenhouse Gas emissions).



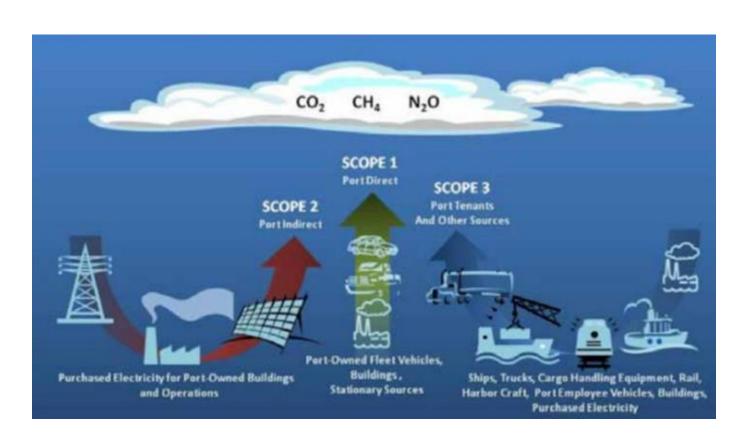
MEDICIÓN, CONTROL Y REDUCCIÓN DE GEI



Scope 1: direct emissions from sources owned or directly controlled by the entity.



MEDICIÓN, CONTROL Y REDUCCIÓN DE GEI

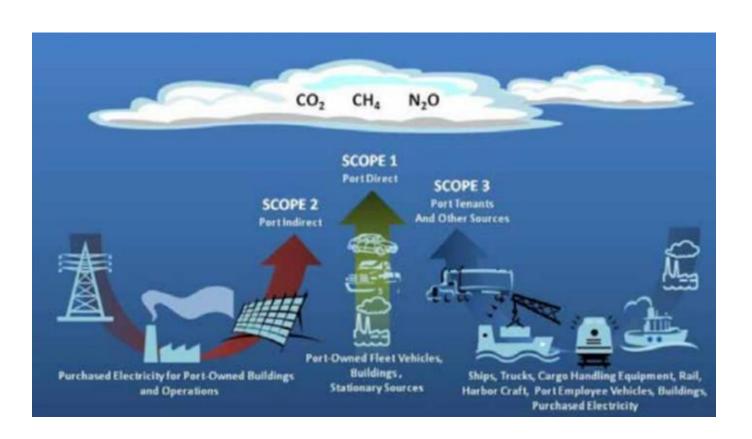


Scope 1: direct emissions from sources owned or directly controlled by the entity.

Scope 2: indirect emissions associated with the generation of electricity, heat, or steam purchased and consumed by the entity for its activities.



MEDICIÓN, CONTROL Y REDUCCIÓN DE GEI



Scope 1: direct emissions from sources owned or directly controlled by the entity.

Scope 2: indirect emissions associated with the generation of electricity, heat, or steam purchased and consumed by the entity for its activities.

Scope 3: Refers to other emissions from direct and indirect sources that occur in the entity's value chain.



EMAS (EcoManagement and Audit Scheme) ENVIRONMENTAL MANAGEMENT SYSTEM



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 are²:

- 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.



STAGES OF IMPLEMENTATION AND EMAS (III)³ CERTIFICATION



Identifying all environmental aspects that have a significant environmental impact

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



STAGES OF IMPLEMENTATION AND EMAS (III)³ CERTIFICATION



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.



STAGES OF IMPLEMENTATION AND EMAS (III)³ CERTIFICATION



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.

Drafting of a Environmental Statement

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



STAGES OF IMPLEMENTATION AND EMAS (III)³ CERTIFICATION



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 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.

VERIFICATION AND VALIDATION

Revision of the implementation of the ISO 14.001 Norm

Revision of the Environmental Statement

External audit compliance



STAGES OF IMPLEMENTATION AND EMAS (III)³ CERTIFICATION



Identifying all environmental aspects that have a significant environmental impact

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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.



ECOPORT-PERS (Port Environmental Review System) ENVIRONMENTAL MANAGEMENT SYSTEM



WHAT IS THE ENVIRONMENTAL MANAGEMENT SYSTEM ECOPORTS PERS⁴?

- 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 <u>www.ecoports.com</u> For ports and terminals out of (ECOSLC, ww.ecoslc.edu



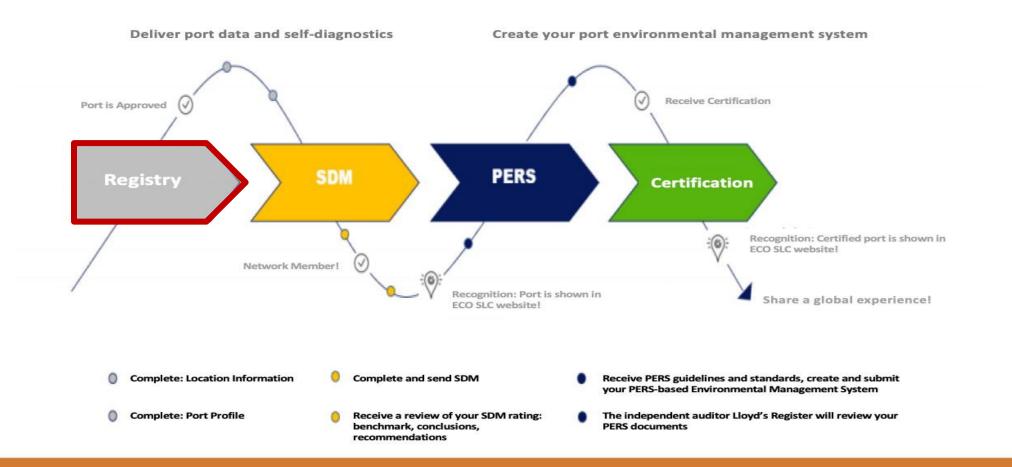
STEPS FOR ECOPORTS PERS CERTIFICATION

- 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.











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



	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?				01	89,8%	84,1%	15,9%
A.5	IF YES,Is the policy publicly available on the Port's Website?				02			
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?				О3	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?				04	89,8%	75,0%	25,0%













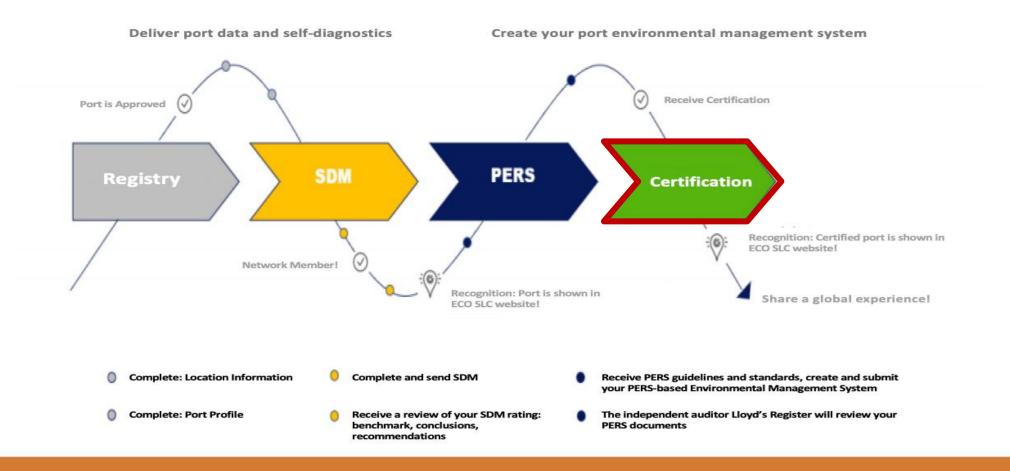
















1. REDUCTION OF WASTE, COSTS, AND INCREASED





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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



1. REDUCTION OF WASTE, COSTS, AND INCREASED



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 LATIN AMERICAN PORTS WITH INTERNATIONALLY RECOGNIZED ENVIRONMENTAL CERTIFICATIONS

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



- 1. Empresa Portuaria Antofagasta (Chile).
- 2. Grupo Puerto de Cartagena : Sociedad Portuaria Regional de Cartagena SPRC y Terminal de Contenedores de Cartagena CONTECAR (Colombia).
- 3. Autoridad Portuaria de Montevideo (Uruguay).
- 4. Administración Portuaria Integral de Lázaro Cárdenas (México).
- 5. Administración Portuaria Integral de Ensenada (México).
- 6. Administración Portuaria Integral de Dos Bocas (México).
- 7. Porto do Açu (Brasil).
- 8. Puerto de Bahía Blanca (Argentina).
- 9. Sociedad Portuaria Riverport S.A. (Colombia).
- 10. Andipuerto Guayaquil S.A. Terminal Portuario (Ecuador).

There are other ports that are also outstanding in the area of environmental management, such as **Sociedad Portuaria Santa Marta** (Colombia), **Puerto Ventanas** (Chile), **Tisur** (Perú), **DP World Callao**, **Posorja** (Ecuador) y **Caucedo** (Domincan Republic), **Puerto Cortes** filial de ICTSI (Honduras), APM **Puerto Moín** (Costa Rica), **Terminal Pacífico Sur** y **Terminal Puerto Arica** (Chile), they will be mentioned below in this presentation. (sustainability strategy).



SUSTAINABILITY INTERNATIONALLY STANDARDS, REPORTING GUIDELINES



GRI STANDARD (GUIDELINES) Global Reporting Initiative

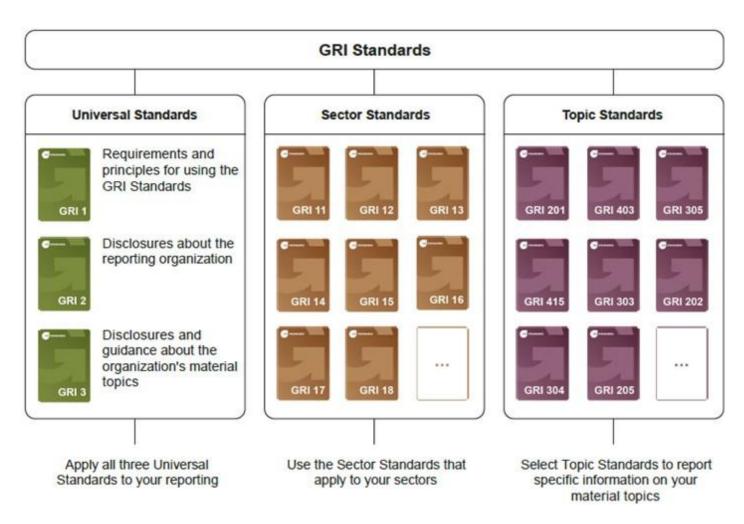
GLOBAL REPORTING INITIATIVE (GRI)



SUSTAINABILITY REPORTING GUIDELINES

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

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



GLOBAL REPORTING INITIATIVE (GRI)

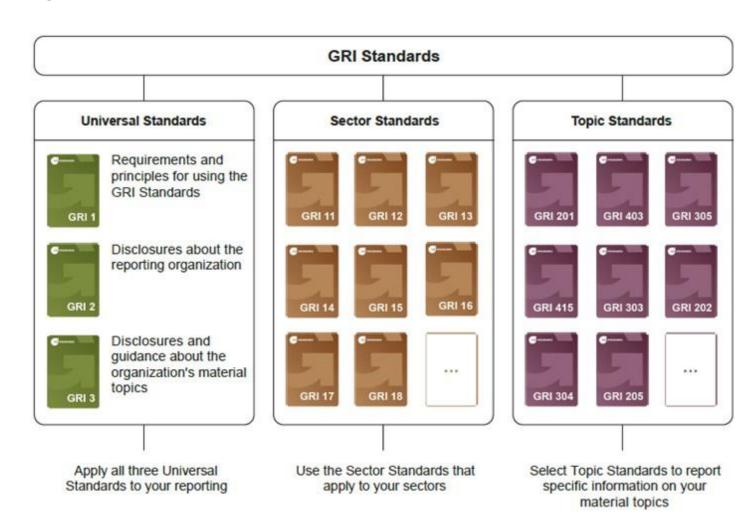


SUSTAINABILITY REPORTING GUIDELINES

In 2019, a new review process. This latest update came into effect reporting purposes in January 2023.

The GRI Standards are structured into three series: GRI Universal Standards, GRI Sector Standards, and GRI Topic Standards.

- GRI1-GRI2-GRI3: Requirements, disclosures and guidance about principles, organization and material topics..
- Sector Standard: provide information to the organization about its potential material topics.
- Estándares Temáticos: include content for the organization to present information about its specific impacts.



GLOBAL REPORTING INITIATIVE (GRI) SUSTAINABILITY REPORTING GUIDELINES



Key Concepts - Reporting principles - Reporting in accordance with the GRI Standard

A sustainability report is a document prepared by ports, based on "structured guidelines," that is aimed at the interested parties or stakeholders of the ports' area or sphere of influence, and contains relevant information about their economic, environmental, social, and corporate governance performance.

Preparation of Reports KEY CONCEPTS

IMPACT
MATERIAL TOPICS
DUE DILIGENCE
STAKEHOLDERS

GLOBAL REPORTING INITIATIVE (GRI)



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Preparation of Reports KEY CONCEPTS	Preparation of Reports REPORTING PRINCIPLES		
IMPACT MATERIAL TOPICS DUE DILIGENCE STAKEHOLDERS	ACCURACY BALANCE CLARITY COMPLETENESS COMPARABILITY SUSTAINABILITY CONTEXT TIMELINESS VERIFIABILITY		

GLOBAL REPORTING INITIATIVE (GRI)



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Preparation of Reports KEY CONCEPTS	Preparation of Reports REPORTING PRINCIPLES	Preparation of Reports REQUIREMENT (9)
IMPACT MATERIAL TOPICS DUE DILIGENCE STAKEHOLDERS	ACCURACY BALANCE CLARITY COMPLETENESS COMPARABILITY SUSTAINABILITY CONTEXT TIMELINESS VERIFIABILITY	REQ. 1: Apply the reporting principles. REQ. 2: Report the disclosures in GRI 2. REQ. 3: Determine material topics. REQ. 4: Report the disclosures in GRI 3. REQ. 5: Report disclosures GRI Topic Std REQ. 6: Provide reasons for omission. REQ. 7: Publish a GRI content index. REQ. 8: Provide a statement of use. REQ. 9: Notify GRI.



ESTÁNDAR SASB SUSTAINABILITY ACCOUNTING STANDARDS BOARD



SASB stands for "Sustainability Accounting Standards Board": SASB enable organizations to provide information on sustainability-related risks and opportunities that could reasonably affect their financial/economic growth stability (cash flow) and access to credit or financing in the short, medium, or long term.

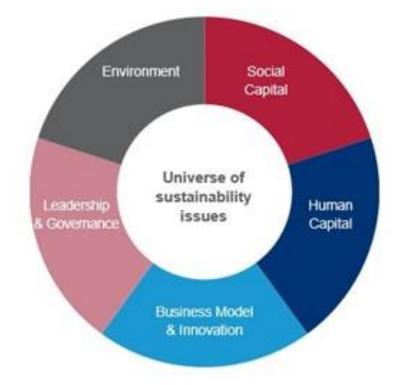
- In the SASB regulatory standard, sustainability topics are grouped into five dimensions: environment, human capital, social capital, business model and innovation, and leadership and governance.
- SASB identifies the most relevant sustainability aspects in 77 industry sectors, which are grouped into 11 types, such as i) consumer goods, ii) extractives and minerals, iii) finance, iv) food and beverages, v) healthcare, vi) infrastructure, vii) renewable resources and alternative energies, viii) resource transformation, ix) services, x) technology and communications, and xi) transportation.
- In detail, each standard includes the following: Disclosure topics + Accounting metrics + Technical protocols + Activity metrics.



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Environment

- GHG Emissions
- · Air Quality
- · Energy Management
- Water & Wastewater Management
- · Waste & Hazardous Materials Management
- · Ecological Impacts

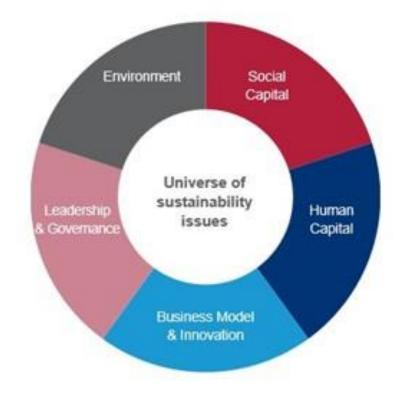




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Environment

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- · Ecological Impacts



Human Capital

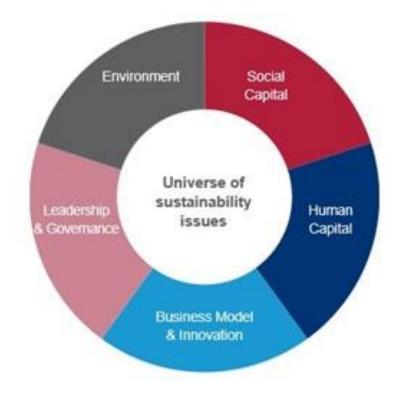
- Labor Practices
- · Employee Health & Safety
- Employee Engagement, Diversity & Inclusion



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Human Capital

- Labor Practices
- · Employee Health & Safety
- Employee Engagement, Diversity & Inclusion

Business Model & Innovation

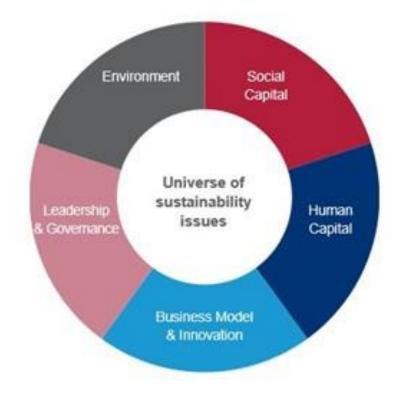
- Product Design & Lifecycle Management
- · Business Model Resilience
- · Supply Chain Management
- Materials Sourcing & Efficiency
- Physical Impacts of Climate Change



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Human Capital

- Labor Practices
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Business Model & Innovation

- Product Design & Lifecycle Management
- · Business Model Resilience
- · Supply Chain Management
- · Materials Sourcing & Efficiency
- · Physical Impacts of Climate Change

Leadership & Governance

- · Business Ethics
- Competitive Behavior
- Management of the Legal & Regulatory Environment
- Critical Incident Risk Management
- Systemic Risk Management



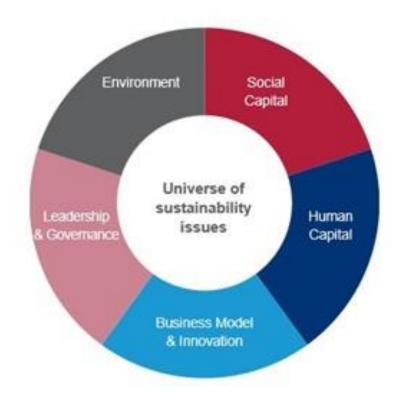
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Environment

- GHG Emissions
- Air Quality
- · Energy Management
- Water & Wastewater Management
- · Waste & Hazardous Materials Management
- · Ecological Impacts

Social Capital

- Human Rights & Community Relations
- Customer Privacy
- Data Security
- Access & Affordability
- Product Quality & Safety
- · Customer Welfare
- · Selling Practices & Product Labeling



Human Capital

- Labor Practices
- · Employee Health & Safety
- Employee Engagement, Diversity & Inclusion

Business Model & Innovation

- Product Design & Lifecycle Management
- · Business Model Resilience
- · Supply Chain Management
- · Materials Sourcing & Efficiency
- · Physical Impacts of Climate Change

Leadership & Governance

- · Business Ethics
- · Competitive Behavior
- Management of the Legal & Regulatory Environment
- Critical Incident Risk Management
- Systemic Risk Management



ESTÁNDAR ESG ENVIRONMENTAL, SOCIAL & GOVERNANCE



Environmental, Social & Governance Standard: ESG standards stems from the need to define an information system and frameworks that serve as a reference for companies to achieve and report on the

fulfillment of sustainable development goals (SDGs).

 Environmental criteria: Activities carried out by the organization that have a positive impact on the environment.





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• Social criteria, which mainly examine actions related to working conditions and respect for human rights.

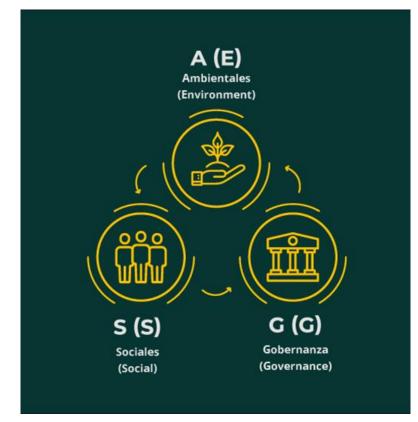




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- Environmental criteria: Activities carried out by the organization that have a positive impact on the environment.
- Social criteria, which mainly examine actions related to working conditions and respect for human rights.
- Corporate governance, which refers to issues related to the corporate governance of organizations, their corporate quality, culture, and management processes, among others.



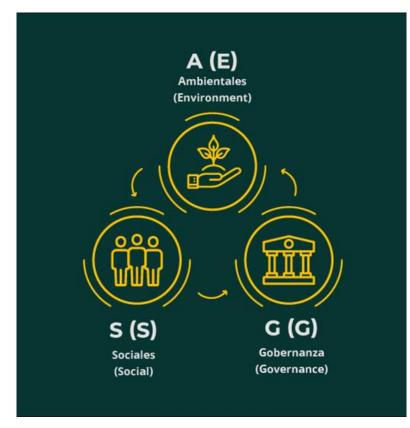


Environmental, Social & Governance Standard: ESG standards stems from the need to define an information system and frameworks that serve as a reference for companies to achieve and report on the

fulfillment of sustainable development goals (SDGs).

A well-defined ESG/ASG policy is no longer optional, but a necessity, some reasons for this are:

- Risk management +
- Competitive advantage +
- Regulatory compliance +
- Stakeholder expectations +
- Long-term value creation +
- Access to capital +
- Brand reputation).





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

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



INTERNAL BENEFITS

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

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

EXTERNAL BENEFITS

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



SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN



AMERICAN PORTS

- DP World Callao (Perú) y otros terminales del grupo: DP World Posorja (Ecuador) y DP World Caucedo (República Dominicana).
- **2. Puerto Cortes** (Honduras).
- 3. Sociedad Portuaria Santa Marta SPSM (Colombia).
- 4. Terminal Pacífico Sur S.A. TPS (Chile).
- **5. Puerto Ventanas S.A.** PVSA (Chile).
- Terminal Internacional del Sur Tisur (Perú).
- 7. Terminal Puerto Arica TPA (Chile).
- 8. Grupo Puerto de Cartagena: Sociedad Portuaria Regional de Cartagena Terminal de Contenedores de Cartagena (Colombia).
- 9. Empresa Portuaria Antofagasta (Chile).
- 10. Puerto de Moín Limón (Costa Rica).

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS 1. REPORT STYLE AND STRUCTURE



- Some reports are released with economic outcomes or financial statements.
- There are other port terminals that do not publish sustainability reports directly because, as they are part of a corporate organization, it is the latter that is responsible for consolidating the sustainable management of the group of companies.
- The 2024 integrated reports of Puerto Ventanas, Empresa Portuaria Antofagasta, and Empresa Portuaria Arica, Terminal Puerto Arica follow the guidelines of the IIRC (International Integrated Reporting Council) Integrated Reporting model, in accordance with International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB).
- The reports from DP World Callao (2024), Terminal Pacífico Sur (2024), and Puerto Cortés (through OPC Operadora Portuaria Centroamericana, a subsidiary of ICTSI International Container Terminal Services Inc.) have been prepared in accordance with the Global Reporting Initiative (GRI) Standards. Terminal Pacífico Sur also includes General Standard No. 461 of the Chilean Financial Market Commission (CMF).

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN PORTS



2. EVOLUTION OF REPORTING

- Several ports publish sustainability reports, while others publish Environmental Reports.
- Puerto Ventanas highlights the systematic work to strengthen its ties with the local community.
- Terminal Puerto Arica TPA | Terminal Pacífico Sur TPS, annual integrated GRI reports.
- Tisur has prepared environmental reports, but no information is available on new reports.
- DP World Callao: GRI methodology. In 2022-2023, DP World Callao (DPWC) incorporated DP World Logistics (DPWL).

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN 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.
- All reports have a section to communicate aspects about the persons working under the control of the organization (staff size, diversity -by age range, seniority, gender, among other traits-, equality of remuneration, labor practices and decent work.
- In some reports, the port company's commitment to the occupational health and safety of its workers is explained and, for that purpose, they report on indicators of accidents and their evolution over time.
- A notable aspect of some reports is the incorporation or alignment with guiding principles such as the SDGs - United Nations Sustainable Development Goals.
- Management and development of innovation culture (PVSA and TPA).

SUCCESSFUL EXPERIENCES OF SUSTAINABILITY REPORTING IN LATIN AMERICAN 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

- ISO 14.001:2015 Environmental Management System certified | Ecoports.
- Energy efficiency policies (ISO 50.001).
- Analysis of CO₂ emissions, materials consumption, fuel consumption, electrical energy consumption, water consumption solid and liquid waste treatment, and biodiversity.