



VI JORNADAS DE INNOVACIÓN EN EL
CLÚSTER PORTUARIO

SPANISH PORT SYSTEM SUSTAINABILITY

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SUSTAINABILITY: DEFINITIONS

- **Sustainable development**: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland: our common future)
- **Sustainability**: Ability to maintain continuity in the long term of human activities in its economic, social, institutional and environmental aspect (RSE UNE 165010)
- **Corporate Social Responsibility**: The voluntary integration by companies of social and environmental concerns in their business operations and in their interaction with their stakeholders. (Communication from the Commission COM (2002) 347 final)

SUSTAINABILITY: VALUE CREATION AND STAKEHOLDER

Stakeholder of an organization or company: Set of people, groups, activities or institutions that are affected or influenced by the activities of the agency or company, who in turn can influence the development and performance of the activities or functions of this.



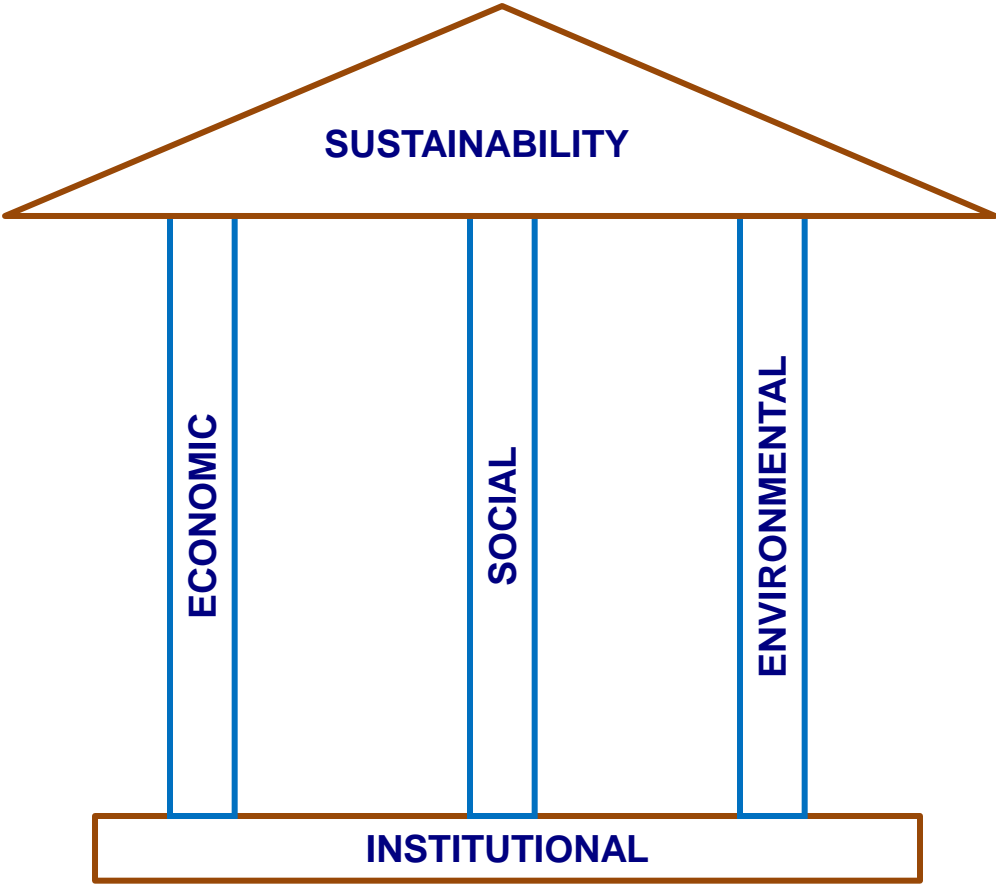
Sustainability and Stakeholders: The sustainability of an activity is closely linked to the ability of that business to deliver value to all stakeholders. Where value contribution is not limited to the provision of economic value.



SUSTAINABILITY. DIMENSIONS OF SUSTAINABILITY

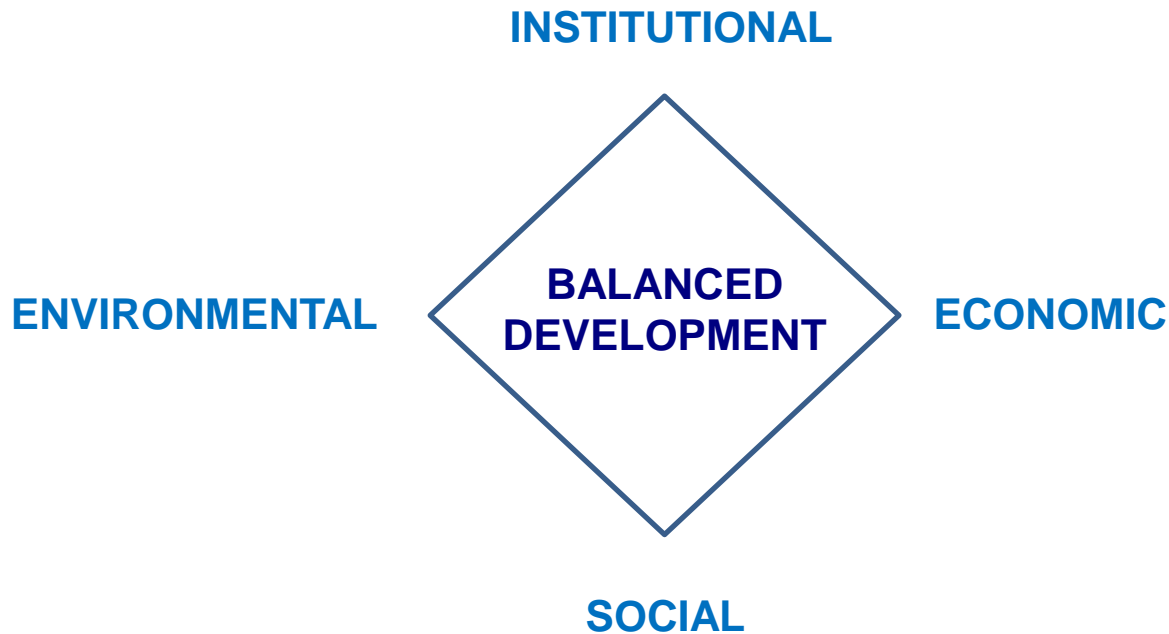
- **Economy**: Achieving economic viability and long-term, contributing to the socioeconomic development of the local environment.
- **Environmental**: Protect natural capital, optimizing natural resource management within a framework of renewal thereof.
- **Social**: To contribute to economic and human development of people within a framework of respect for the integrity of these and participation in decision-making.
- **Institutional**: Ensure transparent and independent government schemas, whose decisions are carried out according to objective criteria, in a framework that would ensure the development of the above dimensions.

SUSTAINABILITY. DIMENSIONS OF SUSTAINABILITY

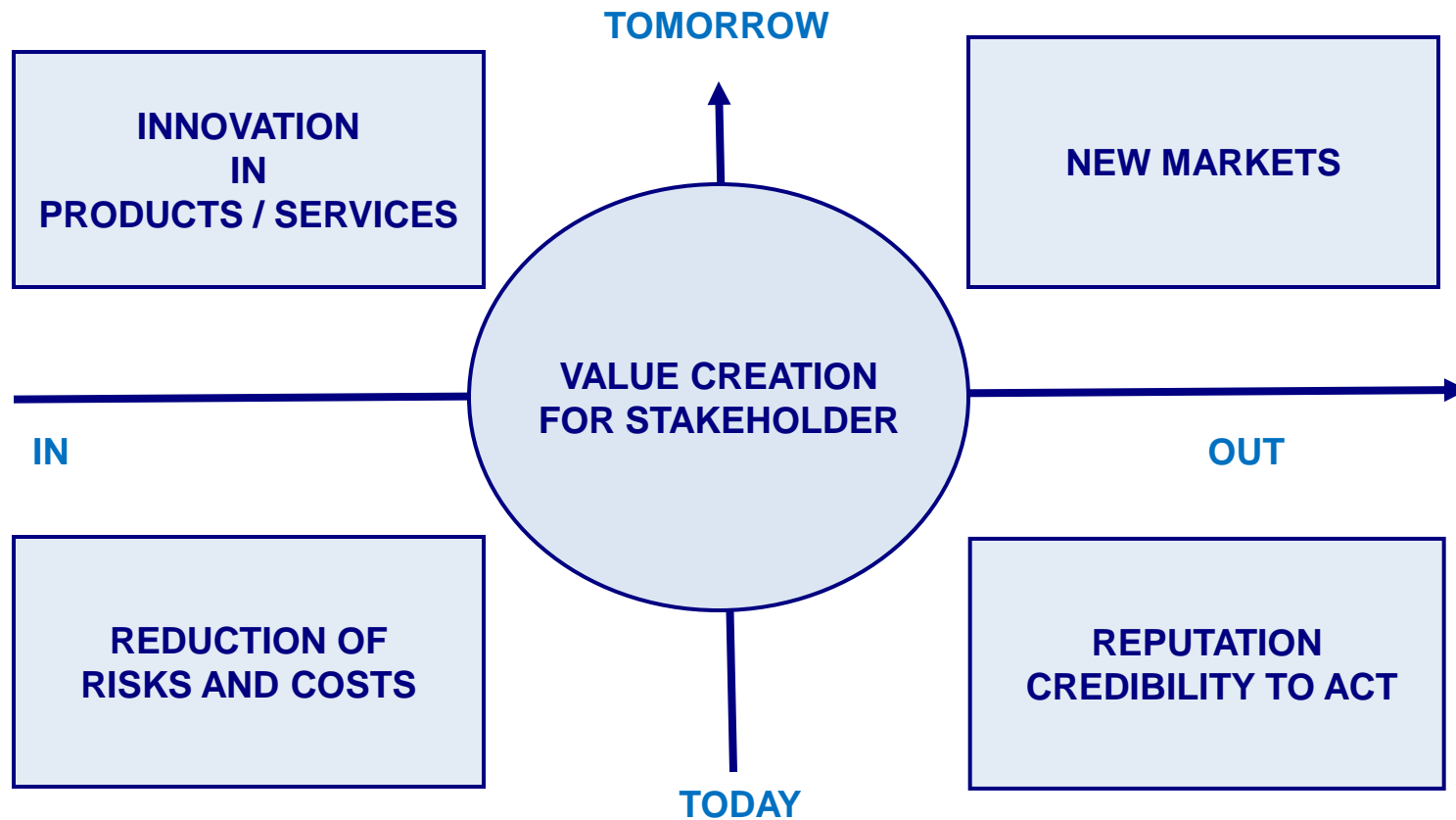


SUSTAINABILITY. DIMENSIONS OF SUSTAINABILITY

Sustainable management of a company: It is the analysis of the effect of its functions and activities in all dimensions of sustainability in order to achieve a balanced development of all aspects.



SUSTAINABILITY. CREATING SUSTAINABLE VALUE





SUSTAINABILITY: EUROPEAN PORT POLICY COMMUNICATION (2007)

- **Enhancing maritime transport, as the most sustainable**
- **Integrate port development in local planning, promoting harmony between port development and environment.**
- **Promote dialogue of stakeholders in planning and management tools (emphasis on stakeholder / Port Community).**
- **Increasing efficiency. Defining indicators to assess the performance per unit of installed area.**
- **Improve access and transport interchange. Defining indicators for the intermodal transport chain.**

SUSTAINABILITY: EUROPEAN PORT POLICY COMMUNICATION

- **Increase operational capacity, while respecting the environment. Definition of environmental indicators.**
- **Improve service quality and risk labor prevention through training policies.**
- **To include, in the port management, the principles of transparency and free competition.**

CONCLUSION: The communication states the need of introducing the concept of sustainability in ports management

LAW OF PORTS AND SUSTAINABILITY . ECONOMIC SELF-SUFFICIENCY

- **Economic self-sufficiency and profitability.** It reinforces the principle of economic self-sufficiency of the Port Authorities and sets a minimum profitability for the entire port system.
- **Progress in the Land-Lord model.** Providing incentives to attract private investment
- **Enhance maritime container traffic.** Apply rate reductions in order to improve competitiveness and specialization of Spanish ports in this type of traffic.

LAW OF PORTS AND SUSTAINABILITY. **SUSTAINABLE MANAGEMENT**

- **Sustainability reports.** Annual business plans must be accompanied by sustainability reports that will:
 - **Manage:** Integrating institutional, economic, social and environmental issues in port planning
 - **Communicate:** Be a tool for information exchange and dialogue with stake-holders of the port.
- **Regulating services.** Companies operating in the port must meet a set of conditions aimed at ensuring the sustainability of their business.

LAW OF PORTS AND SUSTAINABILITY. SUSTAINABLE MOBILITY OF GOODS

- **Development short sea shipping:** Establishes economic incentives in order to promote short sea shipping.
- **Boosting railway:** Establishes several measures to encourage modal shift between shipping and rail transport.

LAW OF PORTS AND SUSTAINABILITY: **QUALITY OF SERVICE**

- **Boosting to improved performance and service quality**
 - **Economic incentives for operators that meet specific conditions to improve the Quality of service provided.**
 - **Economic incentives when the port operator exceeded, by more than 30%, the minimum levels of productivity required.**
 - **In contractual terms are included commitments to overcome minimum performance benchmark**

LAW OF PORTS AND SUSTAINABILITY: GOOD PRACTICES

- Promoting good environmental practices: economic incentives for those operators that sign an agreement with the port authority to improve the environmental efficiency of the operation.
- Improving the environmental performance of the equipment. extensions of the concession period if the operator carries out investments that are "useful in improving the environmental quality of port operations."

LEY DE PUERTOS Y SOSTENIBILIDAD. **CONDICIONES AMBIENTALES**

- **Environmental conditions in services**: It is established the need for environmental conditions in service specifications. It also requires the operator to cooperate with the Port Authority on matters related to safety, rescue, pollution control, environmental protection, emergency and fire fighting.
- **Environmental conditions in concessions**: In the assessment of tenders submitted in contests for the granting of concessions, it is taken into account the environmental measures proposed by the bidder. It also provides that the Port Authority may make a review of conditions for reasons connected with the protection of the environment.

MEMORIAS DE SOSTENIBILIDAD. LEGAL FRAMEWORK

The law of Spanish ports state:

"The draft Business Plan will be accompanied by a Sustainability Report that will be carried out according to the methodology developed by Puertos del Estado"



SUSTAINABILITY REPORTS. GOALS

EXTERNAL COMMUNICATION:

Report transparently on the strategies, commitments and progress of the Port Authority in relation to the interests of the social and economic environment with which they interact

INTERNAL MANAGEMENT:

Support the development of the business plans through a comprehensive diagnosis of the risks and opportunities related to economic, social and environmental matters

SUSTAINABILITY REPORTS. **METHODOLOGY**

The methodology used for carrying out the sustainability reports of the Port Authority is based on GRI (Global Reporting Initiative), however this standard has been adapted to the specific characteristics of the port system

- **indicators related to the institutional commitment of the Port Authority.**
- **Indicators that measure the economic and financial sustainability of the Port Authorities**
- **Indicators aimed at providing information about the port community**

SUSTAINABILITY REPORTS. ECONOMIC DIMENSION

- **It is analyzed the state on issues such as**
 - **Possible sources of economic risk.**
 - **Role of the port within the socio-economic development of their surroundings.**
- **Indicators are defined to provide information about:**
 - **Financial stability**
 - **Efficient use of assets**
 - **Investment structure**
 - **Economic and social impact of the activity**

SUSTAINABILITY REPORTS. SOCIAL DIMENSION

- **It is analyzed the state on issues such as**
 - **Contribution to social development**
 - **Integration of workers in the company**
- **Indicators are defined to provide information about:**
 - **Gender equality**
 - **Training and knowledge management**
 - **Labor risk prevention**
 - **Participation in decision making**

SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION

- **It is analyzed the state on issues such as**
 - **Main sources of environmental impact**
 - **Actions taken to improve environmental performance.**
- **Indicators are defined to provide information about:**
 - **Environmental management and financial resources dedicated**
 - **Environmental quality**
 - **Efficient use of natural resources**
 - **Degree of implementation of environmental management systems**

SUSTAINABILITY REPORTS. INSTITUCIONAL DIMENSION

- It is analyzed the state on issues such as
 - Actions and resources mobilized to ensure progress in the three previous dimensions.
 - Actions taken to ensure the functionality of the infrastructure and services provided by the port.
- Indicators are defined to provide information about:
 - Government transparency and objectivity.
 - Infrastructure capacity.
 - Private investment and Service quality.
 - Innovation.
 - Sustainable mobility of goods

SUSTAINABILITY REPORTS. REQUIREMENTS FOR INDICATORS

- Draw an overall picture of the sustainability strategy of the port system
- Trace the evolution of the sustainability policy of each Port Authority
- To report on the relations of the Port Authority with its stakeholders
- Allowing comparison between ports and suggest areas for improvement
- They are verifiable



SUSTAINABILITY REPORTS: TYPES OF INDICATORS

PRESSURE: Inform about the pressures that affect each of the dimensions

ESTATE: System status report. Assess the effect of both, the pressures acting and the implemented responses

RESPONSE: They report about the measures introduced to respond to the pressures



SUSTAINABILITY REPORTS: TYPES OF INDICATORS

PRESSURE: Traffic volume measures the pressure on infrastructure

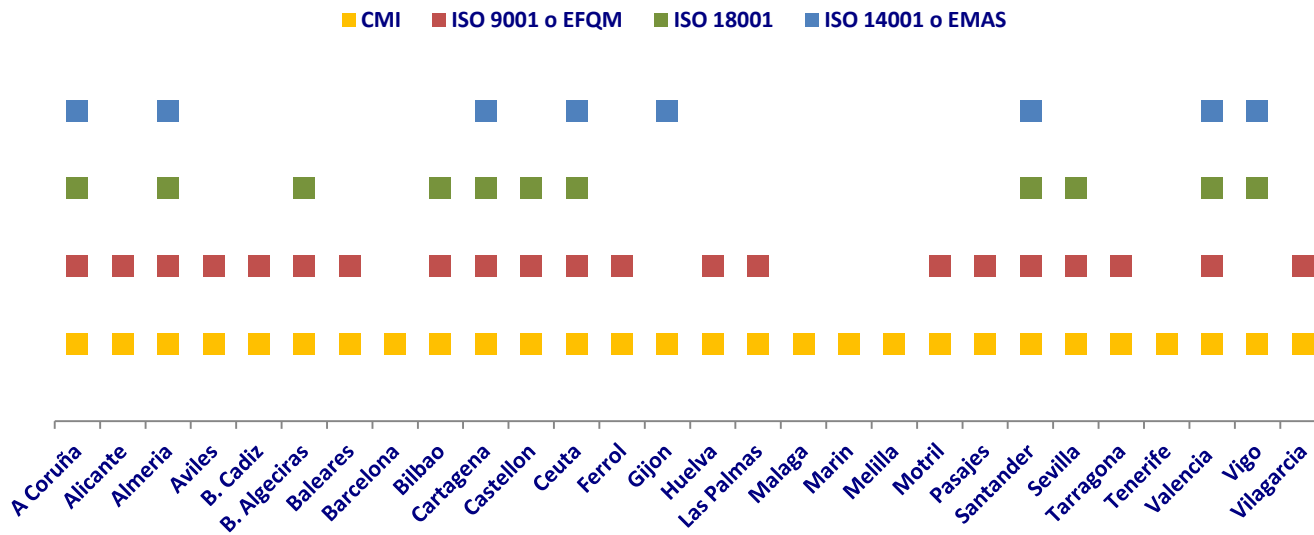
ESTATE: Traffic volume moved per square meter measures the level of use of the infrastructure.

RESPONSE: Investment in higher-performance equipment measure the effort to improve infrastructure capacity.

SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

MANAGEMENT. What are we doing to make objective decisions?

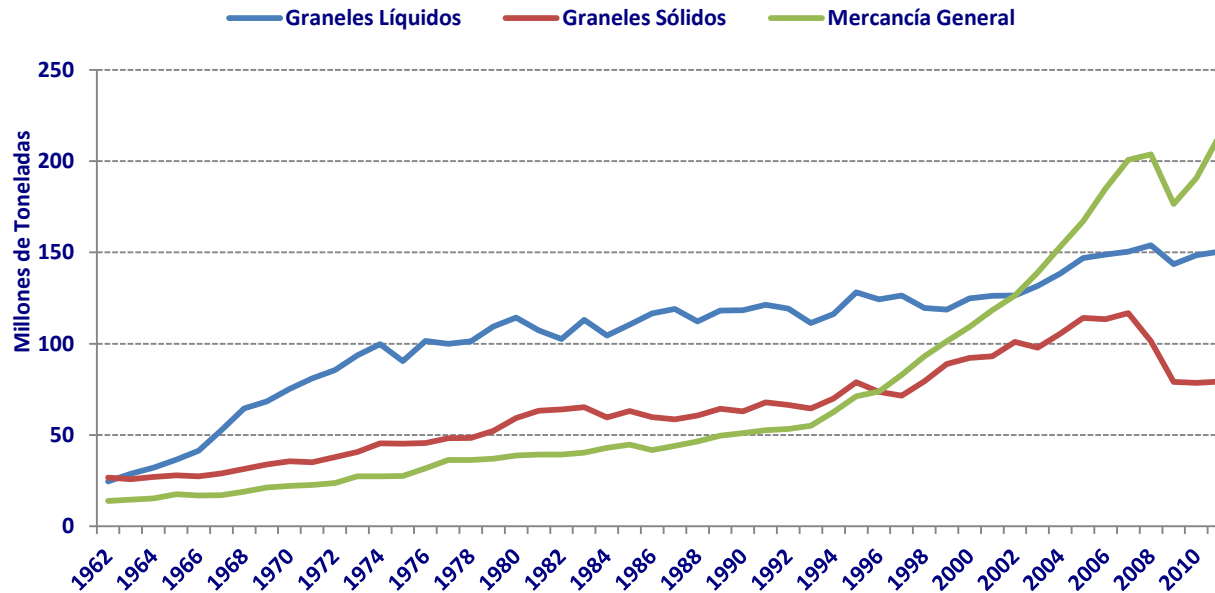
Implantación de metodologías de apoyo a la toma de decisiones y de sistemas de gestión de calidad en las Autoridades Portuarias en 2010



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

INFRAESTRUCTURE. Are we adapting our infrastructure capacity to the demand?

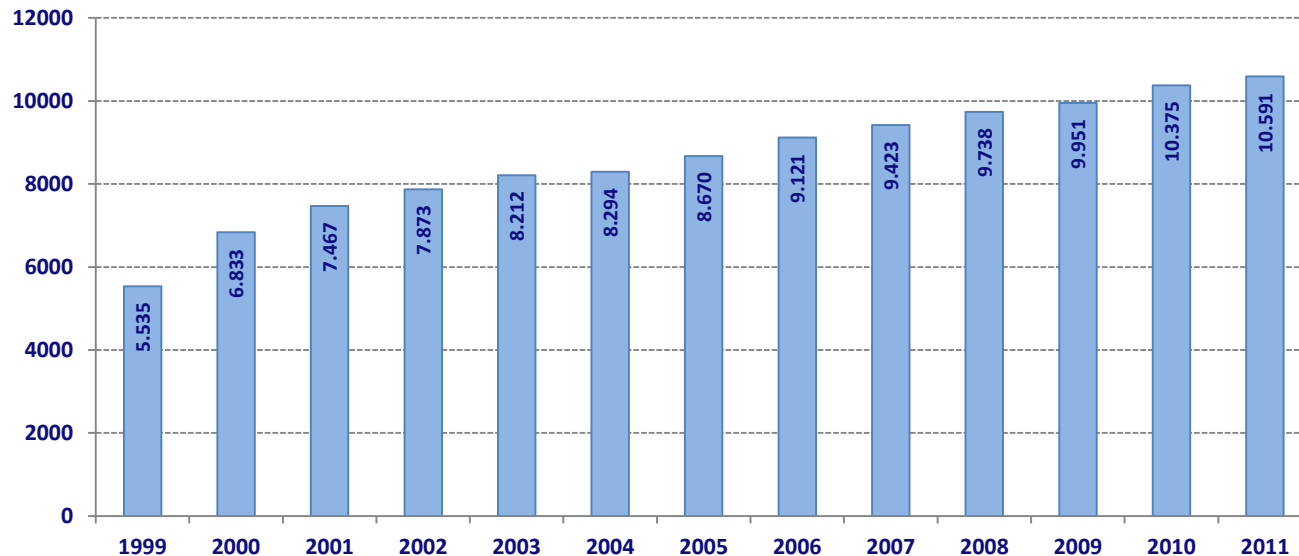
EVOLUTION OF THE TRAFFIC OF GOODS



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

INFRAESTRUCTURE. Are we adapting our infrastructure capacity to the demand?

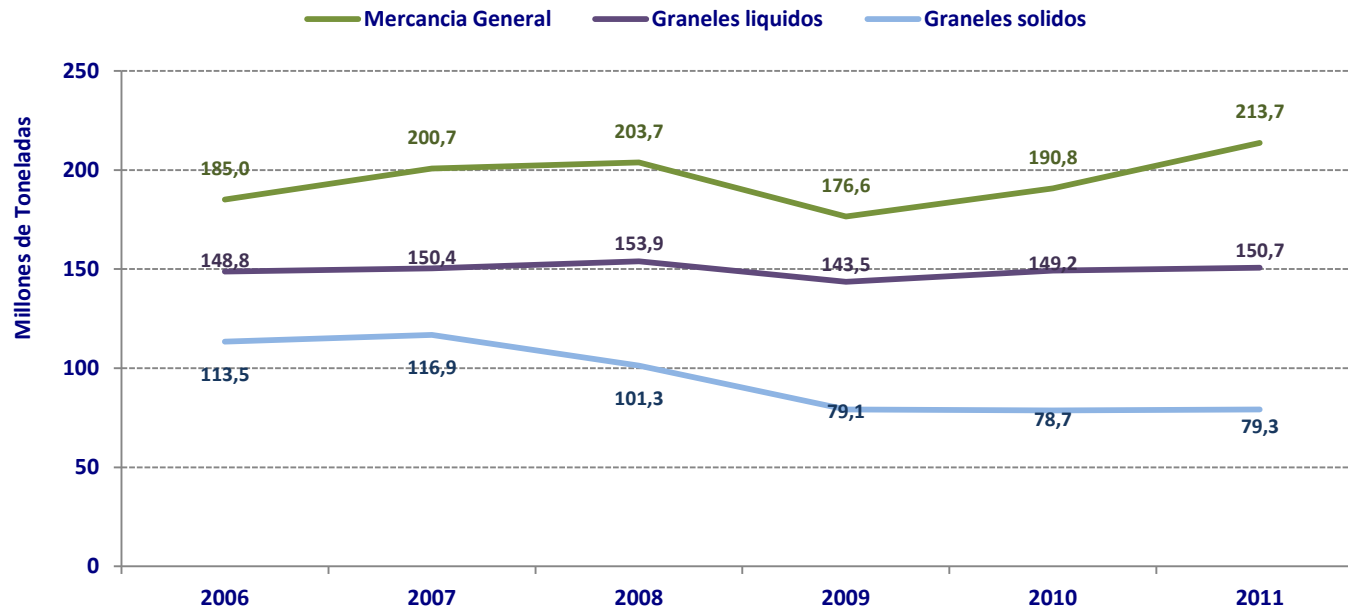
EVOLUTION OF PORT SURFACE



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

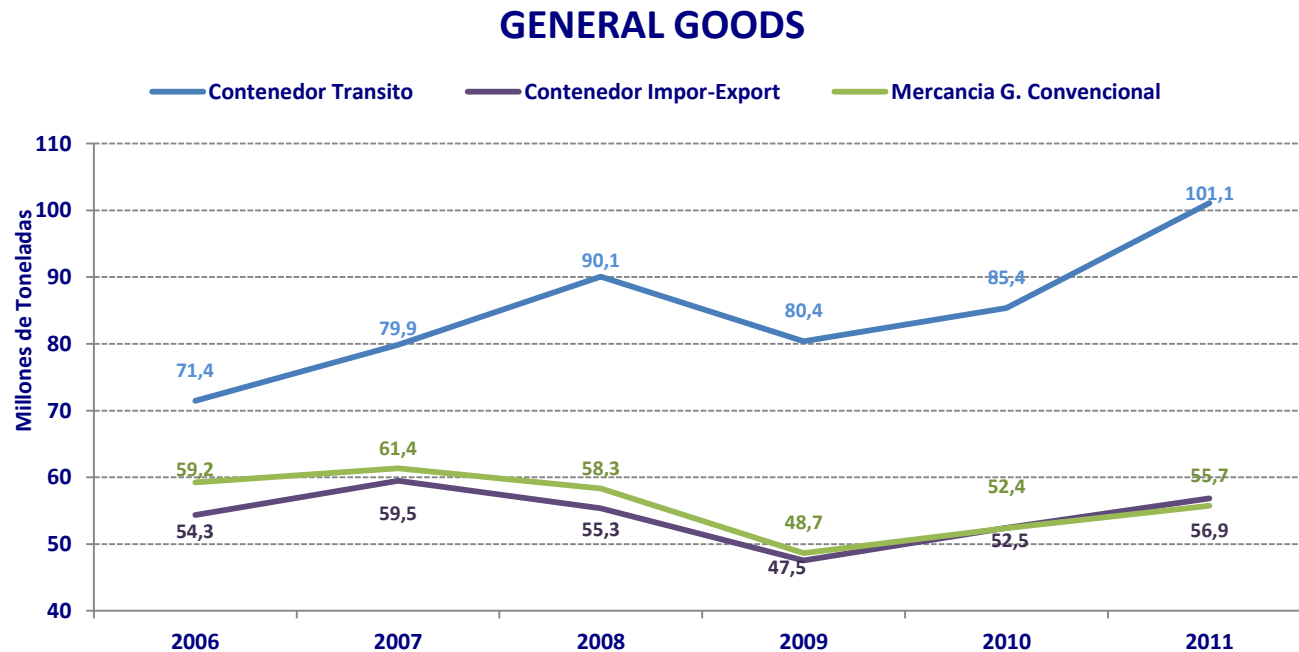
SERVED MARKET: What is the evolution of the traffic of goods?

TRAFFIC EVOLUTION BY KIND OF GOODS.



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

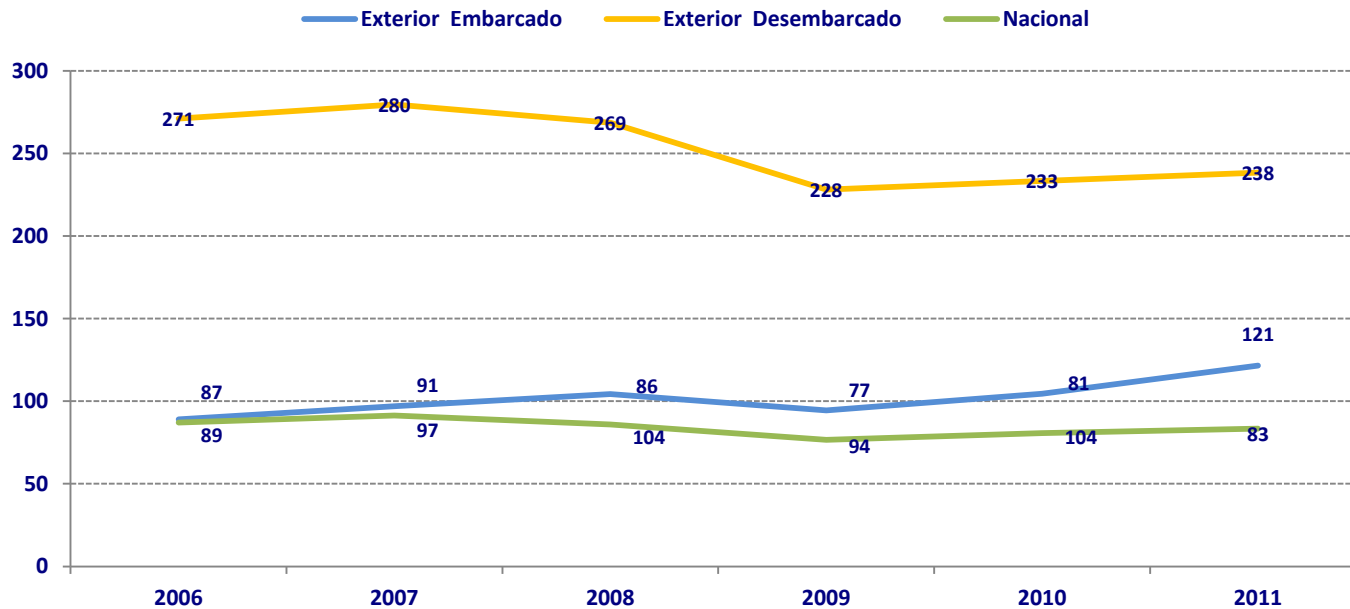
SERVED MARKET: What is the evolution of the traffic of goods?



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

SERVED MARKET: How much comes out?

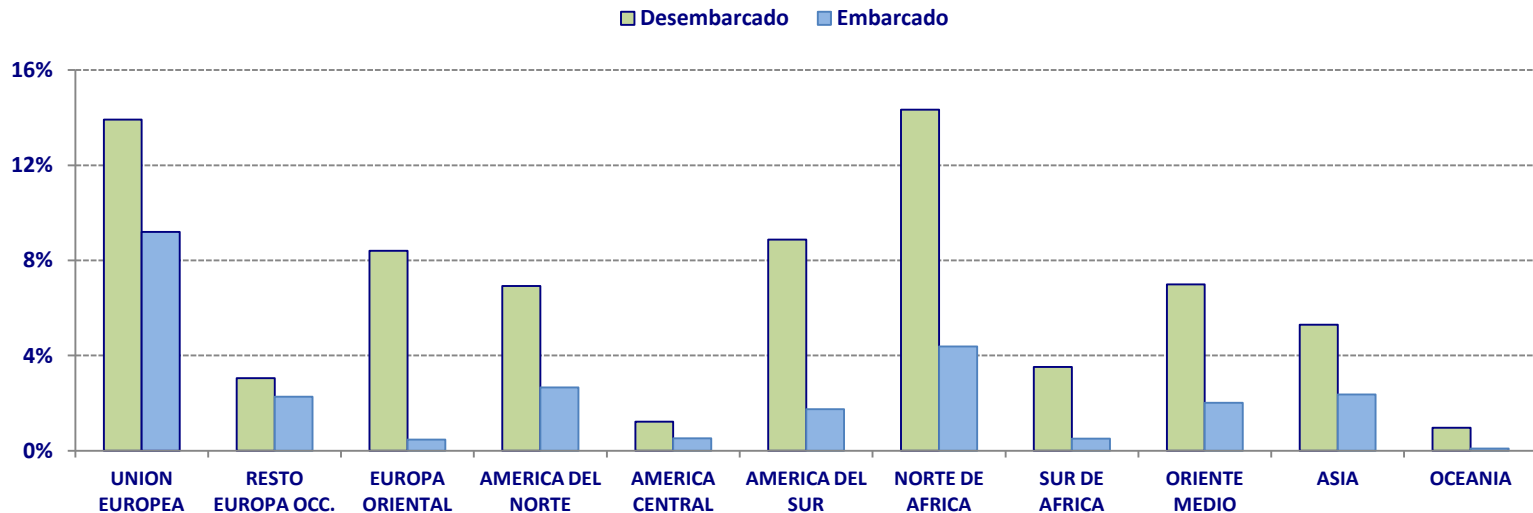
FOREIGN TRAFFIC EVOLUTION



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

SERVED MARKET: What are the origins and destinations of the goods?

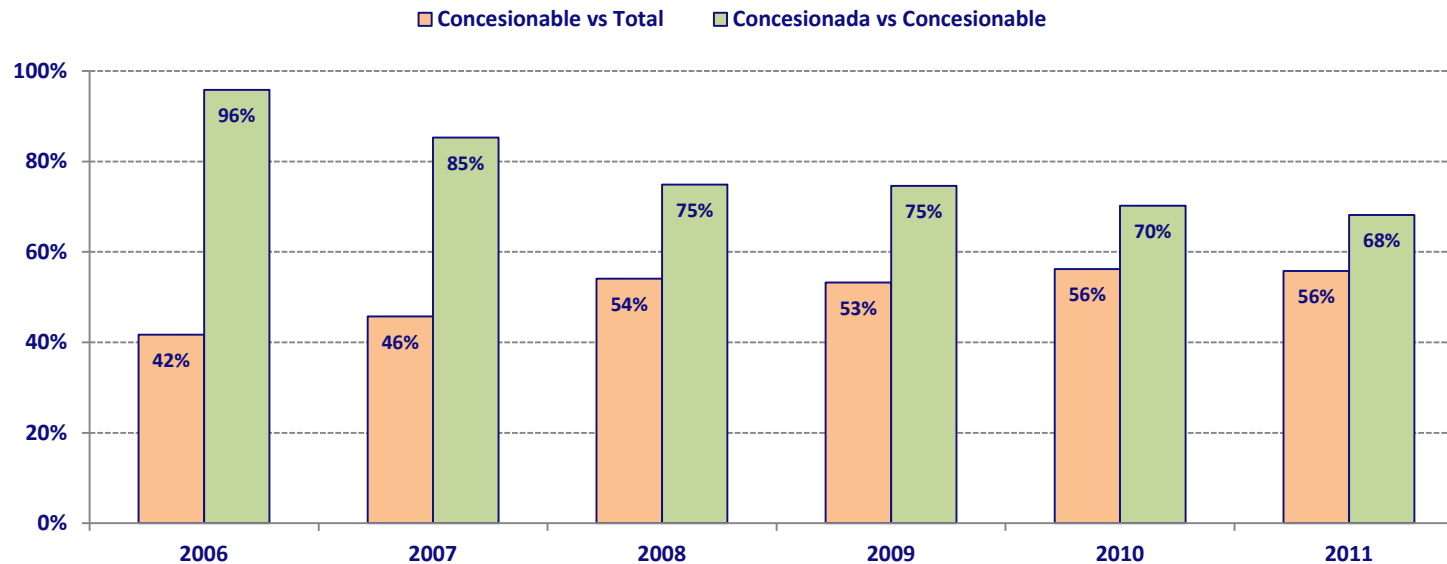
ORIGINS AND DESTINATION OF GOODS BY GEOGRAPHIC AREAS



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

LAND-LORD MODEL: What percentage of the surface is occupied by concessions?

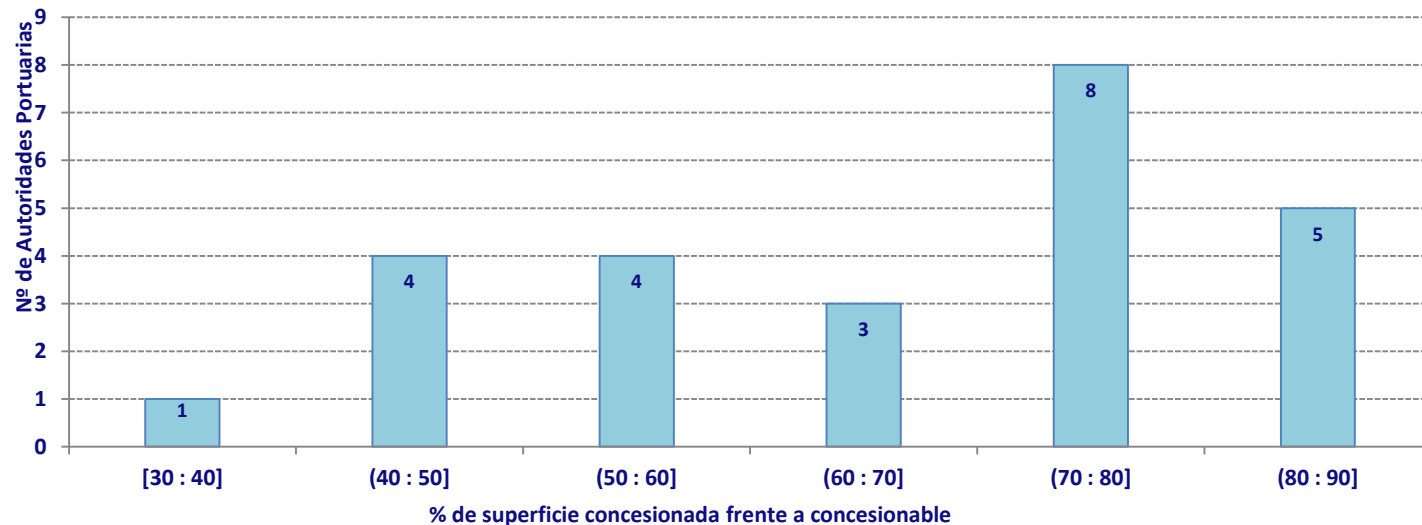
EVOLUCIÓN OF SURFACE USED BY CONCESSIONS.



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

LAND-LORD MODEL: What percentage of the surface is occupied by concessions?

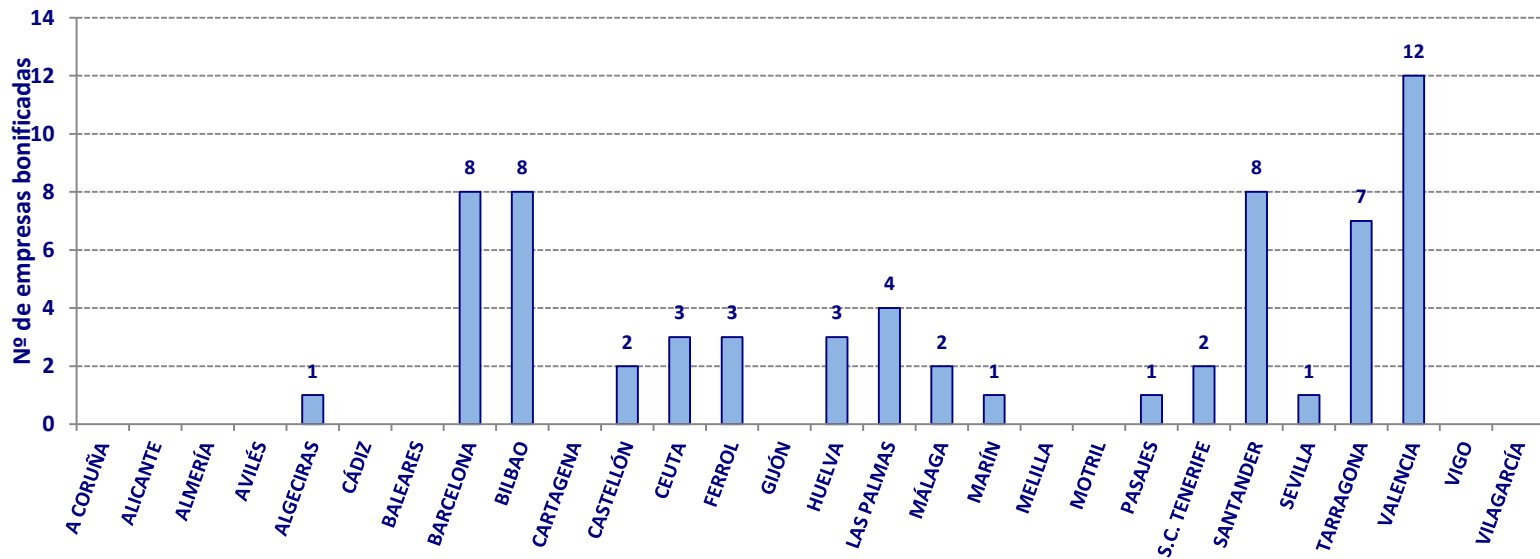
% OF THE SURFACE USED BY CONCESSIONS



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

QUALITY SERVICE. Operators following port service quality systems.

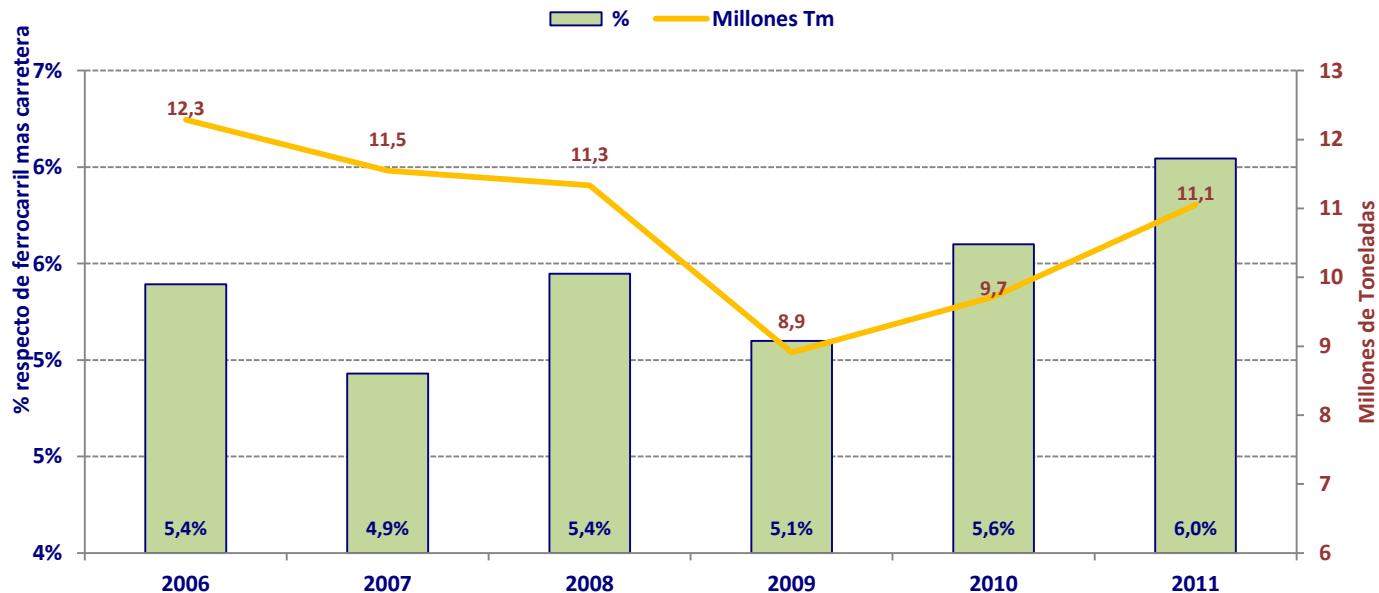
NUMBER OF OPERATOR WITH PORT SERVICE QUALITY SYSTEMS



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

SUSTAINABLE MOVILITY OF GOODS: Are we boosting railway traffic?.

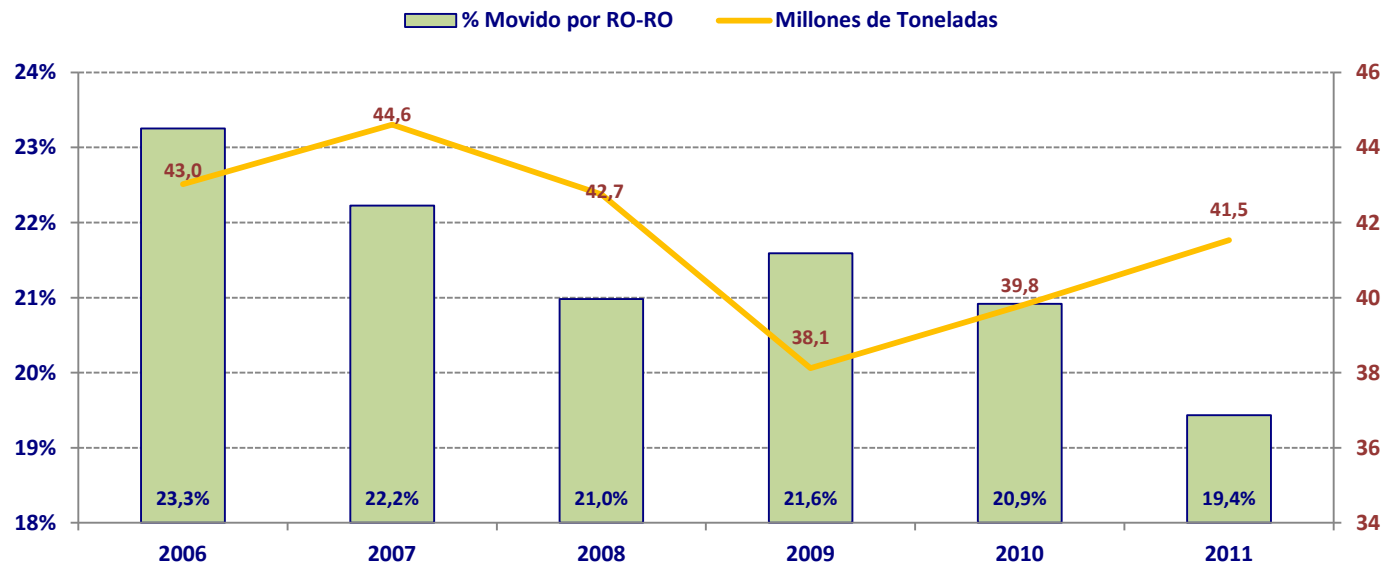
GOOD MOVED BY TRAIN



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

SUSTAINABLE MOVILITY OF GOODS: Are we boosting RO-RO traffic?.

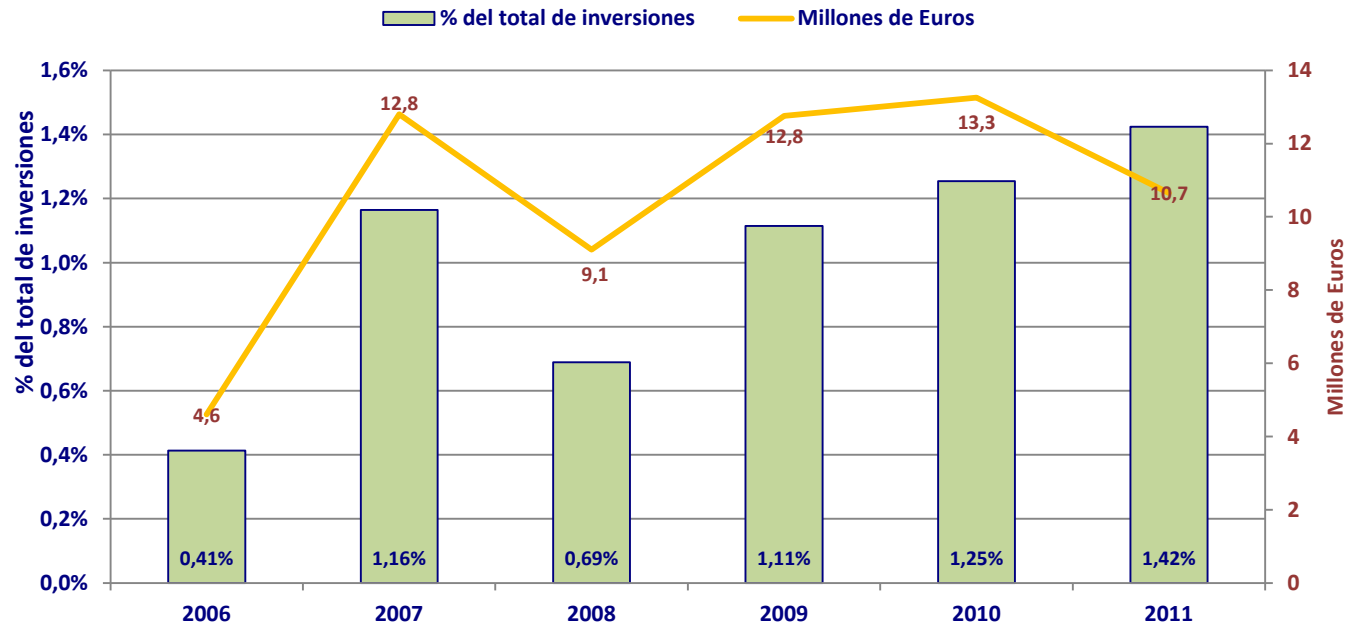
EVOLUTION OF GOODS MOVED BY RO.RO SYSTEM



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

INSTITUTIONAL COMMITMENT : Investments in safety improvement

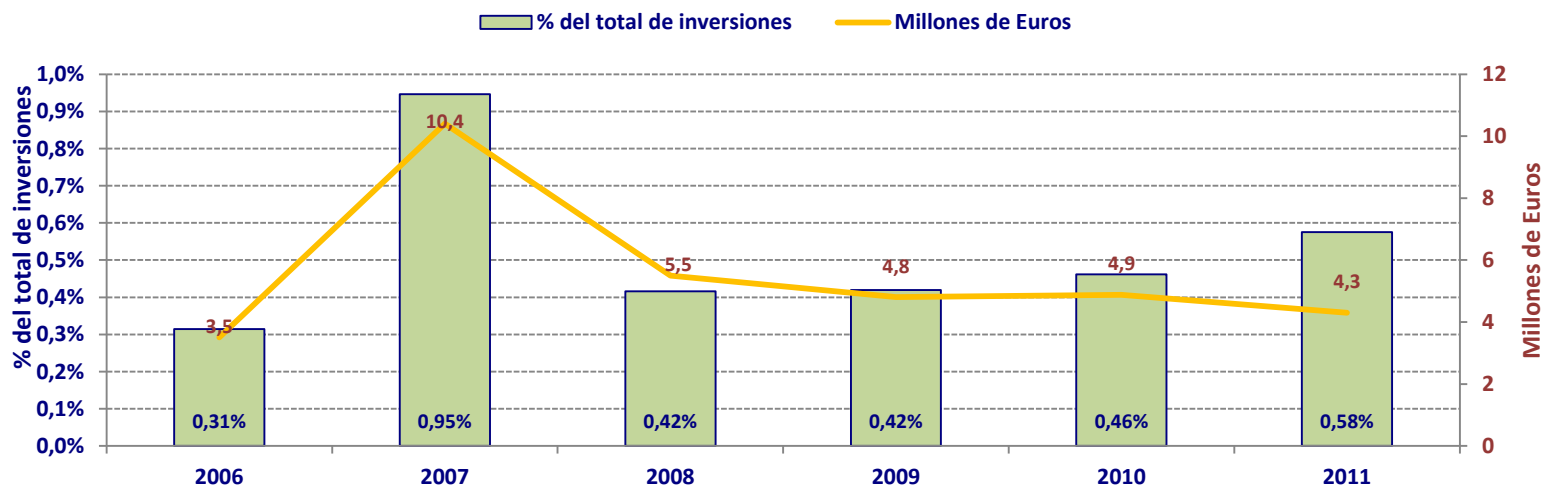
EVOLUTION OF INVESTMENTS IN SAFETY.



SUSTAINABILITY REPORTS: INSTITUTIONAL DIMENSION

INSTITUTIONAL COMMITMENT : Investments in environmental improvement.

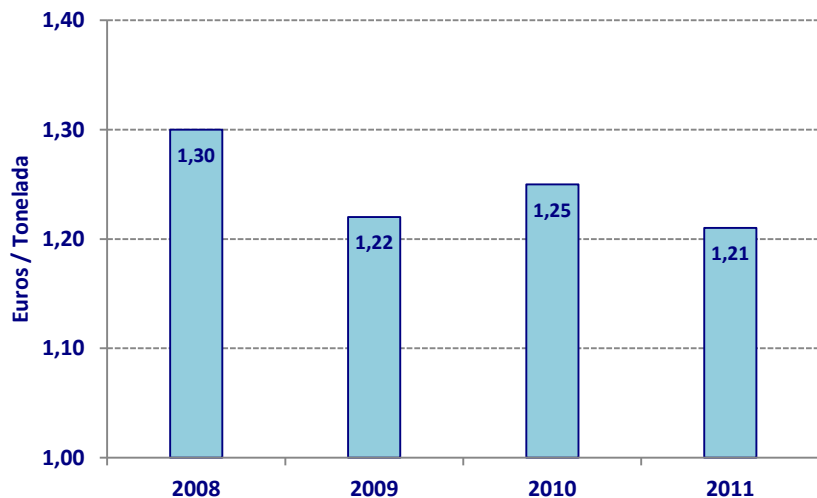
EVOLUTION OF INVESTMENT IN ENVIRONMENTAL IMPROVEMENTS



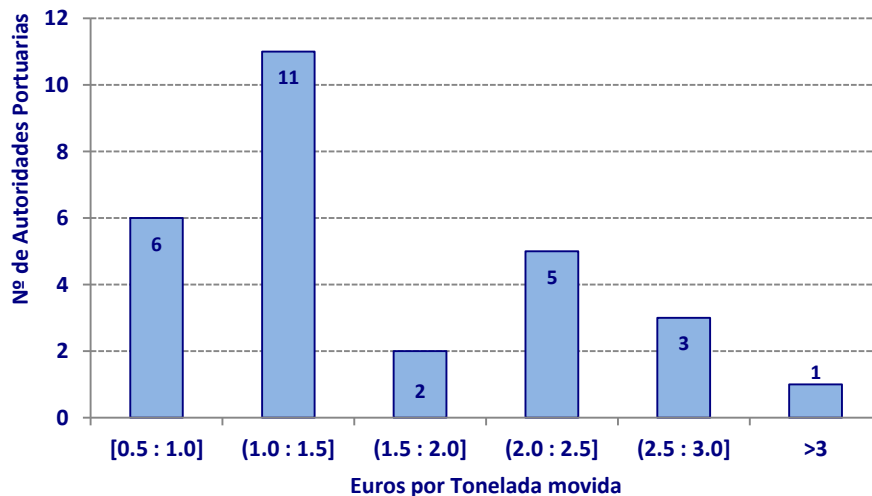
SUSTAINABILITY REPORTS: ECONOMIC DIMENSION

FINANCIAL STATUS. What is our economic performance per moved ton?

EBITDA PER TON. EVOLUTION.



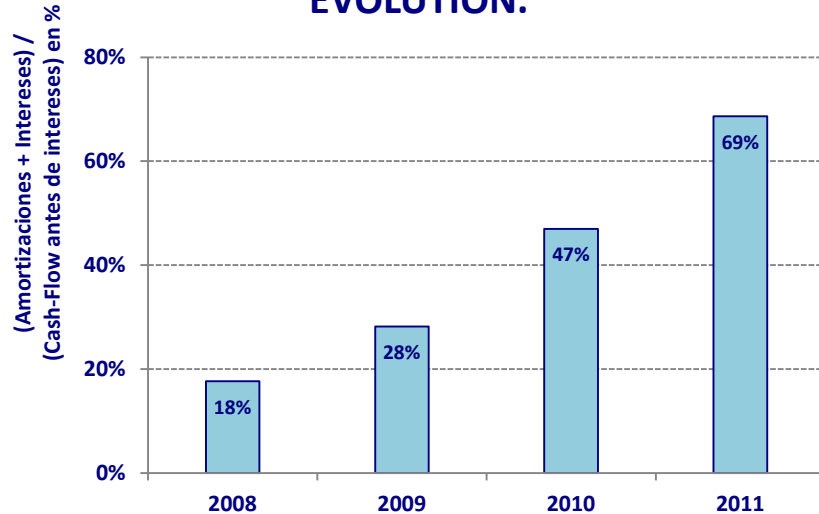
EBITDA PER TON. DISTRIBUTION



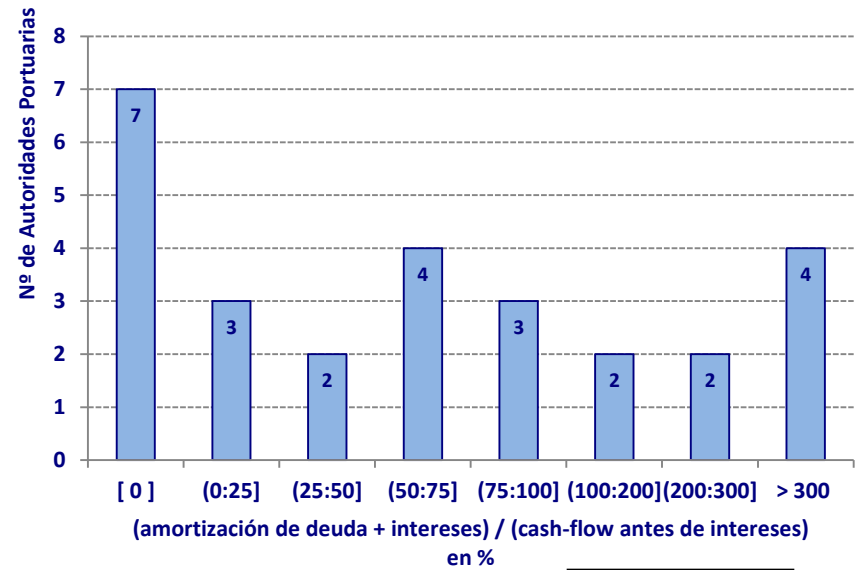
SUSTAINABILITY REPORTS: ECONOMIC DIMENSION

FINANCIAL STATUS. How much cash-flow do we target to pay bank credits

DEBTS PAYMENT VERSUS CASH-FLOW. EVOLUTION.



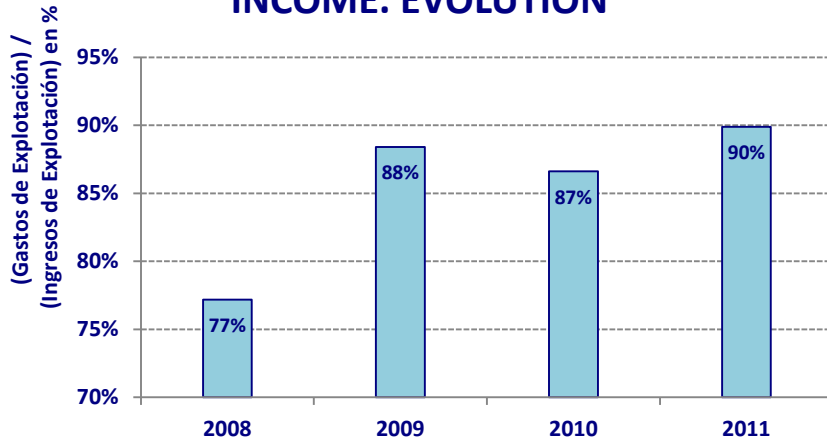
DEBTS PAYMENTS VERSUS CASH-FLOW. DISTRIBUTION



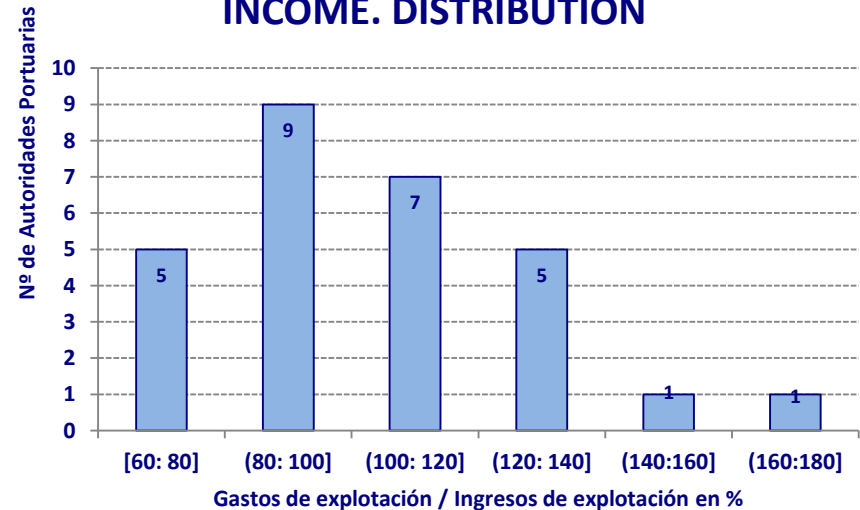
SUSTAINABILITY REPORTS: ECONOMIC DIMENSION

FINANCIAL STATUS. What is the operational cost versus the operational income.

OPERATIONAL COST / OPERATIONAL INCOME. EVOLUTION



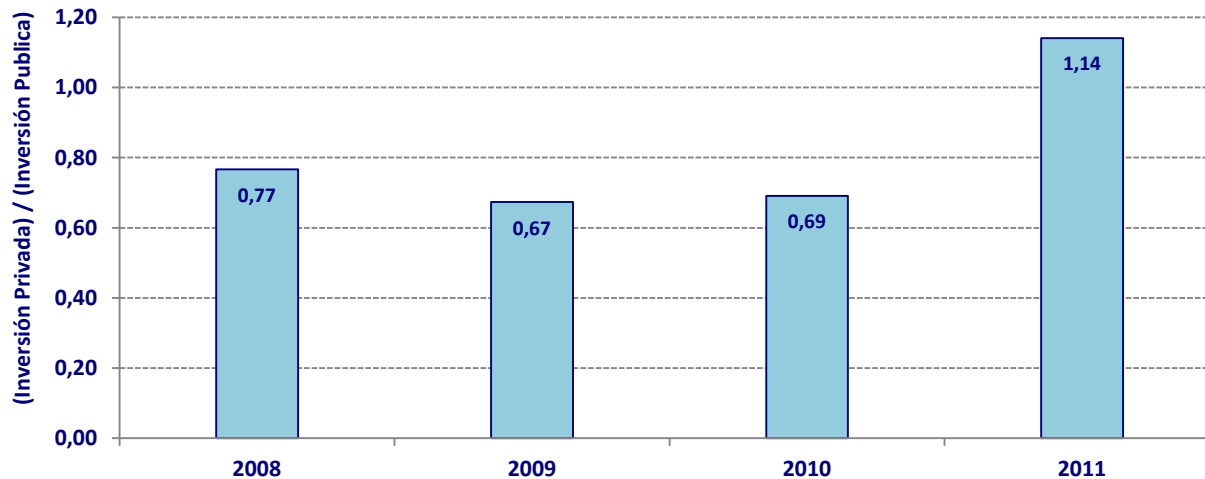
OPERATIONAL COST / OPERATIONAL INCOME. DISTRIBUTION



SUSTAINABILITY REPORTS: ECONOMIC DIMENSION

INVESTMENT: Private investment versus public investment in ports

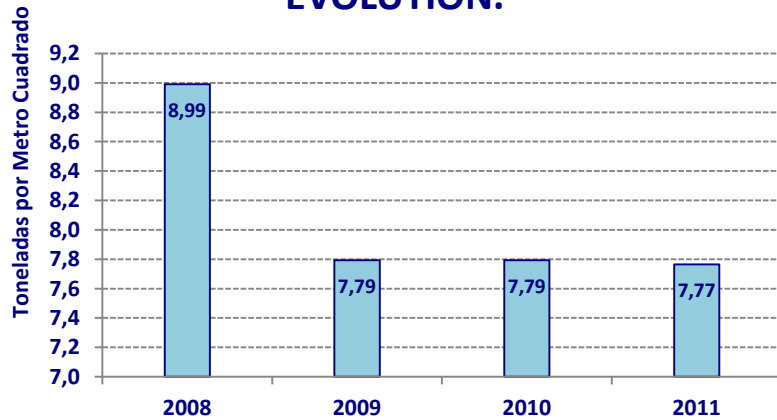
PRIMATE INVESTMENT / PUBLIC INVESTMENT



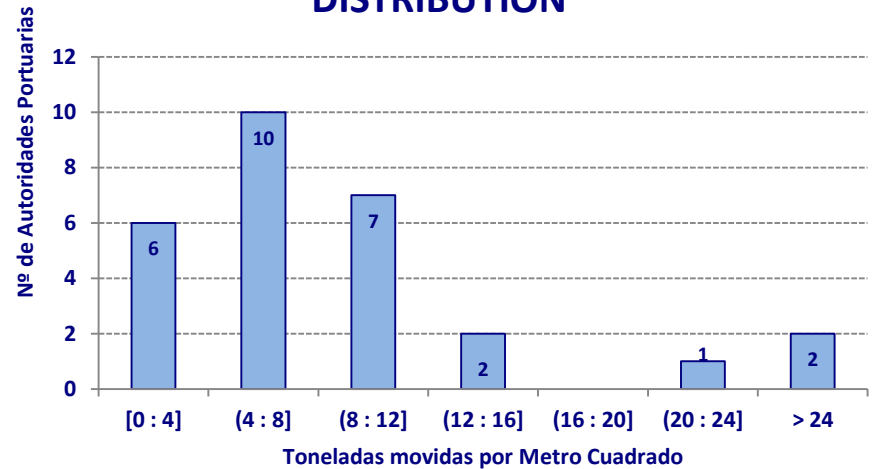
SUSTAINABILITY REPORTS: ECONOMIC DIMENSION

PERFORMANCE: Number of Ton moved per square meter.

TOM PER SQUARE METER. EVOLUTION.



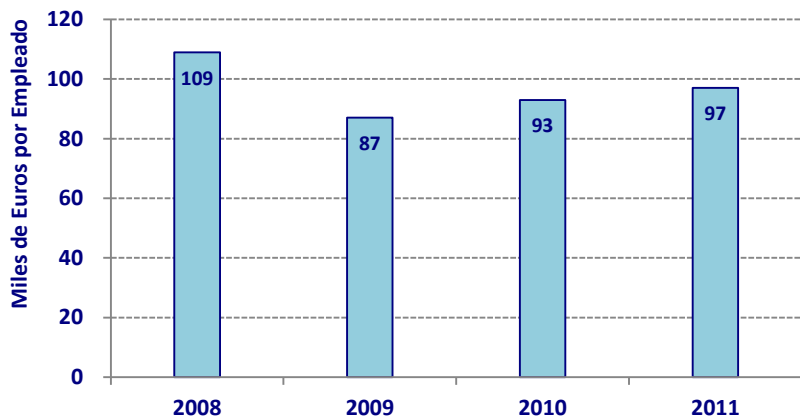
TOM PER SQUARE METER. DISTRIBUTION



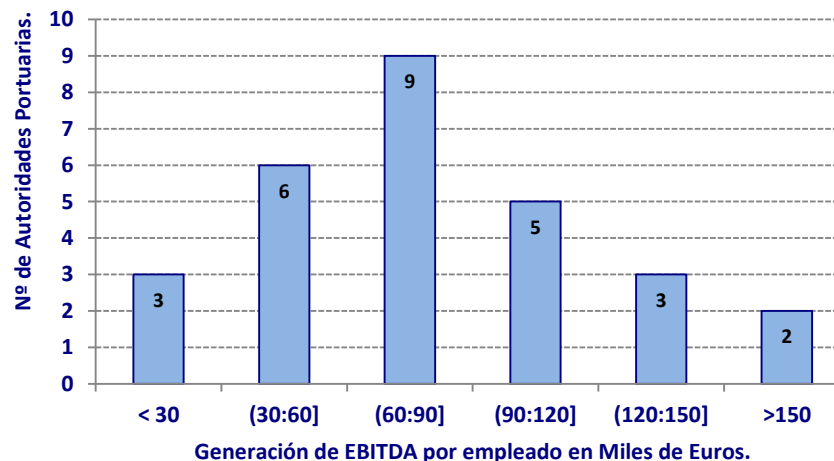
SUSTAINABILITY REPORTS: ECONOMIC DIMENSION

PRODUCTIVITY: EBITDA generated per worker

EBITDA PER WORKER. EVOLUTION



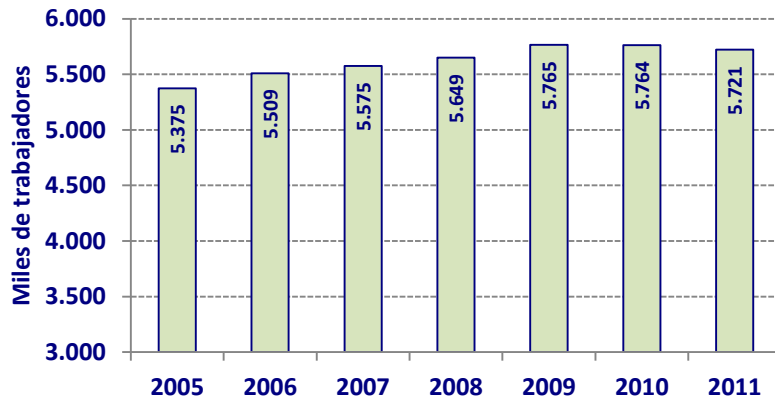
EBITDA PER WORKER. DISTRIBUTION



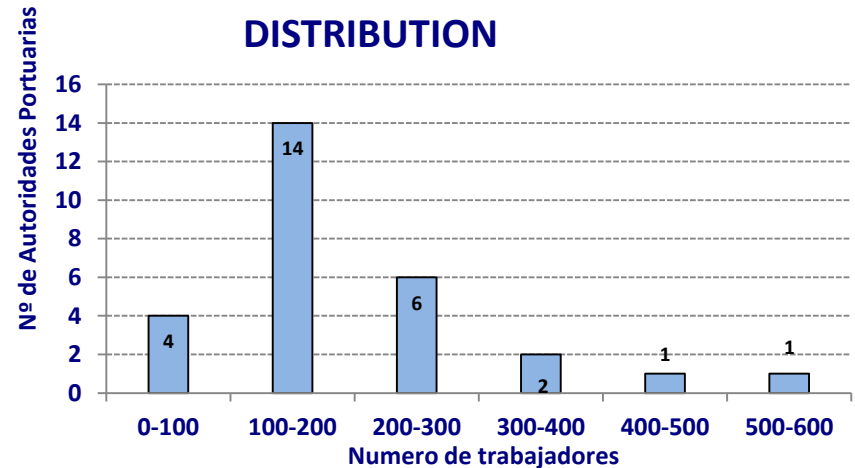
SUSTAINABILITY REPORTS: SOCIAL DIMENSION

EMPLOYMENT: Number of employees

NUMBER OF EMPLOYEES.
EVOLUTION



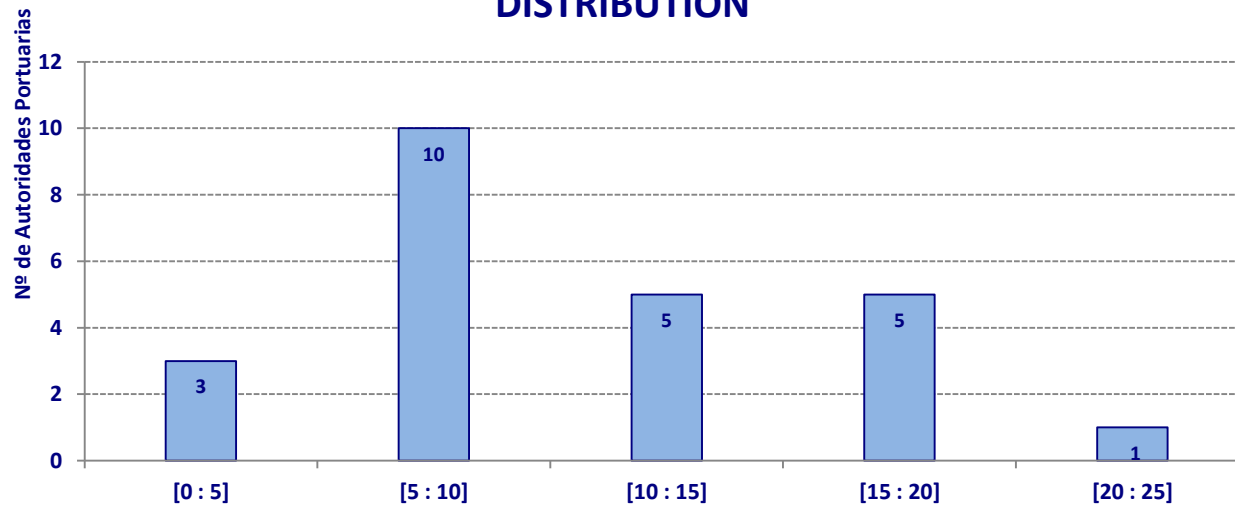
NUMBER OF EMPLOYEES.
DISTRIBUTION



SUSTAINABILITY REPORTS: SOCIAL DIMENSION

EMPLOYMENT: Percentage of temporary workers

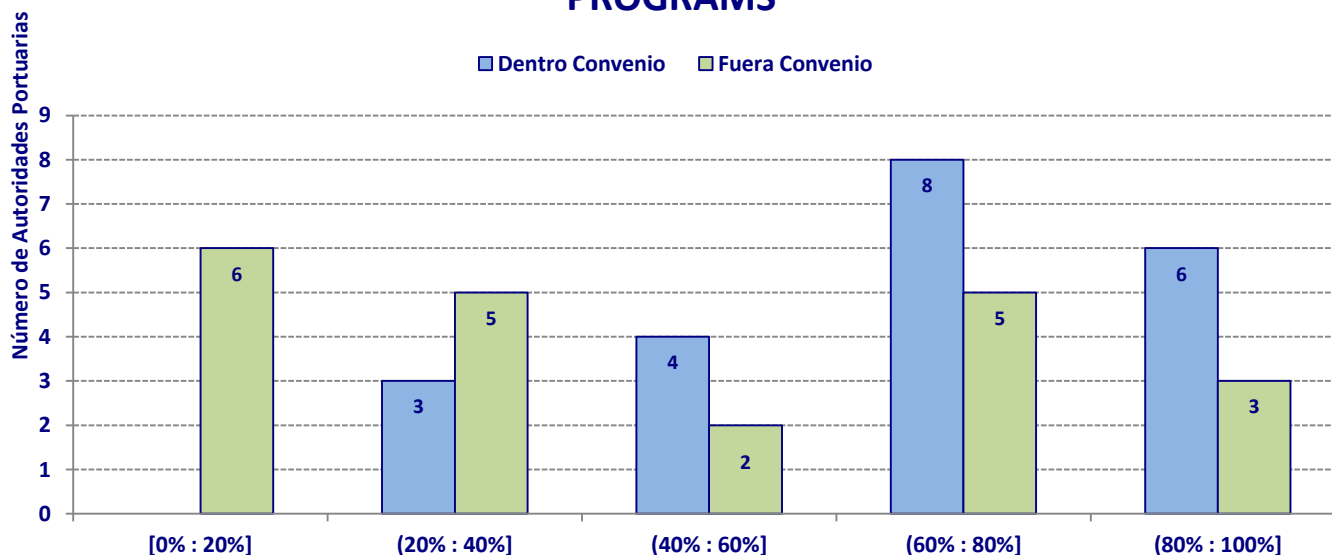
PERCENTAJE OF TEMPORARY WORKES.
DISTRIBUTION



SUSTAINABILITY REPORTS: SOCIAL DIMENSION

TRAINING. Percentage of employees involved in training programs.

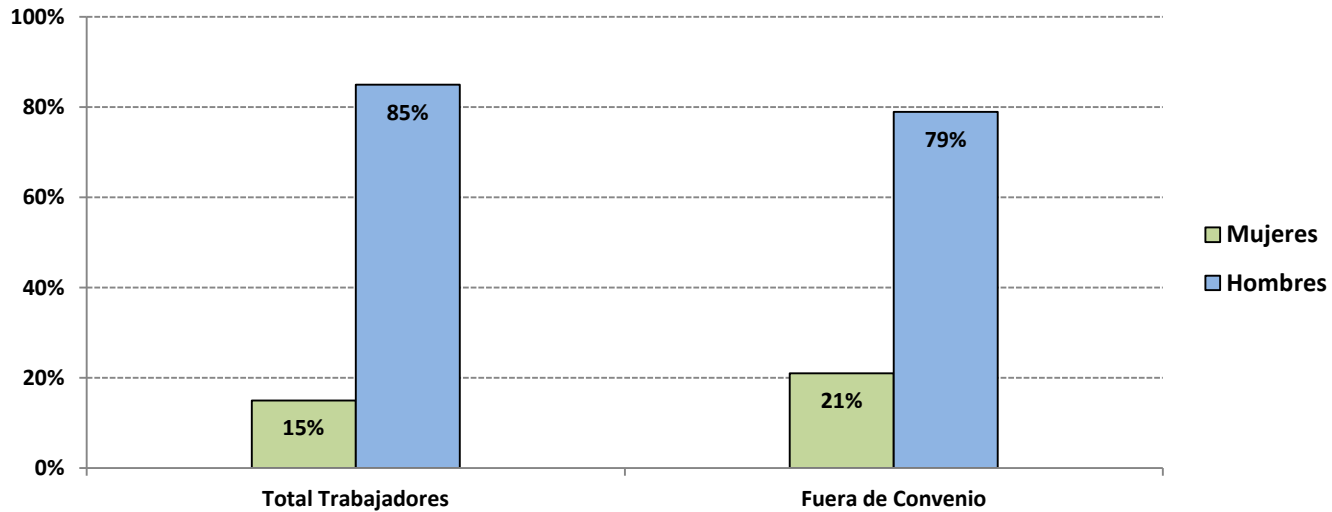
PERCENTAJE OF EMPLOYEES INVOLVED IN TRAINING PROGRAMS



SUSTAINABILITY REPORTS: SOCIAL DIMENSION

GENDER EQUALITY: Percentage of women in the total workforce.

PERCENTAJE OF WOMEN IN THE TOTAL WORKFORCE

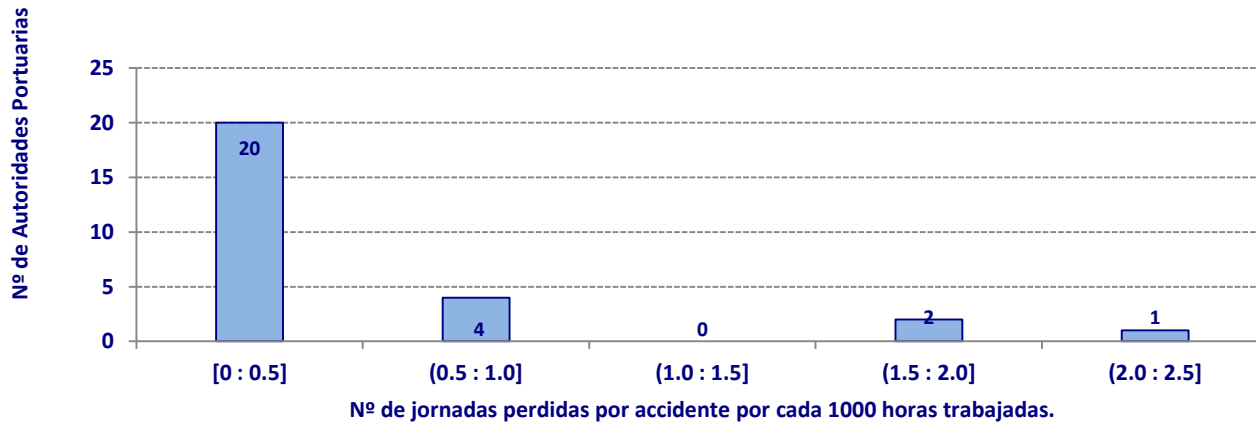


SUSTAINABILITY REPORTS: SOCIAL DIMENSION

LABOUR RISK PREVENTION. Number of days lost per 1,000 hours worked.

Distribución del índice de gravedad de accidentes para el conjunto del sistema portuario durante 2011.

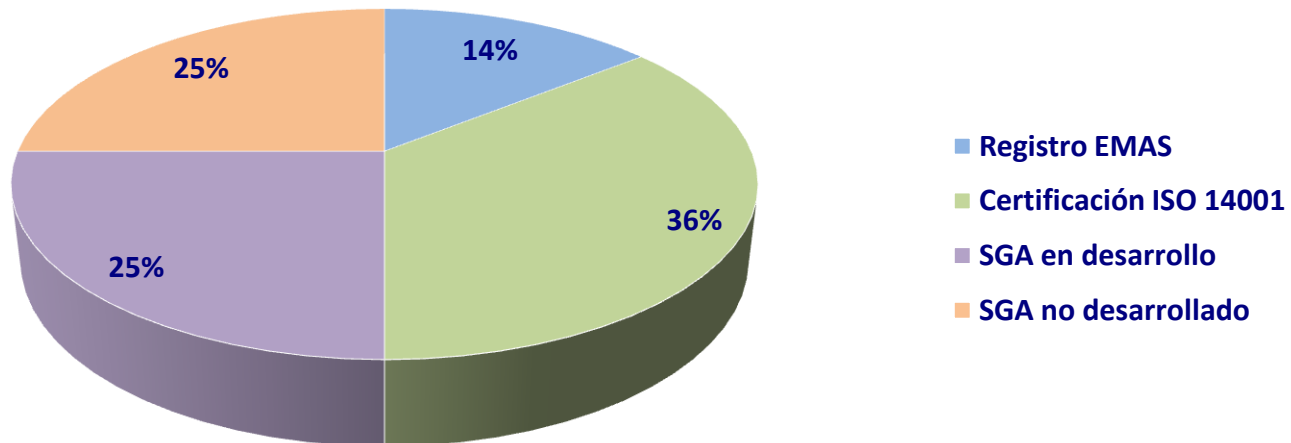
Muestra: 27 de las 28 Autoridades Portuarias



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

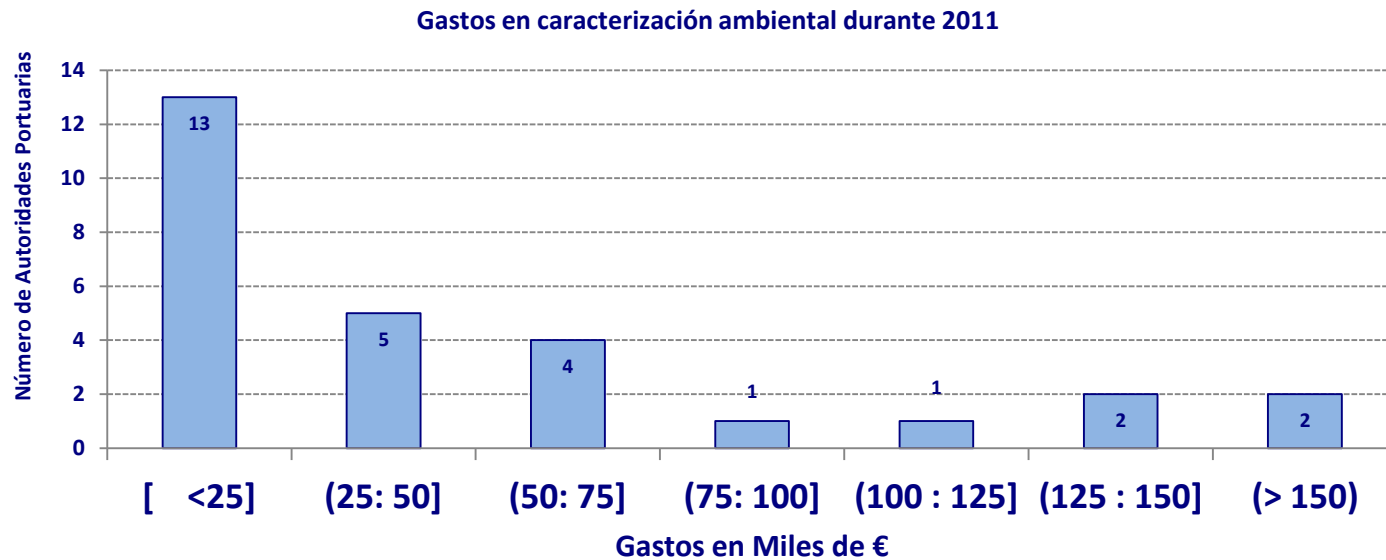
ENVIRONMENTAL MANAGEMENT. Implementation of Environmental Management Systems.

PERCENTAJE OF PORTS THAT HAVE IMPLEMENTED AN ENVIRONMENTAL MANAGEMENT SYSTEM



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

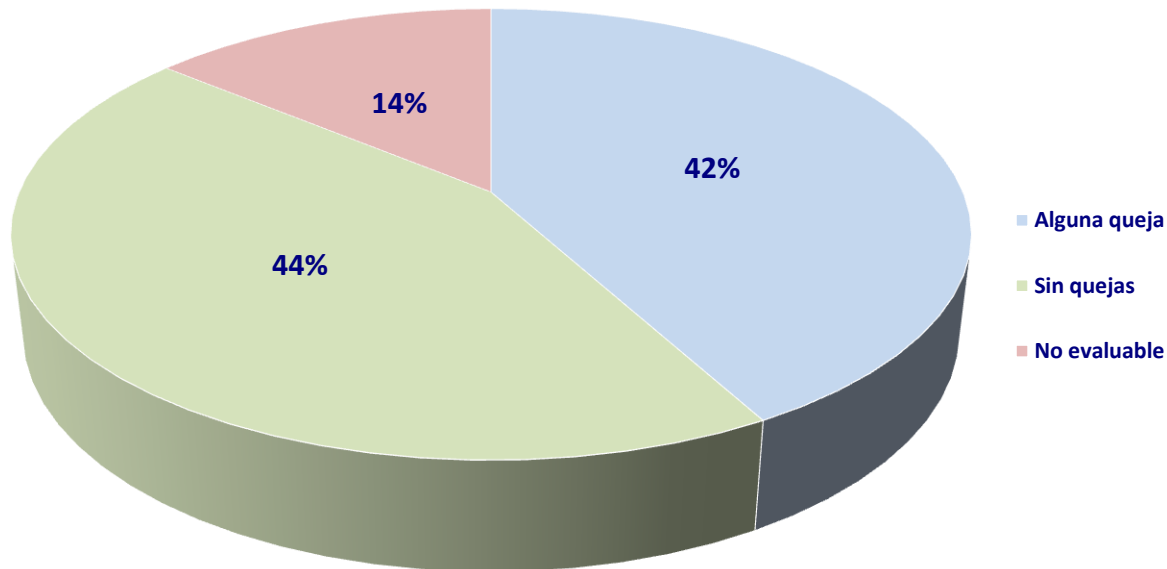
ENVIRONMENTAL MANAGEMENT. Expenditures on environmental characterization.



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

ENVIRONMENTAL QUALITY. Complaints related to air quality

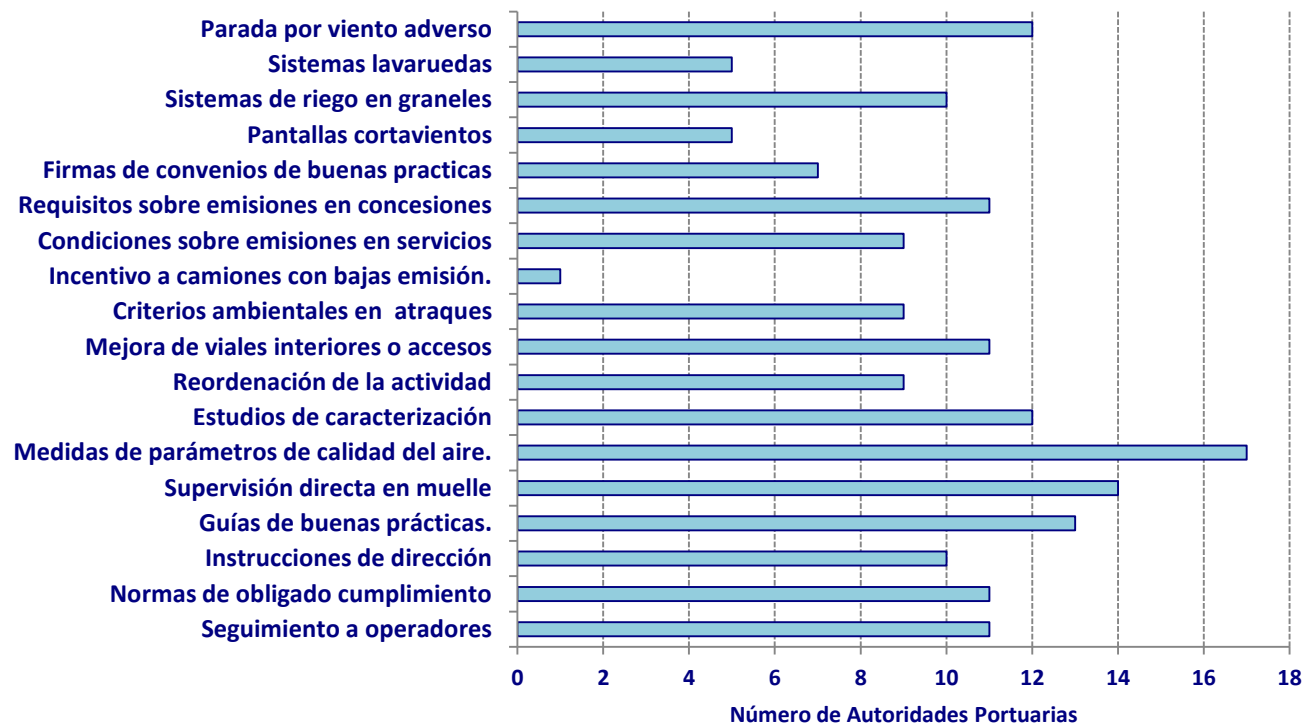
PERCENTAJE OF PORTS THAT HAVE RECEIVED COMPLAINTS



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

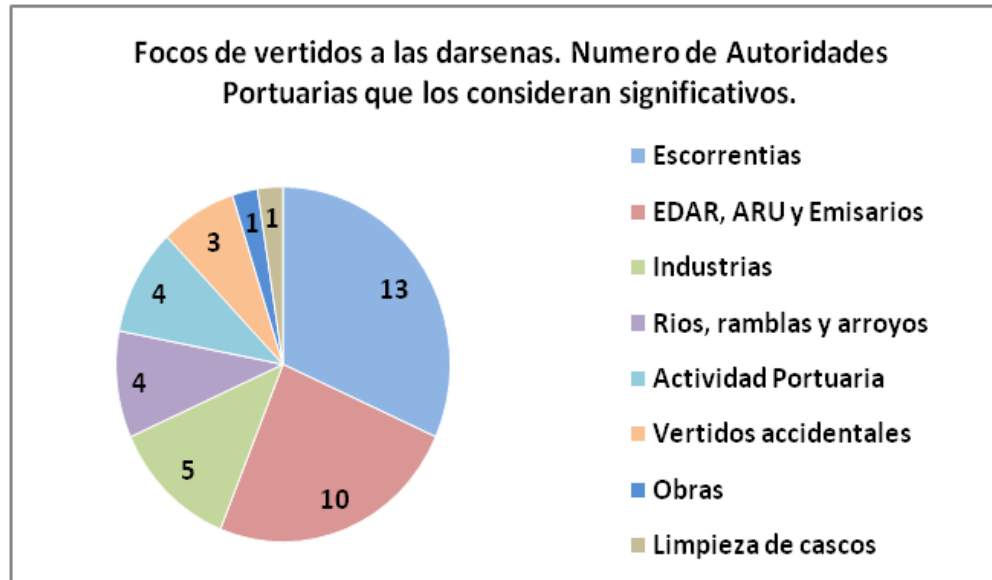
ENVIRONMENTAL QUALITY. Measures taken to improve air quality.

Medidas adoptadas para minimizar emisiones a la atmosfera



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

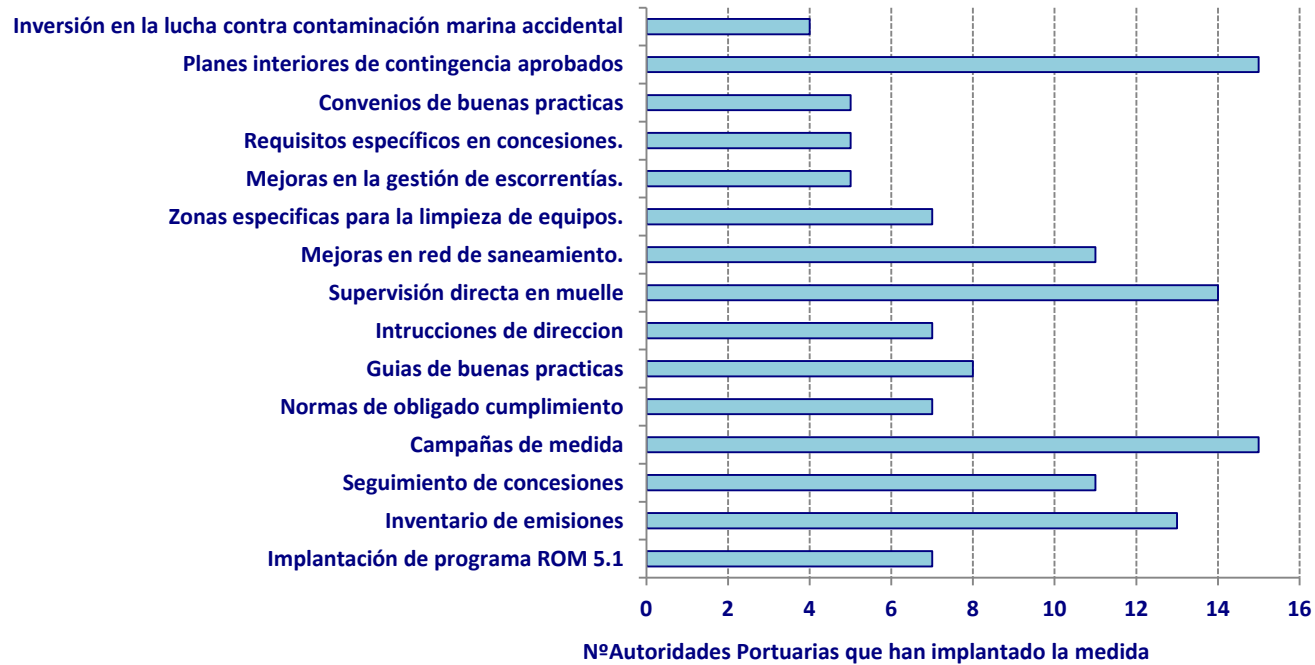
ENVIRONMENTAL QUALITY. Significant sources of water pollution.



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

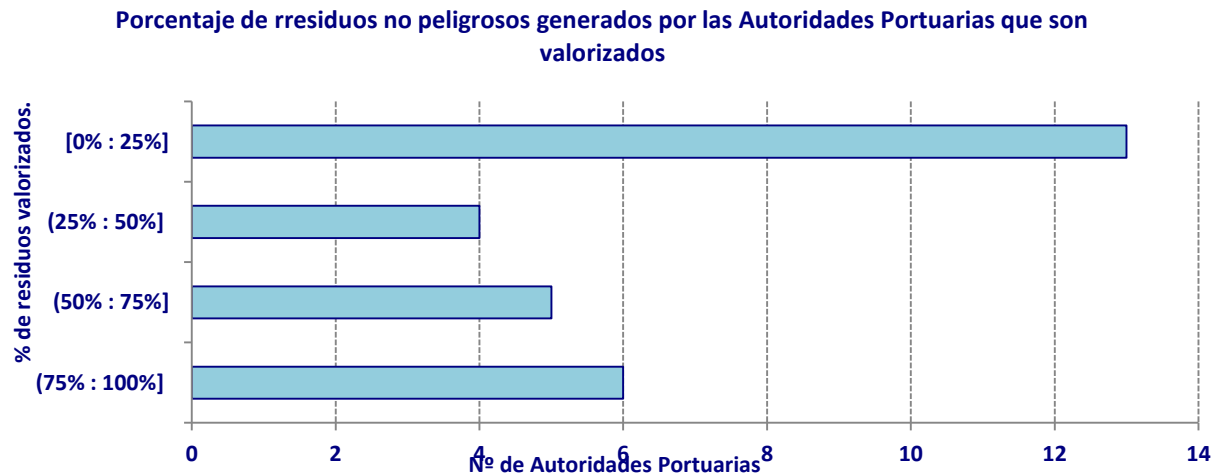
ENVIRONMENTAL QUALITY. Measures taken to improve water quality.

Medidas adoptadas para mejorar la calidad del agua



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

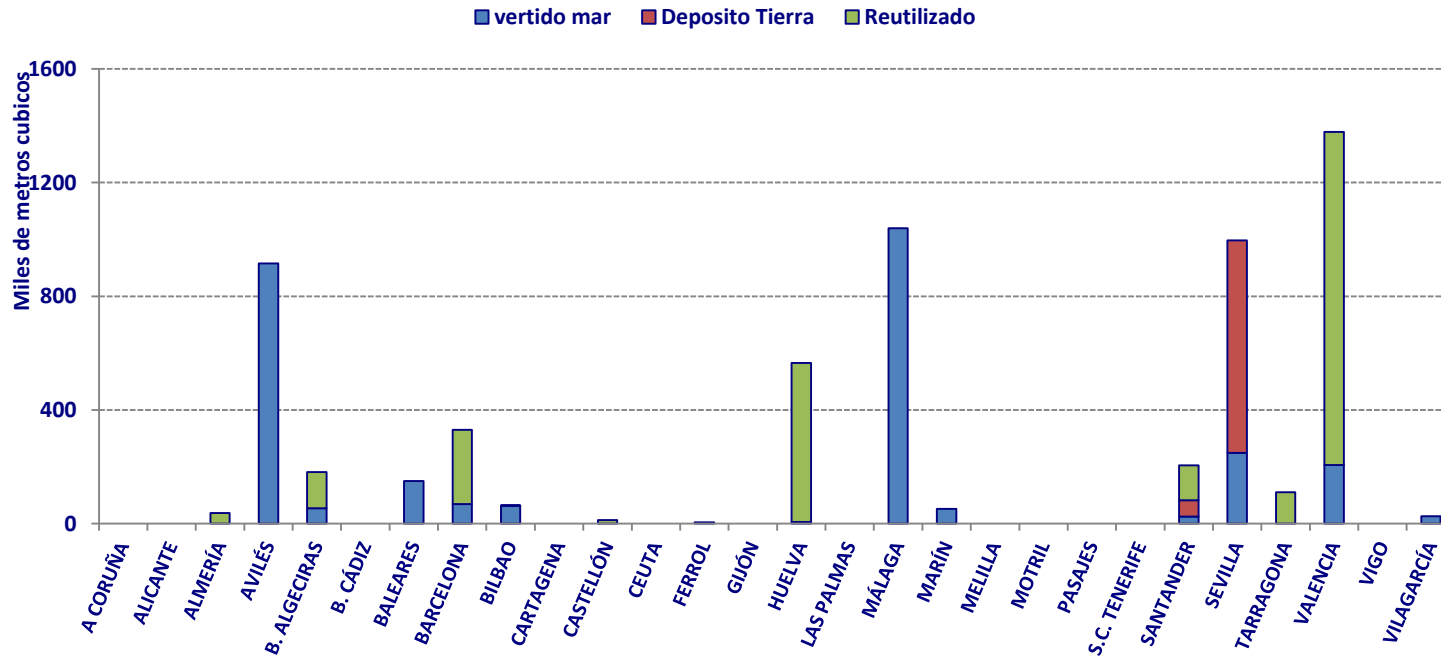
WASTE. Percentage of waste recycled



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

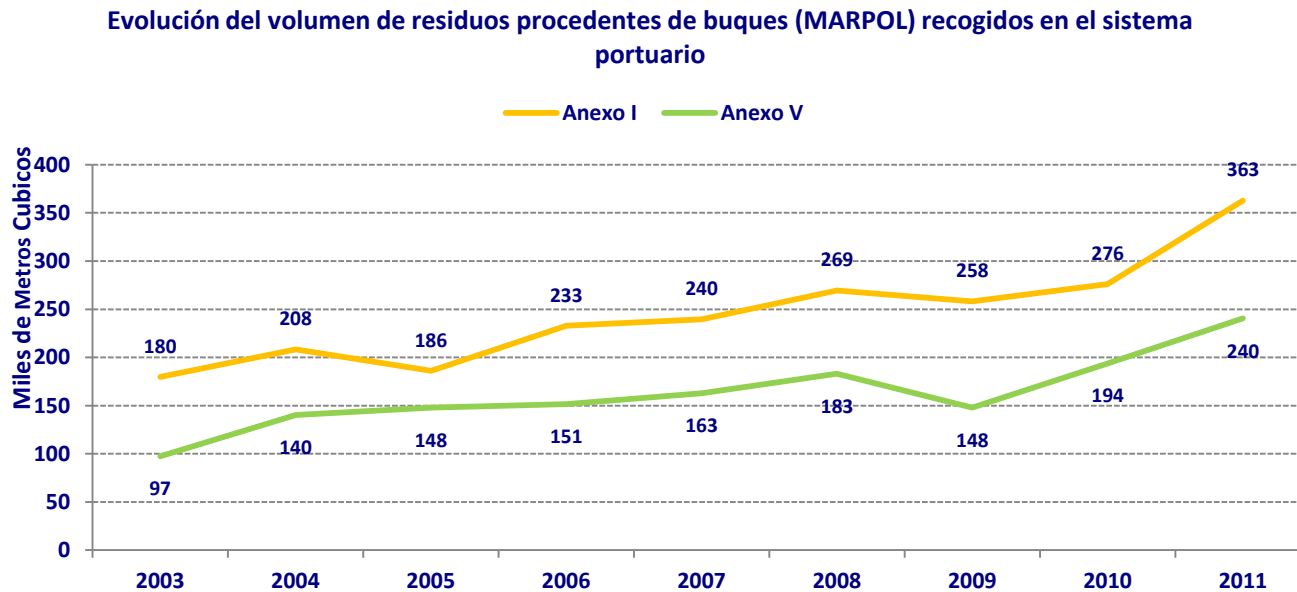
WASTE. Dredged material management and degree of reuse.

Volumen de material dragado y destino de los mismos



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

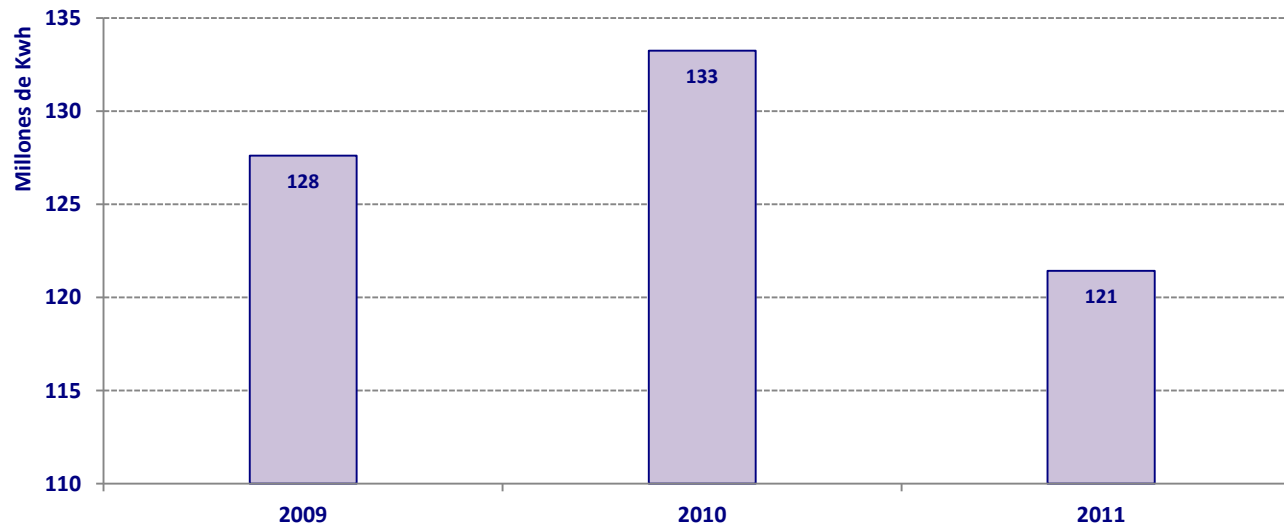
WASTE. Volume of MARPOL waste collected.



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

ECOEFFICIENCY: Electricity consumption. Evolution

Evolución del consumo anual de energía eléctrica del conjunto de las Autoridades Portuarias.
(Muestra: 25 Autoridades Portuarias de 28)

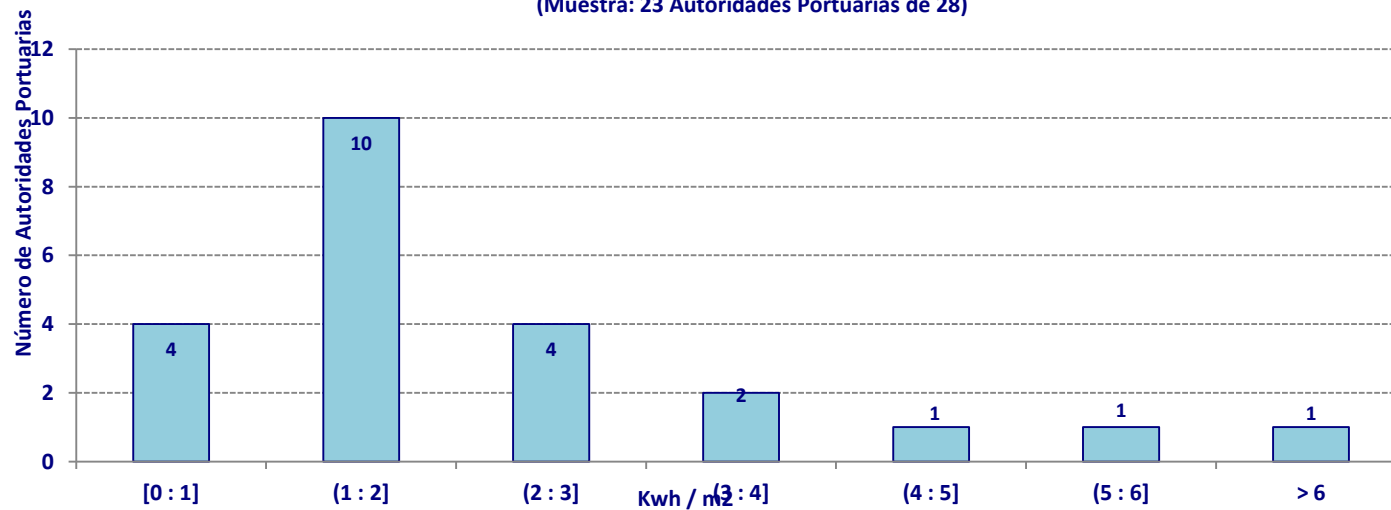


SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

ECOEFFICIENCY: Electricity consumption. Distribution

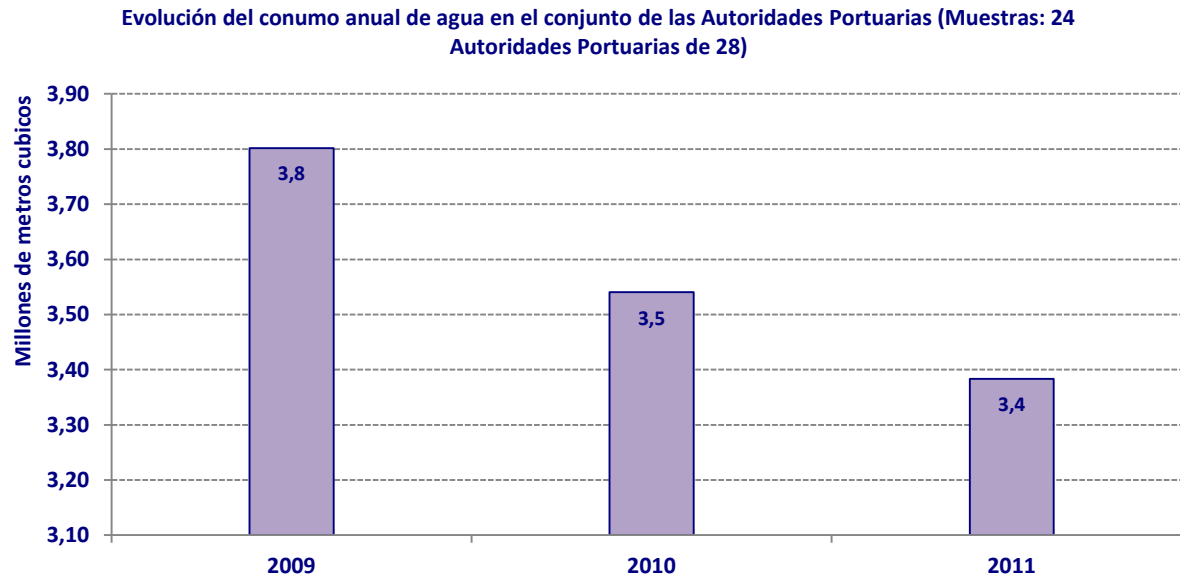
Distribución del consumo de electricidad por unidad de superficie en el sistema portuario durante
2011.

(Muestra: 23 Autoridades Portuarias de 28)



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

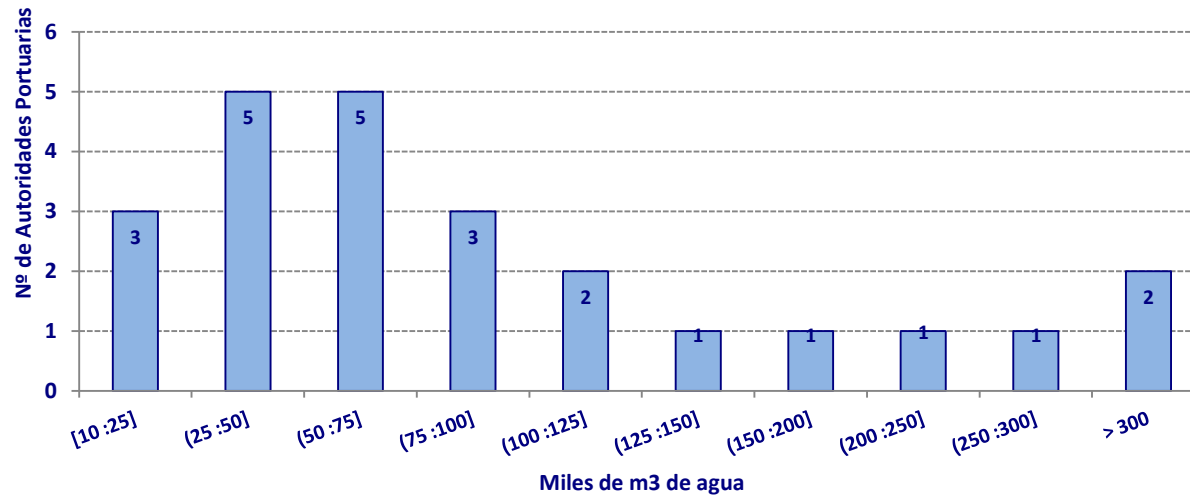
ECOEFFICIENCY: Water consumption. Evolution



SUSTAINABILITY REPORTS. ENVIRONMENTAL DIMENSION.

ECOEFFICIENCY: Water consumption. Distribution

Distribución del consumo de agua en el sistema portuario durante 2011.
(Muestra: 24 Autoridades Portuarias de 28)





VI JORNADAS DE INNOVACIÓN EN EL
CLÚSTER PORTUARIO

SPANISH PORT SYSTEM SUSTAINABILITY

THANK YOU FOR YOUR ATTENTION

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