

1. Introduction to the Case Study

This report includes the results of the analysis of effectiveness of the Environmental Liability Act¹ in Andalusia in terms of application and effectiveness of the principle of exemption of financial security in those organisations which have an Environmental Management System (EMS) certified according to the ISO 14001 standard or registered according to EMAS Regulation.

The main goal of the Environmental Liability Act is to anticipate, prevent and remedy environmental damage and therefore, organisations have the responsibility to take preventive actions - in the case of an imminent threat of environmental damages, and remedying actions - when environmental damage has taken place, as well as to meet related expenses. Thus, the "polluter pays" principle will come into effect.

In this respect, the EMSs offer an alternative tool to tackle the "polluter pays" principle by implementing and putting into effect the commitment of continuous improvement and the prevention of pollution included in the Environmental Policy of that organisation which voluntarily decides to adopt the ISO 14001 standard or the EMAS Regulation.

That is the reason why the Environmental Liability Act tries to absolve certain installations from obligation of establishing financial security according to the principle of non building financial pressure over SMEs and positively assessing the results-based management within the enterprise as long as it is certified by authorised external institutions.

¹ 26/2007 Act of October 23 of Environmental Liability and 2090/2008 Spanish Royal Decree of December, 22 for which the Regulation of partial development of 26/2007 Act is passed.

1.1. Objective

The Environmental Liability Act transposes the Spanish legal system for the Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage. However, the requirement of the constitution of the financial security included in the articles will not be mandatory until being approved by the order of the Spanish Ministry of the Environment, Rural and Marine Affairs.

This Order will not be issued in the Spanish Official Gazette (BOE) until 2011², date in which the mandatory financial security will be required for all activities in Annex III if the operator is expected to cause damage with a primary remedy equal or more than 300,000 Euros. The limit is 2,000,000 Euros if the operator is registered to the EMAS Regulation or has the certification according to ISO 14001 standard.

Priority and gradual scheduling are established in this Order to require such security reviewed in the following table:

| | Priority level | | |
|------------|--------------------------|--------------------------|--------------------------|
| | 1 | 2 | 3 |
| Scheduling | 2-3 years (2013-2014) | 3-5 years (2014-2016) | 5-8 years (2016-2019) |

Table 1 - Scheduling for the constitution of the mandatory financial security according to the priority level

Due to the imminent entry into force of the mandatory financial security, Spanish operators included in the 1st priority level are starting the process of analysing environmental risks either with their own resources or by expertise subcontracting. We are, therefore, in the first stage to analyse the results of the applications of measures included in such Law. This reason has been the main selection criterion to choose the case study at regional level (Andalusia), since we can use this date as reference to study the effectiveness of the principle of exemption of financial security for those certified organisations according to the ISO 14001 standard or registered according to EMAS Regulation. Thus, we can determine the number of certified or registered organisations before and after the enforcement of the Environmental Liability Act.

² Ministry Order ARM/1783/2011, of 22 June, for which priority and scheduling to approve ministry orders is established, from which the constitution of mandatory financial security will be required according to the final provision four of 26/2007 Act.

1.2. Background

As the establishment of the financial security has not been required in Spain yet and the Act is not retroactive (that is, it does not apply to damage caused before the expiry of the deadline for implementation of the Directive of 30 of April 2007 and it does not apply either to damage caused after 30 of April, 2007 if it comes from an activity prior to the current one), there are not national or regional studies which analyse the application and effectiveness level of the implementation of the principle of exemption of financial security in those facilities which have an EMS. However, there are other documents of information and support so that operators included in Annex III of the Act can carry out an analysis of environmental risk at sector level which provide the individual assessment of their risk scenario³.

At European level there are also studies which include a review of the Directive in environmental damage, the transposition into Member States and its application level⁴. However, there are not studies which analyse the effectiveness of the implementation of the principle of exemption of financial security.

1.3. Methodology

The methodology followed for gathering data of the two first sections has been *searching in the main available sources of information* at European, national and regional level in terms of Environmental Liability and EMAS:

- ❖ Website of the Environment European Commission⁵:
- ❖ Website of the Spanish Ministry of the Environment, Rural and Marine Affairs⁶:
- ❖ Website of the Environment Regional Department of the Regional Government of Andalusia⁷:

Through this literature research, the main existing references in terms of standards; handbooks for the application of the Environmental Liability Act; papers and results of courses of training and information about the matter, as well as other type of support documents have been analysed such as:

³ At national level: <http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/responsabilidad-mediambiental/analisis-de-riesgos-sectoriales/>

⁴ Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions under the article 14(2) of Directive 2004/35/EC.

⁵ http://ec.europa.eu/environment/emas/index_en.htm

⁶ <http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/responsabilidad-mediambiental/>

⁷ <http://www.juntadeandalucia.es/medioambiente/site/porta/web/menuitem.7e1cf46ddf59bb227a9ebe205510e1ca/?vgnextoid=ea65f0a209e1b210VgnVCM2000000624e50aRCRD&vgnnextchannel=7217ffa4f6e25310VgnVCM1000001325e50aRCRD>

❖ Regulation:

- Directive 2004/35/EC of the European Parliament of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage.
- 26/2007 Act of 23 October on Environmental Liability.
- 2090/2008 Spanish Royal Decree of 22 December by which the Regulation of partial development of 26/2007 Act is passed.
- Ministry Order ARM/1783/2011, of 22 June, for which priority and scheduling to approve ministry orders is established, from which the constitution of mandatory financial security will be required according to the final provision four of 26/2007 Act.
- Regulation (EC) No 1221/2009 of the European Parliament and of the council of 25 November 2009 on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS).
- International Standard ISO 14001 Environmental Management System.

❖ Handbooks:

- Basic guide of the Environmental Liability Act of the Regional Government of Andalusia.
- Sector risk analysis tool of the Spanish Ministry of the Environment, Rural and Marine affairs.
- Guide of enforcement of Environmental Liability Act (CEPYME, Region of Aragon).
- EMAS - Dynamic tool for environmental protection for sustainable development. Business benefits and environmental management (INEM).

❖ Reports:

- Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions under the article 14(2) of Directive 2004/35/EC.
- White Paper on environmental liability of the European Commission (2000).
- Financial Security in Environmental Liability Directive of European Commission (August 2008).
- Etc.

❖ Events:

- Implementation of the Environmental Liability Law in Spain legal framework and technical solutions (National Experts Meetings, 2011).
- Public mechanisms of promotion of EMAS.
- Etc.

Furthermore, for gathering more specific information like for example the implementation level of the principle of exemption of financial security in organisations which have an EMS, *the competent body has been interviewed* at regional level in terms of environmental liability.

2. Simplification measures

2.1. Measure description

The Directive 2004/35/EC on Environmental Liability constitutes an application mean of the fundamental principles of Environmental Policy included in the Treaty establishing the European Community and especially the "polluter pays" principle through which operators should bear the cost resulting from the pollution caused.

The publication of this Directive encouraged Member States to establish an environmental liability regime which covered damage caused to natural resources because up to that moment most of Member States had established a national law with regard to the responsibility for the damages caused from the activities which are dangerous to the environment.

In this respect, the 26/2007 Act on Environmental Liability came into force in Spain to have an environmental law to adopt new liability systems in order to prevent effectively environmental damage and in case damage was produced, they would guarantee a quick and proper remedy. Therefore, with this new Law, the legal framework for protection of natural resource is complete, since environmental damage due to breach of administrative or penal law were already included by different sector regulations, which set out the obligation of restoring damage from such misconduct.

The Directive entered into force on 30 April 2004, although its transposition to the legal system of the different Member States was delayed due mainly to the following factors:

- ❖ *Existing legal framework*- Member States that had already advanced liability rules on environmental issues had to fit the new legislation into these existing legal frameworks.
- ❖ Challenging *technical requirements*, such as the need for economic valuation of environmental damage and the different types of remediation.
- ❖ The *framework character* of the ELD, which leaves a wide margin of discretion to the Member States, with options to be debated at national level.

In fact, the introduction of a system of mandatory financial security has not entered into forced in Spain yet, but up to June 2014 when such obligation will enter into force for those operators whose activities are included in the level of priority 1 (see table 1).

Therefore, those operators whose activity is included in level of priority 1 are within the deadline for the elaboration of the Report of Environmental Risk Analysis necessary to calculate the amount of the financial security included in chapter III of the Law on Environmental Liability.

Activities included in level of priority 1 with regard to relation established in ARM/1783/2011 Order are as follows:

| Sector according to 26/2007 Act | Section according to 16/2002 Act |
|---|--|
| 33.1.3.- Production of thermal electric power | 1.1.- Installations of combustion with a thermal power of combustion above 50MW. |
| 36.3.- Recovery | 5.1.- Installations for the recovery of hazardous waste, including the management of used oils or for the disposal of that waste in different places of dumps with a capacity of more than 10 tons per day |

Operators who are included in some of these two activities will be exempted of the financial security system with an estimated potential environmental damage between € 300 000 and € 2 million and only if they prove through certificate issued by independent bodies the certification or the registry of their Environmental Management System according to ISO 14001/EMAS.

Therefore, those installations included in sections 1.1 or 5.1 of 16/2002 Act (IPPC) which do not have a certified Environmental Management System according to ISO 14001 standard or registered according to EMAS regulation are now in the right moment to do it. This way they will be exempted of such financial security and they will shave off the cost.

It is, therefore, an ***EMAS promotion measure (funding support)*** aimed at supporting financially those installations which guarantee the fulfilment of the environmental law, the environmental behaviour improvement and the pollution prevention through its Environmental Management System reviewed by an authorised and independent institution.

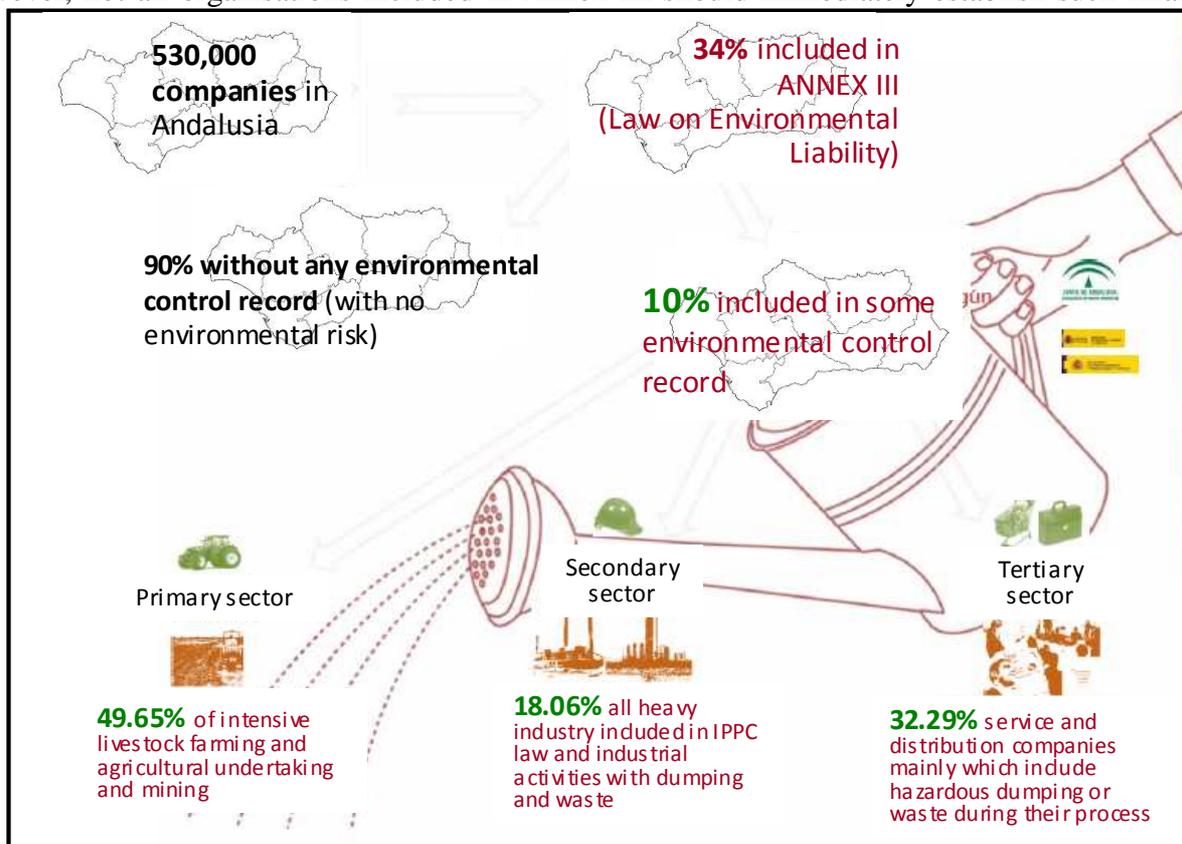
2.2. Description of the sector characteristics in each region

According to the following figure ***34% of Andalusian organisations are included in Annex III of the Law on Environmental Liability***⁸ and therefore, they have the obligation of establishing a financial security.

⁸ Businessmen's Association of Andalusia (event about Law on Environmental Liability. Impact on Andalusian organisations, September 2010).

Figure 1.- Andalusian organisations affected by the Law on Environmental Liability
 (Source: http://www.cea.es/portal/novedades/2010/ponencias_resp_medioambiental/pdf/soluciones.pdf)

However, not all organisations included in Annex III should immediately establish such financial



security, but its implementation is gradually and *activities included in level of priority 1* will be the first ones to contract mandatorily a financial security (see table 1). The deadline of these activities is *end of June 2014* and they are listed in the following table:

| | Included in section IPPC 1.1 | Included in section IPPC 5.1 | Rest of installations |
|--|------------------------------|------------------------------|-----------------------|
| | (2013-2014) | | (2014-2019) |
| No. of Andalusian organisations affected by the Law on Environmental Liability | 123 | 86 | 179.991 |
| | 209 | | |
| TOTAL | 180.200 | | |

Table 2.- No. of Andalusian installations affected by sections IPPC 1.1 and 5.1
 (Source: http://www.juntadeandalucia.es/medioambiente/servtc1/AAIo/?lr=lang_es y http://www.cea.es/portal/novedades/2010/ponencias_resp_medioambiental/pdf/soluciones.pdf)

On the other hand, Andalusian installations registered in EMAS are as follows:

| | Included in section IPPC 1.1 | Included in section IPPC 5.1 | Rest of installations |
|--|------------------------------|------------------------------|-----------------------|
|--|------------------------------|------------------------------|-----------------------|

| | | | |
|--|-----------|---|----|
| No. of Andalusian organisations registered in EMAS | 6 | 0 | 46 |
| TOTAL | 52 | | |

Table 3 - No. of Andalusian installations registered in EMAS
(Source: http://www.juntadeandalucia.es/medioambiente/servtc1/AAIo/?lr=lang_es)

Therefore, in this first period of enforcement of the Law on Environmental Liability (2013-2014) only 6 Andalusian installations included in section 1.1 of IPPC Law (8.6%) will benefit from this promotion measure of EMAS (funding support) being exempted of establishing the financial security.

According to specialised journals⁹, the average investment in an environmental insurance oscillates, depending on the insurance company and type of risk, ***between € 1,500 and € 6,000 for simple risks; between € 10,000 and € 27,000 of premium for medium risks and between € 40,000 and € 120,000 for greater risks.***

The difficulty of organisations to obtain funding plus reasonable prices of these insurances and the low rate of accidents recorded by insurance companies so far might think that this market is worth 25 million Euros in premiums and more than a score of insurance companies are already involved¹⁰. Moreover, the necessity for controlling costs have led many organisations to delay the decision of buying until the last moment, *“The person who causes an environmental accident and does not have any kind of security will have to pay at his/her own expenses for the administrative fines which can reach two millions of euro”*.

For this reason, we are now in a turning point so that organisations included in Annex III of the Law on Environmental Liability which can be exempted of establishing financial security, envision the possibility of implementing an Environmental Management System as a measure to savings in premiums of insurance companies.

Therefore, they should ***assess necessary investment to implement an Environmental Management System according to ISO 14001 standard EMAS Regulation.***

The adhesion to EMAS Regulation means necessarily an effort of organisations involved and they should provide human resources, time and economic resources.

Experience has shown that in order to implement an Environmental Management System, a supply of resources of the organisations should be required and in many cases, the external collaboration, either technical or economic (obtained from grants, subsidies, etc.) The supply and commitment of human resources will depend on the type and size of the organisation.

Existing data in organisations which have been registered in EMAS show that only 10% did not need any kind of grant, 25% obtained grant from its group and 65% applied for external support¹¹.

The implementation of an Environmental Management System and its subsequent registry in EMAS mean costs which can vary from organisation to organisation, depending extensively on the

⁹ Press statement of Marsh (Madrid, 6 April 2010): www.marsh.es

¹⁰ http://www.marsh.es/press/arch/2010/np_060410.php

¹¹ http://www.magrama.gob.es/es/calidad-y-evaluacion-ambiental/temas/sistema-comunitario-de-ecogestion-y-ecoauditoria-emas/costes_implantacion.aspx

size, complexity of the organisation and the starting point. These costs can oscillate between € **5,000 and € 7,000 for implementation** (design of documentation, implementation and internal audits included) € **3,500 and € 7,500 for verification** (certification and verification included) and costs associated to **the registry of the Environmental Management System** in EMAS records. In most of the Spanish Autonomous Communities, registry fees are not charged in order to promote the participation of organisations in EMAS.

3. Analysis

3.1. Analysis of "implementation level" of the measure

Priority and scheduling established for the requirement of the mandatory financial security appoints that until 2013-2014 the first activity sectors which such security will be required are as follows:

- ❖ Installations of combustion with a thermal power of combustion above 50MW.
- ❖ Installations for the recovery of hazardous waste, including the management of used oils or for the disposal of that waste in different places of dumps with a capacity of more than 10 tons per day.

Although the entry into force of the obligation for establishing the financial security is imminent, currently none of the organisation registered in EMAS in Andalusia corresponds to these activity sectors. Therefore, there are no available data to analyse the implementation level of the measure.

3.2. Analysis of benefits derived from the implementation of the measure

In this respect, taking into account that this report includes the results of the analysis of effectiveness of the Environmental Liability Act in Andalusia in terms of application and effectiveness of the principle of exemption of financial security, this is the main advantage of the implementation of the measure.

Existing adjusting mechanisms related to the measure and that prevent organisations from establishing financial security are as follows:

- ❖ Activities that can cause damage whose remedy is below € 300 000.
- ❖ *Activities that can cause damage whose remedy is between € 300 000 and € 2 million as long as they prove with certificates of independent bodies and the organisation belongs permanently and continuously to the community system of environmental management and audit system (EMAS) or the environmental management system UNE-EN ISO 14001.*
- ❖ Organisations that use bio-health and biocidal products referred in Annex III (sections 8 c and d) with agricultural and forest purposes.

3.3. Analysis of environmental benefits derived from the implementation of the measure

EMAS plays an important role in boosting the environmental improvement of industrial and non-industrial organisations, being considered by such organisations as a useful tool to improve the environmental behaviour at long and short term.

Nevertheless, the integration of EMAS with the Environmental Liability Act and therefore, the exemption of financing security in those organisations which have a SGA certified according to ISO 14001 standard or registered according to EMAS Regulation, does not seem to produce direct environmental benefits, but economic benefits: *cost savings related to the establishment of the financing security*.

The implementation of this measure will produce environmental benefits related to SGA, with no differences or substantial changes from the exemption of the financing security.

3.4. Analysis of results obtained at macro level with the implementation of the measure

In Andalusia, the number of organisations registered in EMAS has increased 15% between May and October 2012 according to data published by the Regional Department for Agriculture, Fishing and Environment of the Regional Government of Andalusia. Nevertheless, none of these organisations corresponds to the activity sectors categorised as level of priority 1 in Annex III of the 26/2007 Act of 23 October on Environmental Liability. Therefore, there are no direct results available at macro level from the implementation of the measure.

Although there are no tangible results available for the implementation of the measure, the fact is that the *number of organisations registered in EMAS has increased and therefore its capacity to fulfil the environmental law*. Environmental laws are tightening and organisations identify advantages of the environmental management:

- ❖ Capacity to anticipate to a tightening environmental regulation.
- ❖ Grants, permissions and permits.
- ❖ Improving efficiency of procedures.
- ❖ More efficiency in the use of resources.
- ❖ Financing advantages (discounts on insurance premiums, easier access to loans.)
- ❖ Marketing tool: good green image.
- ❖ Reduction of costs.

3.5. Analysis of the knowledge grade created with regard to the EMAS frame

The organisations that have taken part in this study have stated the need for a better promotion of the system through information and publicity campaigns. These actions would increase the visibility of the system so that more agents become aware of its existence (including the community in general).

A lack of general knowledge of the EMAS frame is identified - and the lack of rewarding by the market, interested parties and public bodies, as one of the most important handicaps for the development of EMAS.

3.6. Analysis of satisfaction level

The study carried out highlights the lack of existing knowledge regarding the simplification measures applicable to registered organisations in EMAS. So, 52% of the organisations that have responded to the question raised, claim to ignore the existence of simplification measures.

To the question rose in order to know if the organisations have obtained any profit derived from this simplification measures, 67% have responded negatively.

However, if we put together the positive answers and the knowledge of simplification measures applicable to organisations registered in EMAS with the procurement of benefits derived from these simplifications, 60% of organisations that affirmed to know the existence of these measures have stated to have obtained benefits.

With respect to the major difficulties that organisations can find in the implementation of EMAS, costs of implementation seems to be a handicap to be considered, since 90% of companies that have responded to the questionnaire consider the cost associated to the implementation is very important or slightly important.

In case of difficulties related to the competent body functions, results obtained in the questionnaires show that 40% do not consider this aspect as a handicap to the implementation of EMAS, 10% consider it very important, 45% slightly important and the answer of the rest has been “No applicable”. These data lead to conclude that the difficulties related to the competent body functions are not presented as a major handicap to the implementation of EMAS.