



ECOPOINTS GLOSSARY

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Action Plan: A statement or statements in a management program of what will be done to achieve a management aim, objective or target. The action plan would include what was to be done, how, by whom, when (or how often) and for how long.

Agrofood (also known as Agri-food): The business of producing food agriculturally (as opposed to through hunting, fishing, gathering). Examples of agrofood industries are those producing cheese, meat, vegetables, etc.

Air emissions (pollutants): Substances or energy (e.g. waste heat) released into the atmosphere in such quantities and of such duration likely to cause harm to plants or animals (including people); damage to materials (e.g. fabrics) and structures (e.g. buildings); changes in weather and climate; or interference with the enjoyment of life or property (e.g. as a result of odours or noise). Air pollutants include; nitrogen oxides, sulphur oxides, ozone, smoke, suspended particulates, carbon monoxide, carbon dioxide, polyaromatic hydrocarbons, benzene, volatile organic compounds, polychlorinated biphenyls, dioxins, chlorine, fluorides, halogen compounds, methane, asbestos, glass and mineral fibre particulates and toxic volatile metals and their compounds (lead, cadmium, arsenic, nickel and mercury).

Air quality standard: The concentration of a pollutant over a specified period above which adverse effects on health or the environment may occur, and which should not be exceeded. Health-based standards (often called primary standards) are usually legally enforceable; environment-based standards (often called secondary standards) may be long-term objectives that are not legally binding.

Biodiversity: The totality of genes, species and ecosystems in a region or in the world. It includes genetic diversity (the variation in the genetic composition of individuals within or among species), species diversity (the variety and frequency of different species) and ecosystem diversity (the variety and frequency of different ecosystems).

Building contractors: A person or company that organizes the building, re-development or repair of offices, factories, specialist facilities etc., for example, by supplying workers and providing materials.

Bunkering: In shipping, bunkering refers to the fuelling of ships with marine (bunker) fuels used to power them, and also includes food and drinking water supplies for the crew. The fuelling operation can either be carried out via pipeline or tanker vehicle at berth or with special bunker vessels on the water. Ship-to-ship fuelling outside the port areas, i.e. at sea, is called offshore bunkering. Very high safety precautions apply to bunkering to ensure that no marine fuels spill into the water during fuelling.

Carbon Footprint: The amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organization, or community. It also often includes the emissions of other greenhouse gases, such as methane, nitrous oxide, or chlorofluorocarbons (CFCs).

Cargo Handling: Environmental risks and impacts may result from spillages or incidents during the handling of cargo. The nature of the environmental risk is dependent on the cargo handled. Cargo types include: **Aggregates:** For example, cement, sand (coarse & fine), gravel and crushed rock often used in the construction industry; **Grains:** For example, wheat, flour, soya, oil seeds and other cereals; **Minerals:** For

example, cement, sulphur, potash, alumina, nitrates, and phosphates. These have been separated from unrefined mineral ores; **Ores:** For example, pyrites, bauxite and iron ore; **Other Dry Bulk:** A general category for all bulk that does not fall into the above sections, for example, sugar and fertilizers; **Perishable Goods:** Any cargo that is liable to decay or deteriorate in transport or storage if conditions are not strictly controlled; for example, foodstuffs such as fruit, bananas, vegetables; **Wood (forest) products:** For example, paper, newsprint, woodchip, wood pulp, pallets.

Cargo Storage: On-site storage activities within the Port area. Different types of storage facility may result if a variety of environmental risks as a result on accidental spillages, runoff or drainage. Alternatively, incompatible chemicals may result in health & safety risks if stored in the same vicinity.

Chief Executive Officer (CEO) or Chief Executive (CE): The highest-ranking executive in an authority or company, whose primary responsibilities include making major corporate decisions, managing the overall operations and resources of a company, acting as the main point of communication between the board of directors (the board) and corporate operations and being the public face of the company.

Clean maritime fuel infrastructure: Arrangements made to offer ship owners as broad a spectrum of alternative fuels as possible in order to improve air quality and reduce greenhouse gas emissions in and around ports and harbours.

Climate (at a given place): The totality of the weather experienced; not simply average weather since climate includes extremes or deviations from the mean state of the

atmosphere, e.g. fogs, frosts, and storms; the behaviour of the atmosphere over periods of weeks, months, seasons, years and decades, i.e. the integration of weather over long periods; usually characterised using long-term records, e.g. 30 years.

Climate Change: A change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide and other greenhouse gases produced by the use of fossil fuels. It may cause weather patterns to be less predictable and ports (depending on location) may experience more frequent and more intense hurricanes, storms, floods and extremes of temperature.

Coastal defence: Structures to protect the coastline from storm damage and erosion by the sea. These defences also include mudflat, salt marsh and sand dune systems.

Coastal Engineering: Activities and structures related to the operation of the Port (for examples docks and quaysides, piers and breakwaters), and its immediate surroundings (for example tidal barrages, coastal and flood defence).

Conservation Areas or Designations: Protected areas of unique or rare species, communities and habitats. For example, RAMSAR wetlands, Biosphere reserves, Special Protection Areas, and Special Areas of Conservation. There are numerous examples of National designations. Some sites may be voluntary protected areas of importance to the local community.

Continual improvement: Process of enhancing the environmental management system, with the purpose of achieving

improvements in overall environmental performance, not necessarily in all areas of activity simultaneously, resulting from continuous efforts to improve in line with the Port Authority's environmental policy.

Contractor: A person or firm that undertakes a contract to provide materials, labour or specialist skills to perform a service or do a job within the port area. For example, dredging operations or hydrographic surveys may be undertaken by a contractor.

Clean Shipping Index (CSI): An independent and holistic labelling system of vessels' environmental performance; a practical tool for differentiating port- and fairway fees or choosing more sustainable shipping alternatives.

(<https://www.cleanshippingindex.com/>).

Corporate social responsibility (CSR): A type of international private business self-regulation that aims to contribute to societal goals of a philanthropic, activist, or charitable nature by engaging in or supporting volunteering or ethically-oriented practices.

Designated waters: Water bodies or sections of a river designated by the relevant water authority under one or more EU Directives, e.g. a river with an important salmon fisher could be designated under the Fisheries Directive and would have to comply with the water quality standards set in this directive.

Differentiated port fees: Environmental charging schemes aimed at reducing the environmental impact caused by transport modes that use the port. The majority of arrangements involve rebates on port dues for vessels that take part in environmental indexes or certification programmes.

Initiatives such as Environmental Ship Index, Green Award and Clean Ship Index assign scores to ships that comply with certain environmental standards.

Digital applications: A broad term that refers to any application software that can be used by a computer, mobile device, or tablet to perform useful tasks. A specific piece of such software is called a software application, application program, application or app. **Application** software is a computer program, or a combination of several computer programs, developed to carry out specific operations such as writing, calculating or any other. It is not the same as a **system** software which only executes application software.

Disaster Recovery Plan: A plan for actions to be taken to recover from a disaster and resume business functions. It does not address preplanning or emergency actions and is part of a broader business continuity management plan.

Duty of Care (Environmental): It is a legal approach in pollution control and environmental legislation applying to people who handle or control environmentally harmful substances or processes. It includes the duty to prevent anyone else contravening legislation; to prevent escape of potentially damaging substances and wastes; and to transfer potentially damaging substances and wastes to individuals or organizations which satisfy legislation dealing with such materials. Duty of Care also covers responsibility to ensure that legal and technical requirements are fulfilled.

EcoSLC: (Eco Sustainable Logistics Chain): This is the neutral, independent and non-profit Foundation that provides access to the EcoPorts Network (including the methodology of SDM, and PERS, the

international standard of EMS) for ports outside Europe. Further information, advisory services and training options can be accessed via: <https://www.ecoslc.eu/>, and contact made using: info@ecoslc.eu

Ecosystem: This is a physically defined environment, made up of two inseparable components: i) The biotope (abiotic) - a particular physical environment with specific physical characteristics such as the climate, temperature, humidity, concentration of nutrients or pH, and ii) The biocenosis (biotic): - a set of living organisms such as animals, plants or micro-organisms, that are in constant interaction and are, therefore, in a situation of interdependence.

EMAS: The EU Eco-Management and Audit Scheme (EMAS) is a management instrument developed by the European Commission for companies and other organisations to evaluate, report, and improve their environmental performance. EMAS is open to every type of organisation. It spans all economic and service sectors and is applicable worldwide. (NOTE: EcoPorts PERS is the only international quality standard of EMS focused on the port sector).

Emergency and Contingency Plans: A set of written procedures for dealing with emergencies that minimize the impact of the event and facilitate recovery from the event. An emergency is a situation that poses an immediate risk or threat and requires urgent attention. The timing of emergencies is often hard to predict. A contingency plan is a course of action designed to help an organization respond effectively to a significant future event or situation that may or may not happen. It is sometimes referred to as "Plan B," because it can be also used as an alternative for action if expected results fail to materialize. Contingency planning is a

component of business continuity, disaster recovery and risk management.

Emergency situations: These can arise for many reasons, for example fire, explosion, collision, flooding, spillage, leakage and uncontrolled development in the course of an operation or activity. An emergency response plan should identify potential emergencies, assess their likely effects and determine procedures to be followed for all emergencies.

Emission standard: The maximum amount or concentration of a pollutant allowed to be emitted from a specified source.

Emission berth standard: Part of goal-based regulatory approach to drive up demand for emissions reductions at berth. It is more flexible than a mandatory regulation (of shore power). Zero emission port standard (arriving at the port) – a measure to ensure only zero emission ships are allowed into EU ports.

Emissions inventory: List of the location and type of pollutant sources in the area under study, together with the amount of pollutant discharged in a specified period.

E.M.S: (See Environmental Management System).

Employee: An employee is someone who gets paid to work for a person or company. Workers do not need to work full time to be considered employees—they simply need to be paid to work by an employer (the person or business that pays them).

Energy efficiency: This means using less energy to perform the same activity. It is therefore one method to reduce human greenhouse gas emissions.

Environment: Surroundings in which the Port operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation. The environment in this context extends from within the Port to the global system or biosphere.

Environmental aspect. An element of the activities, products and services that may impact on the environment directly, or indirectly. The impacts may be beneficial or adverse. The tests of significance are i) Aspects for which the Port Authority has strict liability or responsibility in law, ii) those over which (as a landlord) it may reasonably be expected to be able to bring influence to bear (e.g. over tenants/operators), and iii) aspects that are deemed to be of local, regional or national importance.

Environmental assessment: A process that assesses and predicts the environmental impact of a proposal for example, a road scheme or new development - that is subject to a decision by a competent national authority. It identifies alternatives and presents its findings in such a way that decision-makers can be informed of what needs to be done. Environmental assessment is equally applicable to policy proposals.

Environmental aspects inventory: A list of the Environmental aspects, known or suspected, of the activities, products and services of the Port Authority that may impact upon the environment.

Environmental audit: A systematic evaluation to determine whether or not the environmental management system and environmental performance comply with planned arrangements, and whether or not the system is implemented effectively, and is suitable to fulfil the Port Authority's environmental policy.

Environmental effect: Any direct or indirect impingement to the activities, products and services of the Port Authority upon the environment, whether adverse or beneficial. A **Direct** effect occurs when an activity affects the environment directly, for example: oiling of seabirds after an oil spill. An **Indirect** effect may occur when the effect of an activity on the environment occurs at a distance (in time or space) from the source of the effect. For example; the use of pesticides in agriculture that eventually accumulate in the tissues of seabirds and affect their reproduction and population size.

Environmental effects evaluation: A documented evaluation of the environmental significance of the effects of the Port Authority's activities, products and services (existing and planned) upon the environment. An assessment to decide whether the environmental effects are significant or important and may need to be managed. This evaluation may examine the scale, location, type, duration and frequency of an effect. For example; an occasional oil spill within an enclosed dock *may* not be as significant as frequent small oil discharges in the vicinity of a bathing area.

Environmental factors: All environmental variables that are known to affect organisms; they can be divided into abiotic factors, which involve physical and chemical environmental components (e.g. water, temperature, light, oxygen, nutrients, pH and toxins), and biotic factors, which involve interactions between organisms (e.g. competition, predation, parasitism and mutually beneficial relationships such as pollination).

Environmental impact: Any change to the environment, whether adverse or beneficial, wholly or partially resulting from the Port

Authority's activities, products or services. (See **Environmental effect**).

Environmental Impact Assessment (EIA): The systematic, reproducible and interdisciplinary identification, prediction and evaluation, mitigation and management of impacts from a proposed development and its reasonable alternatives.

Environmental incident: An Environmental Incident is an event itself that may cause harm or potential harm to an environmental receptor e.g. air, water, soil, sediment, wildlife or local habitat (and thus, create an emergency situation).

Environmental Issue: A generic term for all natural and commercial resources, environmental impacts or effects and user/operator conflicts relevant to environmental management.

Environmental management: The functional organization necessary to deliver environmental protection and sustainable development to the highest possible standards of compliance and accountability. It is the process of dealing with, or controlling impacts on the environment arising from port activities and operations.

It requires the Port Authority to establish an environmental policy and to identify objectives and targets that will demonstrate compliance with policy (and legislation). The policy must be relevant to the Port Authority's activities, products, services and their environmental effects. It should also be understood, implemented and maintained at all staff levels.

Environmental management manual: The documentation describing the procedures for implementing the Port Authority's environmental programme.

Environmental management plan: see *environmental management program*.

Environmental management program: A description of the Authority's specific objectives and activities to ensure protection of the environment at a given site, including a description of the measures taken or envisaged to achieve such objectives and where appropriate the deadlines set for implementation of such measures.

Environmental management review: The formal evaluation by management of the status and adequacy of systems and procedures in relation to the environmental issues, policy and regulations as well as new objectives resulting from changing circumstances.

Environmental management system (EMS): it is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency. This covers the organisational structure, responsibilities, ways and means of implementing environmental management. It ensures that the activities of the Port Authority, and their effects, conform with environmental policy and associated objectives and targets. It includes the preparation and implementation of a documented system of procedures and instructions providing the basis for a programme of continuous environmental improvement.

Environmental management system audit: Systematic and documented verification process to objectively obtain and evaluate evidence to determine whether a Port Authority's environmental management system conforms to the environmental management system audit criteria set by the

Port Authority, and communication of the results of this process management.

Environmental monitoring: This is the systematic approach to observing, studying and recording the conditions and quality of the environment. Monitoring typically involves collecting samples and specimens from the air, water, soil and sediment to determine if any physical or biological factors are negatively impacting natural ecosystems and habitats.

Environmental performance: Measurable outputs of the environmental management system, relating to the Port Authority's control of the impacts of its activities, products or services on the environment, based on its environmental policy, objectives and targets.

Environmental Performance Indicator (EPI): Environmental performance indicators condense environmental data into relevant information that allows monitoring, target setting, tracing performance improvements, benchmarking and reporting. They can be classified in the following categories:

- i) Operational performance indicators (OPI), provide information about the environmental performance of an organization's operations.
- ii) Management performance indicators (MPI), provide information about the management's efforts to influence an organization's environmental performance.
- iii) Environmental condition indicators (ECI) provide information about the local, regional, national or global condition of the environment.

Environmental policy: Statement by the Port Authority of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets.

Environmental program: A description of the means of achieving environmental objectives and targets.

Environmental review: An initial comprehensive analysis of the environmental issues, impact and performance related to activities in the port area.

Environmental Report: A descriptive account of environmental performance information by the Port Authority that is communicated to its stakeholders. Information on environmental performance includes among others: Impacts on the environment, performance in managing those impacts, and contributions made to ecological and sustainable development.

Environmental Ship Index (ESI): Identifies seagoing ships that perform better in reducing air emissions than required by the current emission standards of the International Maritime Organization (IMO) (<https://www.environmentalshipindex.org/>)

Environmental statement: A public declaration of the approach and actions carried-out by the authority with regard to its environmental liabilities and responsibilities. It provides environmental information to the public and other interested parties regarding the environmental impact and performance of the organisation. As appropriate, the statement should address such topics as the impact of activities within the port area (and adjacent to it, if significant in terms of cross-boundary impacts), environmental issues and effects, the environmental policy, objectives, environmental program, emissions data, review procedure and specify the date of the next environmental statement.

ESPO (European Sea Ports Organisation): This is the principal interface and representative body of port authorities, port associations and port administrations between European seaports and the European institutions and its policy makers (www.espo.be).

ESPO Green Guide: The “ESPO Green Guide; Towards excellence in port environmental management and sustainability” was formally adopted by the Executive Committee of ESPO in June 2012. It is focused on providing guidance to the members of ESPO on how they can work towards fulfilling their environmental objectives and commitments. Its contents include information for stakeholders, guidance for port authorities, and examples of good practices.
(https://www.espo.be/media/espopublications/espo_green%20guide_october%202012_final.pdf).

Frequency differentiation: this is a concept related with the availability of on shore power supply (OPS). When designing an OPS system in a port, many parameters need to be considered such as variation in frequency, voltage and power. There exist conversion issues related with the variation of frequency levels used in different parts of the world (e.g. North America). In addition, the frequency of on-board electrical systems may differ among vessel's sizes and categories. There are many open technical issues on varying electrical frequencies at berth for different ship types.

Fisheries & Aquaculture: Traditional fishing fleets and fish processing activities based within the Port or its surrounding area. For example: **Aquaculture:** Shrimp ponds, freshwater fish farms and fresh water mussel farms; **Mariculture:** Salmon and sea trout farms, mussel and oyster beds, and seaweed

farming (for example kelps); **Fixed Net Fishing:** The use of nets fixed to the shore, for example gill nets, herring nets and tangle netting; **Seaweed collection:** Collection of edible species of seaweed or for use as fertilizer.

Flood defence: Structures designed to avoid or prevent flooding of the land by river flooding and tidal or storm surges. These defences also include mudflat, salt marsh and sand dune systems.

General Cargo Vessel: Multiple deck ship designed to carry goods shipped unpacked or packed in cartons, crates, bags or bales but not shipped in bulk.

GHG emissions (SEE also, Climate Change): The release into the earth's atmosphere of any of various gases that contribute to the greenhouse effect. Carbon dioxide, methane, and water vapour are the most important greenhouse gases. (To a lesser extent, surface-level ozone, nitrous oxides, and fluorinated gases also trap infrared radiation). The greenhouse effect is the process by which radiation from a planet's atmosphere warms the planet's surface to a temperature above what it would be without this atmosphere.

Green Award: A certificate that is issued by the independent Green Award Foundation to vessels and shipping companies that have made additional investments in the vessel and crew in order to improve the environmental performance, safety and quality (<https://www.greenaward.org/>)

Green discounts: Initiatives offered to shipping and associated stakeholders in recognition of the application of good practices in terms of reducing environmental impacts.

Global Reporting Initiative (GRI) Sustainability Reporting Framework:

GRI helps businesses and governments worldwide understand and communicate their impact on critical sustainability issues such as climate change, human rights, governance and social well-being. This enables real action to create social, environmental and economic benefits for everyone (<https://www.globalreporting.org>).

Habitat: A place where an organism lives; a type of environment inhabited by particular species and/or communities; often characterised by dominant plant forms, physical characters or a combination of these, e.g. forest, grassland, marsh and stream habitats.

Hazardous/ Dangerous Cargo: Storage of hazardous & dangerous cargo may result in specific environmental risks dependant on the physical- chemical characteristics of the chemicals stored; the method of storage, the location, size and management of the storage site. Dangerous cargo, their properties, stowage and storage requirements are given in the 'International Maritime Dangerous Goods Code' (IMDG) published by the IMO.

Incentive scheme: An arrangement under which a port authority provides financial benefits to ships to encourage and reward good environmental performance.

Induction programme: This is the process used within many businesses and authorities to welcome new employees to the company and prepare them for their new role. Such programmes often include briefings on Safety, Health, Environment and Security.

Industry: Economic activity concerned with the processing of raw materials and manufacture of goods in factories.

Initial environmental review: A report containing a brief, preliminary evaluation of the types of impacts that would result from an action. Often used as a screening process to assess whether or not proposals should undergo full scale Environmental Impact Assessment.

Interested parties (may also be referred to as Stakeholders): Those with an interest in the environmental effects of the Port Authority's activities, products and services. These include those exercising statutory environmental control over the Port Authority, local residents, the Port Authority's investors, insurers and workforce, customers and consumers, environmental interest groups and the general public.

Internal (and external) standards: The Port Authority has its own set of *internal* documents and systems that reference external content. These may be operating *standards*, specifications, drawings, handbooks, procedures, and a range of other authority/proprietary documents that reference external/industry *standards*, regulations and codes.

Inventory: In the context of port environmental management there are two important registers: i) the Inventory of Aspects, the formal and complete list of the activities, products and services that may impact on the environment. Its role is to track changes in priorities and occurrences, and to assist those with responsibility for controlling such impacts, and ii) Inventory of Legislation, the comprehensive register of legal liabilities and responsibilities to which the port authority must comply.

ISO 14001 (revised edition 2015): This is the international standard that specifies requirements for an effective environmental

management system (EMS). It provides a framework that an organization can follow, rather than establishing environmental performance requirements. ISO 14001:2015 (<https://www.iso.org>) is relevant to all organizations, regardless of size, location, sector, or industry. (NOTE: EcoPorts PERS is the only international quality standard of EMS focused on the port sector).

Liabilities (Environmental): Legal responsibilities for the Port Authority's acts or omissions. Failure of the Authority to meet those responsibilities leaves it open to a lawsuit for any resulting damages or a court order to perform (as in a breach of contract or violation of statute).

LNG: Liquefied natural gas is natural gas that has been converted to a liquid form for the ease and safety of natural gas transport.

Logistics Operator: A company that designs, manages and controls the supply chain of another company. The logistics operator, depending on the commercial agreement between both companies, can operate during supply, transport, storage and/or distribution.

Low emission zones: These are areas where high polluting vehicles are regulated. Usually this means that vehicles with higher emissions cannot enter the area. In some low emission zones vehicles, which contribute more to pollution have to pay a fee or register their vehicle if they enter the area. Most low emission zones affect buses, coaches and heavy-duty goods vehicles (usually over 3.5 tonnes Gross Vehicle Weight (GVW)).

Marine Engineering: Activities within the port related to the development, maintenance and disposal of MARINE structures, including: windfarms, turbines, oil and gas

rigs, platforms, pipelines and cables, and support of ocean mining and exploration.

Monitoring: Activity involving repeated observation, according to a pre-determined schedule, of one or more elements of the environment to detect their characteristics (status and trends).

Mitigation: This means an action or activity intended to remedy, reduce, or offset known negative impacts on the environment.

Natural resources:

The naturally occurring assets that provide use benefits through the provision of raw materials and energy used in economic activity (or that may provide such benefits one day) and that are subject primarily to quantitative depletion through human use. They are subdivided into four categories: mineral and energy resources, soil resources, water resources and biological resources.

N.G.O (Non-governmental organization): a non-profit, citizen-based organization that operates independently of any government, typically one whose purpose is to address a social or political issue.

Objective: Overall environmental goal, arising from the environmental policy and significant environmental aspects, that the Port Authority sets itself to achieve, and which is quantified where practicable. An explicit statement of what the Port Authority hopes to achieve e.g. to improve air quality in the port area, to reduce the environmental impact of ship waste.

Operational control: Operational control consists of planned responsibilities, training needs, resources, control measures and information and further, if necessary, instructions, procedures and monitoring. This is to ensure that the activities are

carried out in line with legal and other requirements.

Operators: Companies that control or perform activities within, adjacent to, or connected with the port's own operational programme and geographic/hydrographic area. For example, companies that operate terminals or cargo-handling.

O.P.S: Onshore Power Supply (Also known as Alternative Maritime Power (AMP), Cold Ironing, or Shoreside Electricity). It deals with the connection between ship and shore and the procedures for safe operation.

Organisation: Any organised body or establishment, for example, a business, company, government department, charity or society. For bodies or establishments with more than one site, a single site may be defined as an organisation.

Pandemic (from Greek πᾶν, pan, "all" and δῆμος, demos, "people"): This is an epidemic of an infectious disease that has spread across a large region, for instance multiple continents or worldwide, affecting a substantial number of people. Compared to an *epidemic* disease, a *pandemic* disease is an *epidemic* that has spread over a large area, that is, it is prevalent throughout an entire country, continent, or the whole world.

Paris Agreement: The Paris Agreement is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC), dealing with greenhouse-gas-emissions mitigation, adaptation, and finance, ratified by EU in 2016.

Performance criteria: The condition or value of each parameter or attribute used to judge the achievement of an objective. The value or condition of a parameter, attribute

or environmental quality used to judge performance. Alternatively, the condition, status or value of a parameter or attribute at which management action is initiated or required.

Performance indicator: An (environmental) performance indicator may be defined as:

- A measure of the Port Authority's progress in achieving compliance with legislation and improving environmental quality through the actions of its environmental management programme.
- Information that demonstrates over time the effectiveness of the port's environmental management programme in attaining high grades of environmental quality standards through continuous improvement.

PERS (Port Environmental Review System): This is the international quality standard of Environmental Management System specifically applied to the port sector and designed to assist port authorities, companies and terminal operators with compliance with environmental legislation, achievement of their environmental objectives and sustainable development. Ports may voluntarily apply for certification to the PERS standard in which case, conformity with the requirements is independently audited by Lloyd's Register. For ESPO member ports see <https://www.ecoport.com/>, for ports outside Europe, see <https://www.ecoslce.eu/>

“Port development (land)” aspects:

The lack of space and the increasing number of industries located in the Port area create the necessity of expansion towards the surroundings. This occupation of the terrestrial space may generate several consequences:

- Destruction of some natural areas close to the Port (e.g. wetlands, dune systems).
- Disturbance of the flora and fauna which live in the area affected for the new expansion.
- Relocation of some installations which can generate social conflicts.
- Landscape impact due to the very existence of the port. For instance, the port infrastructure, the land-based traffic and the lighting used during night operations give the Port the appearance of a busy industrialized district.

“Port development (sea/water)” aspects:

The increase in the maritime transport around the world has made the Ports expand (e.g. new docks, new facilities) in order to provide the maximum surface to the port users. Basically, this means the use of space on the sea which may cause different effects:

- Alteration of the coastal hydrography, causing:
 - Changes in currents.
 - Water stagnation which can lead to eutrophication processes and waste accumulation.
 - Erosion or accrual of some coastal areas.
- Interaction with the marine ecosystems, disturbing the benthic habitat, increasing turbidity over a wide area and re-suspending contaminants.

Precautionary Principle: Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. If there is any uncertainty or doubt about the effect that an action may have, the environment must be given the benefit of the doubt. Prevention is better than cure, so release should be prevented

even before there is evidence of damage. The precautionary principle is part of a policy of risk prevention to reduce emission levels of All human-induced substances.

Prevention of pollution: Use of processes, practices, materials, products or energy that avoid or reduce the creation of pollution and waste.

Private company: a limited company that does not issue shares for public subscription and whose owners do not enjoy an unrestricted right to transfer their shareholdings.

Public Company: a limited company whose shares may be purchased by the public and traded freely on the open market and whose share capital is not less than a statutory minimum.

Recreational Use: The Port area and its surroundings may attract a variety of recreational activities that may need to be considered in the management of the Port and its environment. For example; bird watching, wildfowling, horse riding, bathing, angling, power boating, jet skiing, surfing and SCUBA diving.

Recycling: The process by which waste or used materials are put back into productive use. Efficiently operate recycling systems can reduce pollution problems caused by waste disposal. In addition, some recycling schemes may provide alternative sources of energy, and all help conserve energy and natural resources.

Renewable resources: Resources that can be harvested or extracted regularly without diminishing its yield. All biological resources are renewable if used sustainably, as are some physical resources such as power derived from wind, water flow or

waves. In many cases, however, potentially renewable biological resources are harvested in excess of their capacity to regenerate. This leads to declines in yield over time. In agriculture, this decline may be compensated by the use of fertilisers and pesticides which are not in themselves renewable resources, and which through their use cause other problems.

Resource: Anything that is used directly by people. A renewable resource can renew itself or be renewed at a constant level. A non-renewable resource is one whose consumption necessarily involves its depletion.

Resource consumption: This is about the use and depletion of non-renewable reserves or stores, or the use of renewable supplies. It refers to such issues as water, energy, petroleum, electricity *etc.*

Responsibility (Environmental): This is an obligation that the Port Authority has to do something. (Liability means that it is subject to repercussion if the duties are not carried out).

Risk analysis (Risk assessment, RA): Technique used to determine the likelihood or chance of hazardous events occurring (such as release of a certain quantity of a toxic gas) and the likely consequences. Originally developed for use in nuclear and chemical industry where certain possible events, of low probability, could have extremely serious results. Attempts are being made to use concepts from probabilistic risk analysis to characterise environmental impacts, worse occurrence and nature are not easy to predict with any degree of accuracy.

Screening for significance: The process of identifying and selecting the most important

activities, products and services that may impact on the environment. This can be based on legal requirements, policy statements and risk analysis of the impact of the aspect. If an impact is regarded as being significant (e.g. opinion of stakeholders), the aspect has to be regarded as significant.

Scrubbers (or Exhaust Gas Cleaning Systems (EGCS): These are used to remove particulate matter and harmful components, such as sulphur oxides (SO_x) and nitrogen oxides (NO_x) from the exhaust gasses generated as a result of combustion processes in marine engines, to implement pollution control.

Scrubbers Liquid Effluent: Operating or cleaning a wet exhaust gas scrubber for marine diesel engines and boilers generates effluents (washwater) that must be treated prior to discharge. Washwater contains gaseous and particulate emissions removed from the exhaust in the funnel by the scrubber.

S.D.M. (Self-Diagnosis Methodology): This is a concise checklist against which port managers can self-assess the environmental management programme of their port in relation to the performance of both the sector and international standards. It may be accessed via www.ecoport.com for ports in Europe, and through www.ecoslc.eu for ports outside Europe. It is a component of the port sector's international EMS quality standard of PERS.

Senior Management: The most senior staff of an organization or business, including the heads of various divisions or departments led by the chief executive. In this case is the organisation is the Port Authority. This term is also known as a Top Management.

Service providers: In an employment contract (a 'contract of service'), the employer is obliged to provide work and the employee is obliged to do that work. A Contractor has a 'contract for services' in which there's no such obligation – the contractor agrees to provide services to the client in accordance with an agreed schedule. For example, the provision of catering or parking by external agencies.

Shipping company: A business or enterprise that moves goods or possessions by ship.

Shipping & Navigation: Those activities and structures required for the safe passage of shipping into, within and out of the Port and its harbour(s).

Significant environmental aspect: An element of activity, product or service that may be considered a priority issue in terms of actual or potential impact on the environment (See Environmental issue).

Social integration: This is the process during which newcomers or minorities are incorporated into the social structure of the host society. Social integration, together with economic integration and identity integration, are three main dimensions of a newcomers' experiences in the society that is receiving them.

Social media: Websites and applications that enable users to create, communicate and share content or to participate in social networking using internet and mobile phones.

Stakeholders: Individual or group concerned with or affected by the environmental performance of an

organisation, e.g. local community, government, employees, clients, authorities.

Strategic planning: This is the process of creating specific business strategies, implementing them, and evaluating the results of executing the plan, in regard to an authority's or company's overall long-term goals or objectives. It is a concept that focuses on integrating the activities and programmes of various departments (such as accounting and finance, marketing, operations and human resources) within an authority or company to accomplish its strategic goals. The term strategic planning is essentially synonymous with strategic management.

Suppliers: A person or organization that provides something needed by the Port authority or its Operators such as a products or services. For example, the provision of office materials or fuels.

Sustainable development: The established definition is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' ((Brundtland Report). The aim is to improve the quality of human life within the carrying capacity of supporting ecosystems. Any industrial sector will only be sustainable when it supports the communities and environments on which it depends both now and in the future.

Targets: A detailed statement, usually quantified within a defined time frame, of measures by which it can be confirmed that specified objectives have been met. E.g.: objective = to improve the quality of harbour seawater near public beach; target = compliance with EU Directive on Bathing Water Quality Standard, OR, compliance with water quality standards by the year 2005.

Tenant: In the context of SDM/PERS, a person or company that occupies land or property rented from the Port Authority (landlord).

Terminals: Areas set aside for the transshipment of specific items. This includes the dock, berthing facilities, cargo handling facilities, storage and transport infrastructure required for safe operation of the terminal.

Training Requirements: Provisions made available by the Port Authority for the effective delivery through teaching and education of the skills, knowledge (and fitness, where appropriate) necessary to initiate, maintain and improve capability, capacity, productivity and performance amongst employees and managers. They include both the methods of presentation and the material itself.

U.N. Sustainable Development Goals: These are the blueprint to achieve a better and more sustainable future for the global society by addressing the global challenges it faces. The 17 goals are all interconnected and include those related to poverty, inequality, climate change, environmental degradation, peace and justice.
<https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

Waste Disposal, Effluent Discharges & Emissions: Activities that may have a direct effect on water, air and soil quality of the Port and its surroundings. For example, industrial emissions, industrial effluent, runoff, ship discharges, ship and vehicle exhausts, thermal discharges, sewage and marine litter.

Waste Management: These are the activities and actions required to manage waste from its inception to its final disposal. This includes the collection, transport,

treatment and disposal of waste, together with monitoring and regulation of the waste management process.

Waste Reception Facilities: Include reception facilities for shipboard waste, for example, chemical wastes, oily wastes, oily bilge water, ballast water, tanker & hull washings, shipboard sewage, and garbage whether they are fixed, mobile or contractor operated.

Weather: (in a given place) The condition of the atmosphere at a given time with respect to the various elements, e.g. temperature, sunshine, wind, precipitation; refers to the behaviour of the atmosphere over a few hours or at most over a few days (see **climate**)

