

A satellite map of Europe and the surrounding oceans, showing the Mediterranean Sea to the south and the Atlantic Ocean to the west. A small inset photograph in the top right corner shows a coastal town with a harbor and a large tree in the foreground.

Mission: influence public policy in EU in order to achieve a safe, efficient and environmentally sustainable European port sector, operating as a key element of a transport industry where free and undistorted market conditions prevail, as far as practicable..

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat

Google earth

ESPO views and initiatives on greener ports and sustainability



Aegean Energy Agency, Piraeus, 10th March 2016
Dr Christopher Wooldridge, Science Coordinator, EcoPorts

ESPO – Environmental Policies



- **Voluntary, Self-regulation**
- **Level-playing field**
- **Environment is pre-competitive***

Technical committees:

- **Sustainable development**
- **Intermodal transport and logistics**
- **Governance**
- **Economic analysis**
- **Cruise and passenger issues**

- ✓ **Small ports and islands***
- ✓ **Each port is unique***
- ✓ **Energy consumption***
- ✓ **Waste management***
- ✓ **Water consumption***
- ✓ **Sustainable development***
- ✓ **CSR***

European Sea Ports Organisation



- Founded in 1993, based in Brussels
- Represents European seaport authorities*
- Members from EU and neighbouring countries (observers)
- Recognised counterpart of European institutions
- A lobby and a knowledge network



Environmental priorities evolve



(Reactive and pro-active EMS)

	1996	2004	2009	2013
1	Port Development (water)	Garbage / Port waste	Noise	Air quality
2	Water quality	Dredging: operations	Air quality	Garbage/ Port waste
3	Dredging disposal	Dredging disposal	Garbage / Port waste	Energy Consumption
4	Dredging: operations	Dust	Dredging: operations	Noise
5	Dust	Noise	Dredging: disposal	Ship waste
6	Port Development (land)	Air quality	Relationship with local community	Relationship with local community
7	Contaminated land	Hazardous cargo	Energy consumption	Dredging: operations
8	Habitat loss / degradation	Bunkering	Dust	Dust
9	Traffic volume	Port Development (land)	Port Development (water)	Port development (land)
10	Industrial effluent	Ship discharge (bilge)	Port Development (land)	Water quality

Evidence and trends of port performance



Who wants to know?	What's in it for the port?
Regulators & Courts	Compliance
European Commission	Cost & Risk reduction
Investors/stakeholders	Sustainability
Insurance* /Banks	Market opportunity
Auditors	Positive image
NGOs/Community	License to operate

SMALL PORTS

Four categories recognized by ESPO:

<1, 1-10, 10-25, >25 (in million tonnes)

- < 1 million tonnes
- Urban, estuary/island, inland
- Port area: 47 ha (cf. 226/408/3480)
- Number of employees: 15 (cf. 550/1480, 12000)
- Environmental Policy? Yes 59% (cf. 83/87/100)

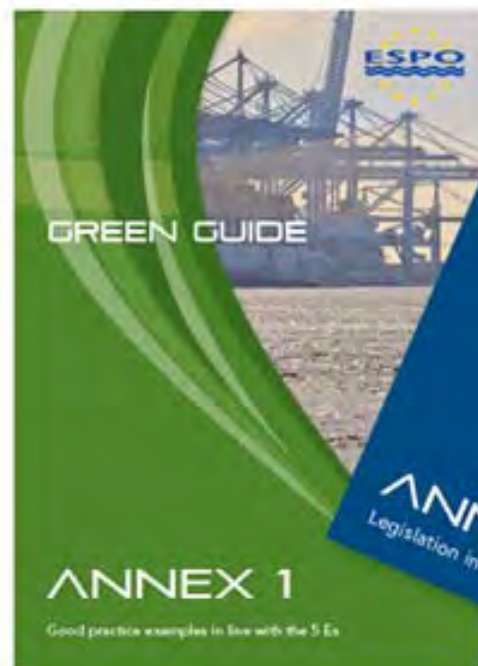
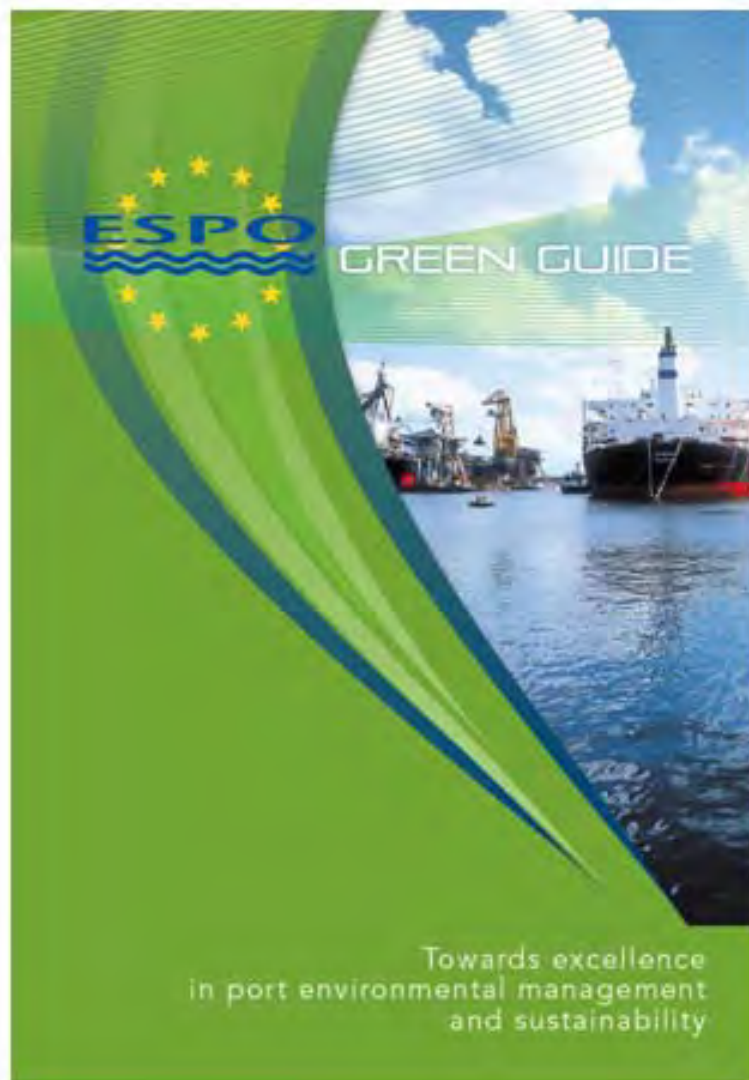
(SuPORTS Sustainable management for European local ports)



- Significant local Aspects
- Multi-tasking staff
- Good local knowledge
- Relatively restricted internal capacity/resources (?)
- Local sensitivities
- Socio-economic status



ESPO Green Guide



www.espo.be / www.ecoports.com

Five guiding principles - Environment



1. Voluntary self regulation
2. Work together – sharing knowledge and expertise
3. Local community – license to operate and to grow
4. Systematic approach to environmental management
5. Being transparent – reporting



Five Es - common framework for action



In respect to the above principles, European port authorities aim to continuously work towards improving their environmental performance through focused action on:

1. **Exemplifying:** Setting a good example towards the wider port community by demonstrating excellence in managing the environmental performance of their own operations, equipment and assets
2. **Enabling:** Providing the operational and infrastructural conditions within the port area that facilitate port users and enhance improved environmental performance within the port area
3. **Encouraging:** Providing incentives to port users that encourage a change of behaviour and induce them to continuously improve their environmental performance
4. **Engaging:** with port users and/or competent authorities in sharing knowledge, means and skills towards joint projects targeting environmental improvement in the port area and the logistic chain
5. **Enforcing:** Making use of mechanisms that enforce good environmental practice by port users where applicable and ensuring compliance

Annex 1 - Good practice examples



- Air quality
- Energy conservation and climate change
- Noise management
- Waste management
- Water management

★ Dynamic

★ 76 contributions

★ 26 ports - 12 countries

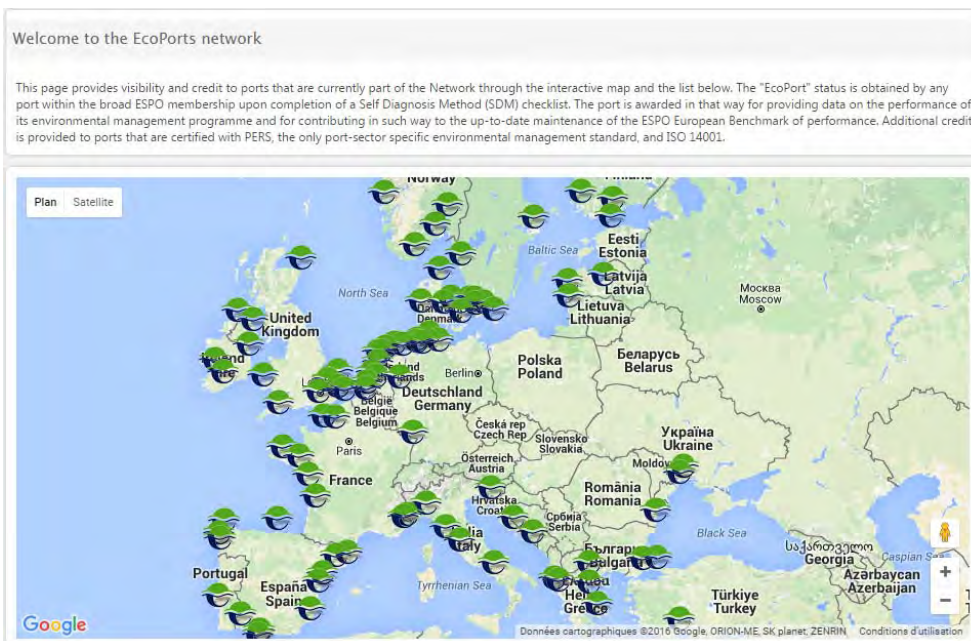
★ Ongoing update

★ Online database

www.espo.be / www.ecoports.com

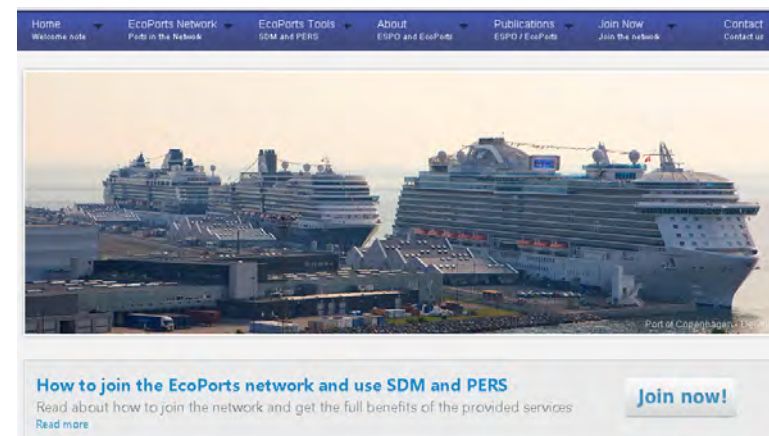


EcoPorts - integral part of ESPO since 2011



www.ecoport.com

- Port-inspired
- Ports-help-ports
- Retain Initiative
- Level Playing Field
- Influence Policy
- Set and Maintain Standards
- Network of collaboration*



...and it also grows globally



Globally: www.ecoslc.eu

ECO SLC
Sustainable Logistics Chain

Home About Management Tools
ECOSLC EcoPorts and ECOSLC Tools

EcoPorts Port Environmental Management Tools & Services

- » Self Diagnosis Method (SDM)
- » Port Environmental Review System (PERS)

Join now!

EcoPorts Port Environmental Management Tools & Services

Ecoports has three Tools to introduce Port Environmental Management System in port authorities on a basic, start up, level. SDM and PERS are internationally recognised basic standards.



Visibility



Welcome to the EcoPorts network

This page provides visibility and credit to ports that are currently part of the EcoPorts network. A port is awarded membership upon completion of a Self Diagnosis Method (SDM) checklist. The port is awarded in that way for providing data on the performance of its environmental management programme and for contributing in such way to the up-to-date maintenance of the ESPO European Benchmark of performance. Additional credit is provided to ports that are certified with PERS, the only port-sector specific environmental management standard.



Latest EcoPorts

Hamburg Port Authority - Germany

Feb 26, 2016

Liepāja Port Authority - Latvia

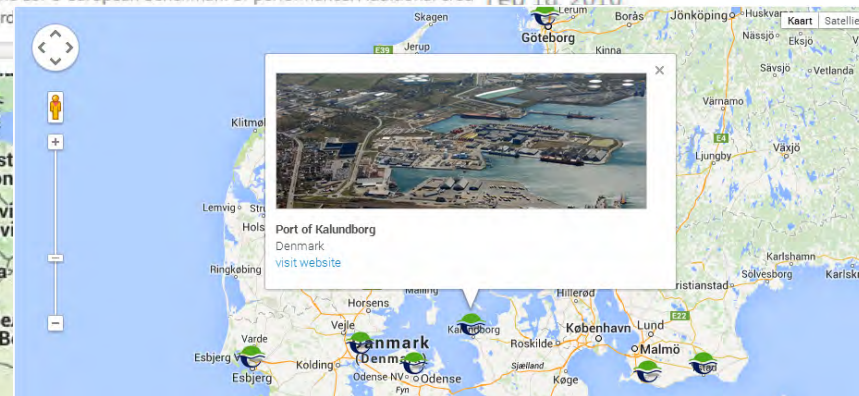
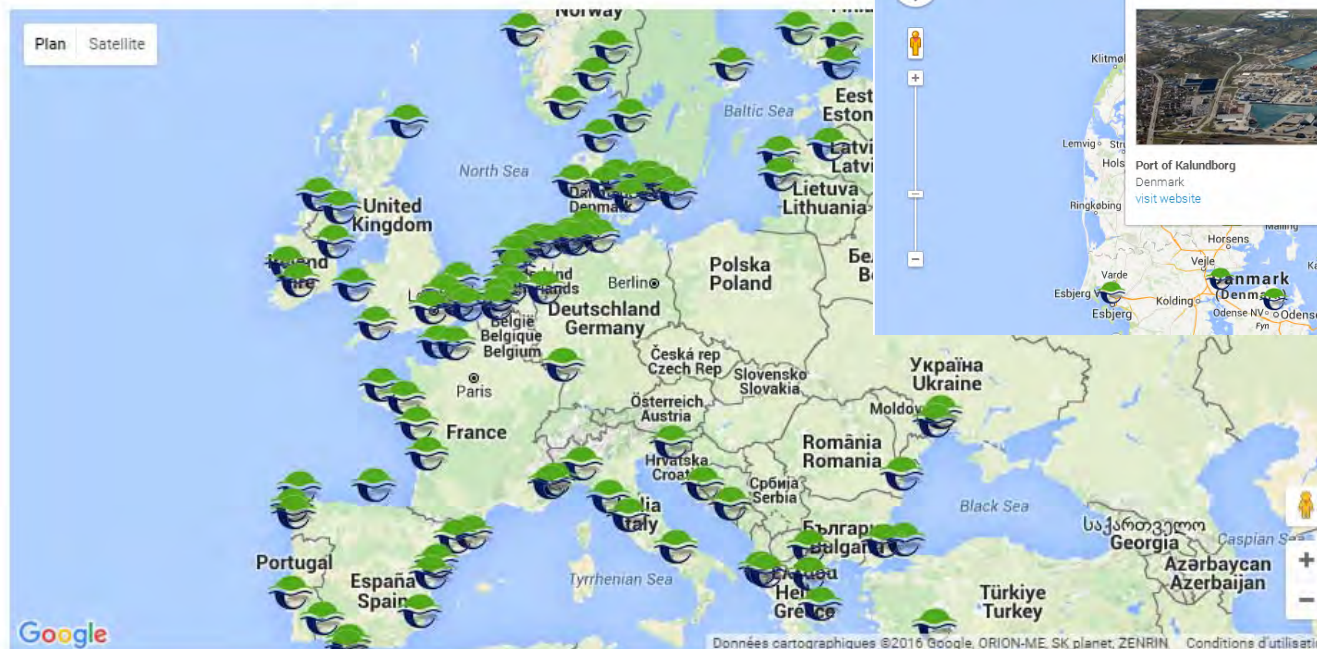
Feb 23, 2016

PORT DE ROUEN - France

Feb 19, 2016

Port of Bergen - Norway

Feb 18, 2016



Benefits of implementing an EMS



- **Compliance with legislation**
 - **Cost saving & risk reduction**
 - **Improved stakeholders relations**
 - **Meeting customer expectations**
 - **Demonstration of commitment**
 - **Improved environmental performance**
 - **Integrated SHE (S)**
 - **Monitoring – scientific evidence**
- Μείωση κόστους και βελτίωση του διαχειριστικού ελέγχου,
 - Συμμόρφωση με τη νομοθεσία και καλές σχέσεις με τους stakeholders
 - Εξυπηρέτηση απαιτήσεων των πελατών
 - Ανάδειξη της δέσμευσης,
 - Βελτιωμένη περιβαλλοντική απόδοση,
 - Κινητοποίηση της λιμενικής αρχής για την περιβαλλοντική διαχείριση,
 - Ολοκληρωμένη περιβαλλοντική διαχείριση και αποτελεσματική ενσωμάτωση της περιβαλλοντικής διάστασης και αποτελεσματική διασύνδεση με την υγεία και ασφάλεια, καθώς και συστήματα ποιότητας,
 - Παρακολούθηση του περιβάλλοντος που προωθεί την εφαρμογή των δεικτών απόδοσης για την παρακολούθηση της αποτελεσματικότητας του συστήματος διαχείρισης.

Principles to practice

ISSUES – AND OPTIONS - CHANGE WITH TIME – ENVIRONMENT-PLUS*



STRATEGIC ANALYSIS
QUESTIONNAIRE FOR
THE (ENVIRONMENTAL)
PORT MANAGER



SDM

SELF DIAGNOSIS METHOD

SELF
DIAGNOSIS
METHOD

SDM sections



SDM

SELF DIAGNOSIS METHOD

- **Environmental policy**
- **Organisation and personnel**
- **Awareness and training**
- **Communication**
- **Operational management**
- **Emergency planning**
- **Monitoring**
- **Review and audit**

- **Δήλωση Περιβαλλοντικής Πολιτικής**
- **Δομή/Οργάνωση και Προσωπικό**
- **Ευαισθητοποίηση και εκπαίδευση**
- **Διαδικασίες και καταγραφή (εκθέσεις)**
- **Λειτουργική διαχείριση**
- **Ανάπτυξη Σχέδιων Περιβαλλοντικής Διαχείρισης (EMS)**
- **Αναπτυξη Σχεδίων αντιμετώπισης Έκτακτων Αναγκών (ΣΕΑ)**
- **Αναπτύξουν περιβαλλοντική παρακολούθηση**
- **Διαδικασίες επανέλεγχου (Review&Audit)**

SDM feedback and benchmark



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%



PORT ENVIRONMENTAL REVIEW SYSTEM



Reach a standard – to set an example*

PERS:

Port Environmental Review System



- 1.0 Port profile**
 - 1.1 Environmental policy statement**
 - 1.2 Identification of environmental aspects, legal requirements and performance indicators**
 - 1.3 Documented responsibilities**
 - 1.4 Conformity review on requirements**
 - 1.5 Basic environmental report**
 - 1.6 Selected examples of best practice**



PERS Award Piraeus 2013
Piombino (Italy), Corfu, Kavala, Lagos, Volos

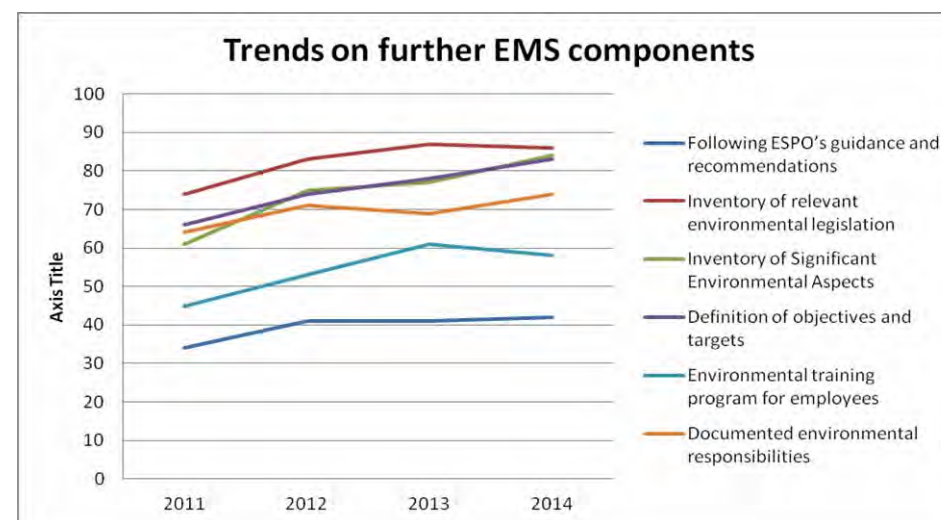
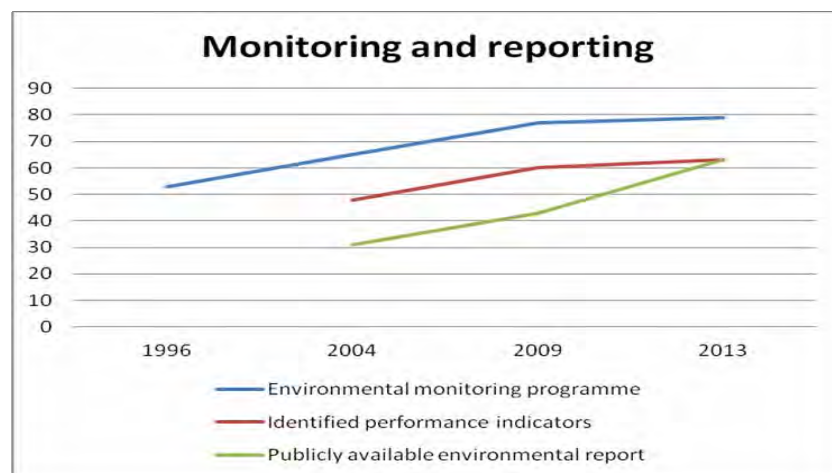
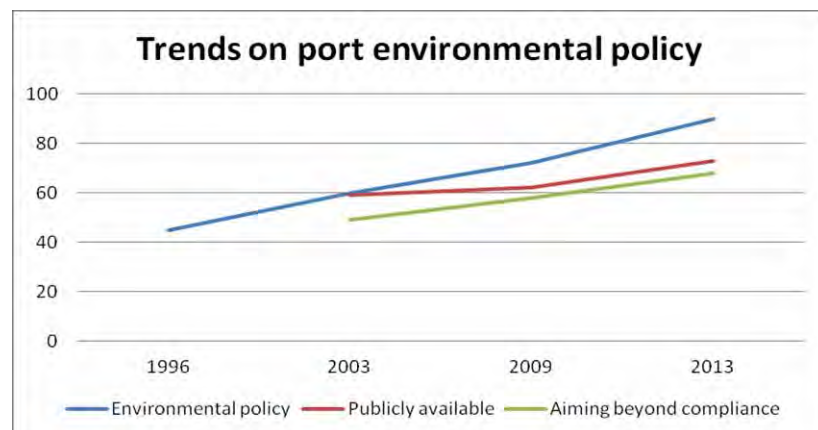


2. Port of Lagos

Stakeholder roundtable 7/09/2012



Added value sector - Credibility



Source: ESPO/EcoPorts surveys and SDM

In conclusion - what is a green port?



- ★ A port that shares experiences and works together with stakeholders and other ports to deliver:
 - ✓ Compliance - Reduction of costs and risks - Sustainability
- ★ A port with a structured approach on environmental management
 - ✓ Constantly identifying and managing challenges
 - ✓ Sets targets and works towards continuous improvement
 - ✓ Applies the principles of the Green Guide
- ★ A port that is transparent in communicating / reporting efforts
 - Aware of Public / stakeholders expectations

A GREEN PORT SUPPORTS A SMART ISLAND



Philosophical model:
ΥΓΕΙΑ ΓΙΑ ΜΑΣ
Geographically Integrated Auditing
Monitoring And Sustainability



AEA
HIT
DAFNI

Mission
Objectives
Coordination



EC
National
Municipality

Universities*
Research Inst.
Ports & Projects

Medcruise
Shipowners
Industry

ESPO
EcoPORTS

EcoPorts Network
Tools
Education
Training + R & D
Database
Promotion

Policy Investment Education Training R&D Culture Test-beds

Policy

Practice

Competitiveness Environment Logistics Sustainability Value-added*

NETWORK OF SUSTAINABLE
AEGEAN AND IONIAN ISLANDS



How can ESPO and EcoPORTS assist?



- **Use Website and Newsletter help to promote concept and activities**
- **Integrate the principles of SMART islands and the Pact of Islands into EcoPorts training and educational material***
- **Incorporate the objectives of the Island network into existing University undergraduate and postgraduate teaching schemes***
- **Offer the integration of EcoPorts SDM in the context of island ports as part of post-graduate scheme (demonstration and guidance to Island Port Authorities)**
- **Collaborate in funding applications**



THANK YOU FOR YOUR ATTENTION

ΘΑ ΕΠΙΣΤΡΕΨΩ!