

Aspects and trends of logistical services

Aspects of a country's territory and its basic economic activities determine the nature of its logistical services and set the dominant types of transportation services available (international/national) and the use of specific means of transportation (for example, sea transportation for islands).

✓ High use/saturation of freight transportation by road

Growth in the frequency of shipments leads to an increase in road transportation, which in turn eventually leads to saturation with a resulting increase of pollution and waste of energy.

✓ Intermodal transportation

The saturation of highways is one of the factors that make the use of other means of transportation with less environmental impact more attractive. A combination of means of transportation is intermodal transportation, which represents an important option for decreasing environmental impact.

✓ Subcontracting

An increase in subcontracting reflects a trend to outsource logistical services, which places a large part of the responsibility and possibility of mitigating harmful environmental aspects of freight transportation in the hands of autonomous workers.

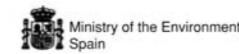
✓ Increase of logistic activity and specialization

Specialization in the manufacture of goods and decreased national self-sufficiency lead to an increase in trade and, therefore, in logistic activity.

Mediterranean Action Plan

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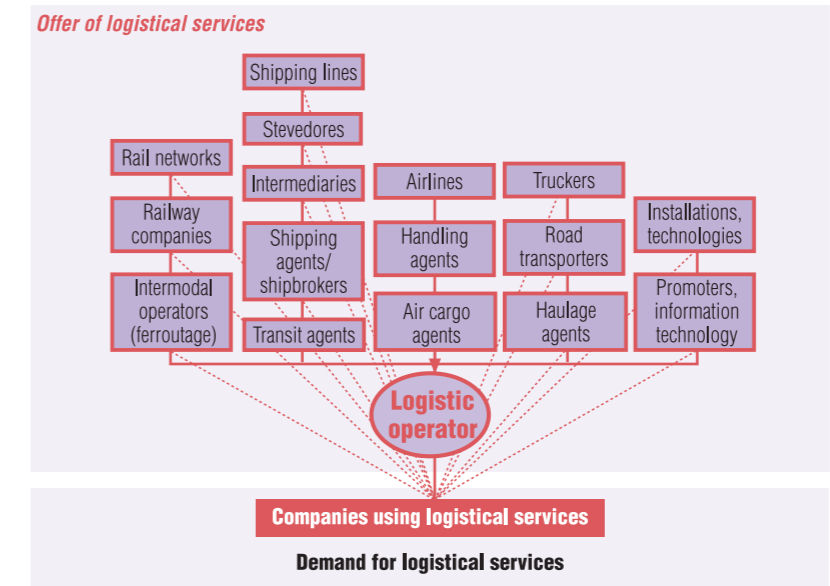


Good Environmental Practices in Logistical Services

Castellano
CD English
Français

The Regional Activity Centre for Cleaner Production (RAC/CP) of the Mediterranean Action Plan has prepared this brochure to facilitate the introduction of a Programme of Good Environmental Practices (PGEP) in logistical services. The manual that accompanies this brochure focuses on transportation of freight on land, specifically by road.

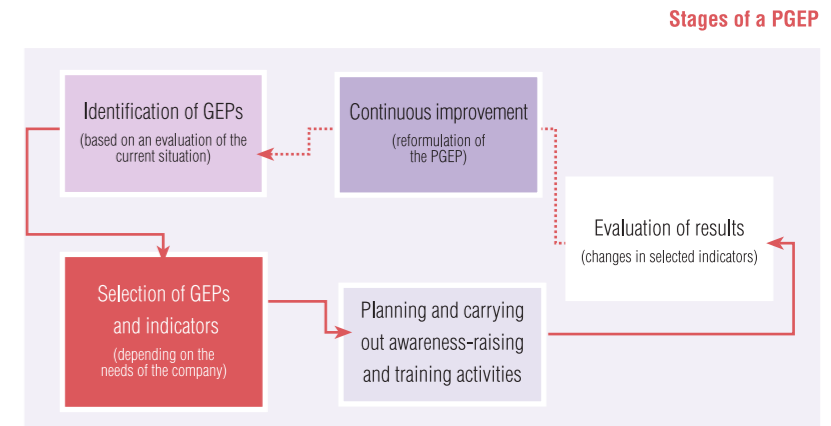
Agents that intervene in logistic operations



How to introduce a Programme of Good Environmental Practices (PGEP)

A PGEP must be designed and planned following a logical and ordered sequence in order to ensure its success and the participation of employees, which is a key aspect in achieving the desired objectives.

For success, the specific activities of **awareness raising** and **training** must be carried out in addition to the monitoring of the introduction of good practices in order to check for effectiveness and facilitate the detection of new needs.



There are **two types of strategies** for carrying out a PGEP, according to the degree of organizational complexity of the company, depending whether the organization is a:

- Logistic operator
- Autonomous transporter

How to identify applicable good environmental practices

Methodology

In order to determine which good environmental practices (GEPs) are applicable, a system of matrices has been developed, which identify environmental impact and GEPs in accordance with the processes carried out by a company. In addition, several sheets have been prepared with more detailed information on applicable GEPs.

Stages

1. Identification of the **processes** that take place in a firm. Each process has an associated **matrix**.

- 1- Planning and managing pick-up and delivery routes
- 2- Freight-loading operations at the shipper
- 3- Loading operations at logistics centres
- 4- Transport
- 5- Freight off-loading operations
- 6- Location and warehousing of goods
- 7- Handling at the warehouse
- 8- Preparation of orders, break-down and packaging
- 9- Vehicle maintenance
- 10- Maintenance of installations

2. Determination of the type of **logistical company**:

- A – Logistic operator (including all activities)
- B – Full-load transport agency
- C – Split-cargo transport agency
- D – Autonomous transporters
- E – Sender and consignee

3. Determination of the **GEP** to be introduced in accordance with the type of logistical company, using the matrices for processes that the firm carries out. Subsequently, the relevant GEP sheet* will be consulted in order to obtain additional information on the GEPs to be introduced.

*Column "N" indicates the number of sheet to be consulted in each case.

Example

Matrix 5

5	OFF-LOADING OPERATIONS	A	B	C	D	E	N
ENVIRONMENTAL IMPACTS	During off-loading operations the following environmental impacts can occur.						
	<ul style="list-style-type: none"> • Atmospheric pollution from fuel consumption because of: <ul style="list-style-type: none"> - Idling engines and reckless driving, which cause unnecessary fuel consumption - Insufficient coordination of inverse logistics (empty packing, pallets, foldable boxes) that require load-less trips that then have to be repeated 	X	X	X	X	X	1
	<ul style="list-style-type: none"> • Soil pollution from: <ul style="list-style-type: none"> - Waiting time for off-loading at areas near the loading dock with risk of spills 	X	X	X		X	4
	<ul style="list-style-type: none"> • Generation of waste: <ul style="list-style-type: none"> - Incorrect off-loading from lack of off-loading norms or proper training 	X	X	X		X	3
GEPs	<ul style="list-style-type: none"> • Source of accidents: <ul style="list-style-type: none"> - Off-loading outside the centre with risk of accidents from poor handling 	X	X	X		X	6
	<ul style="list-style-type: none"> • Respect the off-loading instructions, especially for dangerous products. Coordination with the safety adviser of the off-loader for transport. • Stop the engine. Set time limits for turning off the engine, because fuel consumption is greater during time at idle than consumption at starting the engine. 	X	X	X	X	X	3
	<ul style="list-style-type: none"> • Inverse logistics (pallets, boxes, containers, waste, etc.) treated in accordance with specific instructions set by the sender. 	X	X	X	X	X	1-8
	<ul style="list-style-type: none"> • Train employees involved in these areas. Respect the measures for management of waste of the off-loader. Follow the environmental procedures established in that business. 	X	X	X	X	X	1-3

Sheet 1: Atmospheric pollution

(See sheet 1)

Sheet 8: Inverse logistics

Inverse logistics:

1. Return of packing and packaging in order that goods reach the client in appropriate conditions
→ reuse environmental policy

Applicable GEPs

- ◇ Clearly identify materials belonging to the client
- ◇ Minimize the material in circulation (thanks to quick return)
- ◇ ...

Environmental impacts generated if the GEPs are not introduced

- ◇ Generation of waste from breakage of packing and packaging
- ◇ ...

2. Return of incorrect or defective goods

Applicable GEPs

- ◇ Study and identify defective logistics and correct the causes of errors, if possible
- ◇ ...

Environmental impacts generated if the GEPs are not introduced

- ◇ Generation of waste from goods through obsolescence or expiration
- ◇ ...

Examples of indicators

- ◇ Number of trips required to return packing or packaging material