





### ENHANCE THEMATIC WORKSHOP

EMAS as a criteria in the definition of the IED inspection programme

Vienna, 20th and 21st June 2018



#### **Questions/Topics to be covered**





- Is EMAS part of the national legislation regarding environmental inspections?
   Is there a difference to the IED?
- How does the practical implementation of inspections work?
- What is the difference between EMAS organizations and Non-EMAS organizations regarding environmental inspections? (in theory and in practice)
- What experiences do EMAS organizations have regarding environmental inspections? (Challenges, benefits, burdens, costs, resources, ...)
- What is the current role of the EMAS verifier regarding environmental inspections?
- Please indicate the number of companies affected by environmental inspections and the number of EMAS companies affected by environmental inspections



### The Environmental Inspection Plan Industrial Emission Directive







The **Directive 2010/75/EU on Industrial Emissions (IED)** lays down rules on integrated **prevention and control of pollution** arising from industrial activities.

- **PREVENTION**: Lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.
  - Obligation to hold a permit to be operated the industrial activities.
- CONTROL: For activities listed in annex I IED
  - Competent authority shall ensure that all installations are covered by an **environmental inspection plan** and shall ensure that this plan is regularly reviewed and, where appropriate, updated.

#### **The Environmental Inspection Plan Establishments**

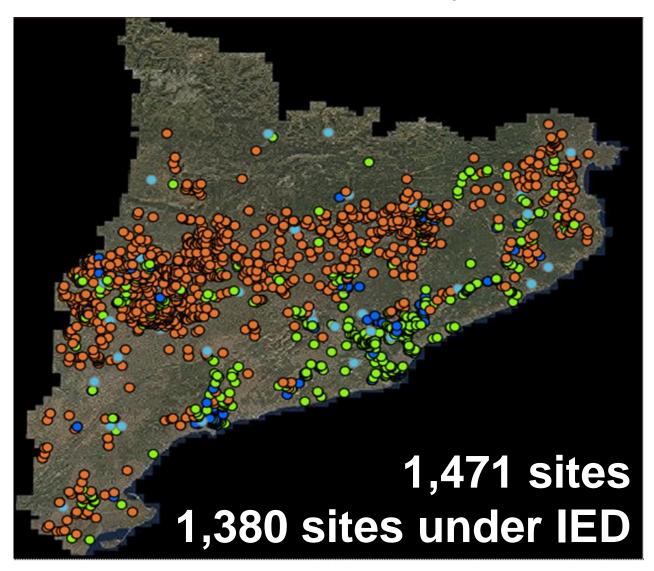
- The 2017-2019 Environmental Inspection Plan covers 1,471 establishments:
  - 1,380 establishments (94%) under IED
- All establishments are sites with environmental authorization (permit) that may be subject to integrated environmental inspections.



# The Environmental Inspection Plan Establishments: Sectors of activity

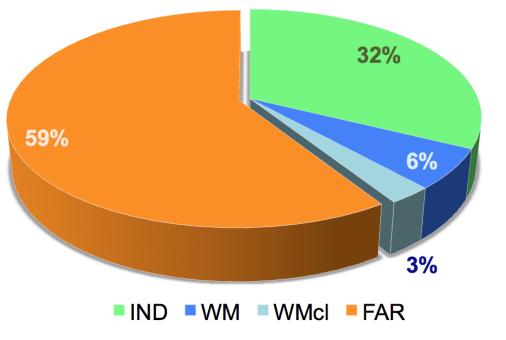






- Industrial
- Waste management
- Waste management controlled landfill
- Livestock farm

#### 565 non livestock farmers



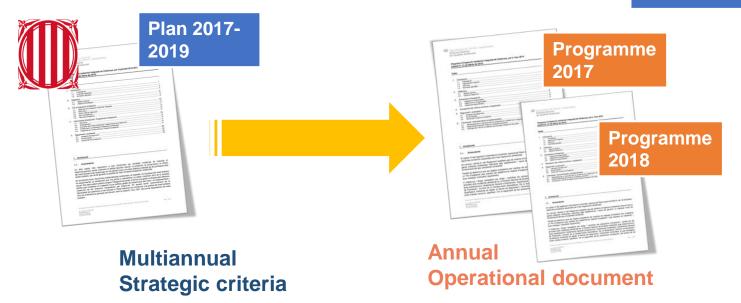
### The Environmental Inspection Plan Plan vs. Programme





Based on the **INSPECTION PLAN**, the competent authority shall regularly draw up **PROGRAMMES FOR ROUTINE ENVIRONMENTAL INSPECTIONS**, including the **frequency of site visits** for different types of installations.

Art. 23 IED





#### The Environmental Inspection Plan Frequency of site visits





### The **PERIOD BETWEEN TWO SITE** VISITS shall be based on a systematic appraisal of the environmental risk of the installations concerned and shall not exceed:





### The Environmental Inspection Programme Systematic appraisal of the environmental risk







The systematic appraisal of the environmental risks shall be based **on at least** the following criteria:

- The potential and actual impacts of the installations concerned on human health and the environment taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents.
- The record of compliance with permit conditions.
- The participation of the operator in the Union eco-management and audit scheme (EMAS)

Art. 23 IED

## The Environmental Inspection Programme The methodology of appraisal





#### **IRAM** method

Integrated Risk Assessment Method developed by IMPEL







European Union Network for the Implementation and Enforcement of Environmental Law

#### **SEVERITY**

source and environmental vulnerability

**IMPACT CRITERIA (IC)** 

#### **PROBABILITY**

related to the **organization**(**environmental management**,
level of compliance, attitude, age of
the installation, etc.).

OPERATOR PERFORMANCE CRITERIA (OPC)

### The Environmental Inspection Programme The methodology of appraisal





#### PHASE 1

 Impact criteria (ICx) and thresholds of appraisal: Impact profile

#### PHASE 2

Operator Performance Criteria (OPC): Risk profile

### PHASE 3

 Application of "the rule": Risk Category (RC)

#### PHASE 4

 Reduction to Risk Category (only EMAS)

#### PHASE 5

Forecast of inspection frequency

# The Environmental Inspection Programme Systematic appraisal of the environmental risk







The systematic appraisal of the environmental risks shall be based **on at least** the following criteria:

- The potential and actual impacts of the installations concerned on human health and the environment taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents.
- The record of compliance with permit conditions.
- The participation of the operator in the Union eco-management and audit scheme (EMAS)

Art. 23 IED

### The Environmental Inspection Programme The methodology of appraisal-Impact criteria





### IMPACT CRITERIA (IC)

- Type of installation
- Air emissions
- Emissions to water
- Transfer of non-hazardous and hazardous wastes
- Receipt of non-hazardous and hazardous waste.
- Risk of accident
- Sensitivity of the local environment



# The Environmental Inspection Programme The methodology of appraisal-Impact criteria





### IMPACT CRITERIA (IC): Air emissions

Score	
0	No releases to air
1	The sum of the releases to air - normalised to the thresholds of Annex 2 E-PRTR is $\leq 0.5$
2	The sum of the releases to air - normalised to the thresholds of Annex 2 E-PRTR is > $0.5$ and $\leq 1$
3	The sum of the releases to air - normalised to the thresholds of Annex 2 E-PRTR is > 1 and $\leq$ 5
4	The sum of the releases to air - normalised to the thresholds of Annex 2 E-PRTR is > 5 and $\leq$ 10
5	The sum of the releases to air - normalised to the thresholds of Annex 2 E-PRTR is > 10



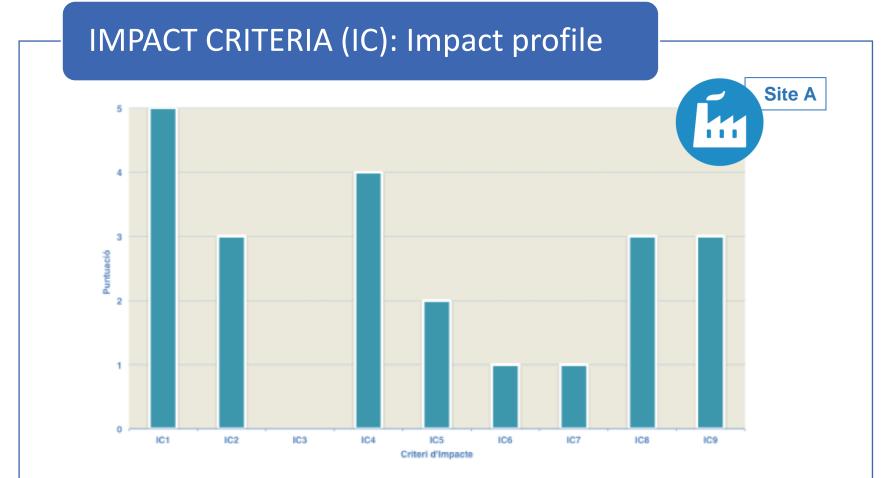




# The Environmental Inspection Programme The methodology of appraisal-Impact criteria









Each impact is punctuated between "0" and "5"



## The Environmental Inspection Programme Systematic appraisal of the environmental risk







The systematic appraisal of the environmental risks shall be based on at least the following criteria:

- The potential and actual impacts of the installations concerned on human health and the environment taking into account the levels and types of emissions, the sensitivity of the local environment and the risk of accidents.
- The record of compliance with permit conditions.
- The participation of the operator in the Union eco-management and audit scheme (EMAS)

Art. 23 IED

### The Environmental Inspection Programme The methodology of appraisal-Operator Performance criteria





#### **OPERATOR PERFORMANCE CRITERIA (OPC)**

- The method assigns a score between "-1" and "+1" for each behaviour criterion.
  - Good behaviour: -1
  - Moderate or neutral behaviour: 0
  - Bad behaviour: +1
- There are different sub-criteria for each criterion







### The Environmental Inspection Programme The methodology of appraisal-Operator Performance criteria





#### OPERATOR PERFOMANCE CRITERIA (OPC)

- The method assigns a score between "-1" and "+1" for each behaviour criterion.
  - Good behaviour: -1
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- There are different sub-criteria for each criterion

### ENVIRONMENTAL MANAGEMENT SYSTEM

- EMAS
- ISO 14001
- No EMS

### COMPLIANCE WITH PERMIT CONDITIONS

(Declaration of the inspection)

- Satisfactory compliance (without defaults)
- Appropriate compliance (only minor defects)
- Inappropriate compliance (with one o more important defects)

#### **OPERATOR REACTION**

- Immediate reaction on detecting non-compliance in an inspection.
- Reaction after receiving one notification from Inspection Competent Authority
- Without reaction or reactions after receiving more than one notification from Inspection Competent Authority.



### The Environmental Inspection Programme The general criterion adopted to qualify the non-compliances







Fact that does not entail risk or can entail a low risk of damage about the environment, the security or the health of the persons.

In general, the check of its correction does not require to plan an additional inspection.

#### For example:

- Non-compliance the administrative or documental permit condition
- Non-compliance he duties to communications to the Competent Authority (results of emissions, incidents and accidents of operation, ...).
- Operate the activity with a non authorized change, with effects about the environment, the security and the health of the persons, that can be qualified as non substantial, in application of the thresholds established by the Competent Authority.



Fact that can entail a higher risk of damage about the environment, the security or the health of the persons.

The check of its correction requires to plan an additional inspection

#### For example:

- Non-compliance the technical permit condition.
- Non-compliance the emission limit values limit for polluting substances.
- Non-compliance the emission monitoring requirements
- Operate the activity with a non authorized change, with effects about the environment, the security and the health of the persons, that can be qualified as substantial, in application of the thresholds established by the Competent Authority.

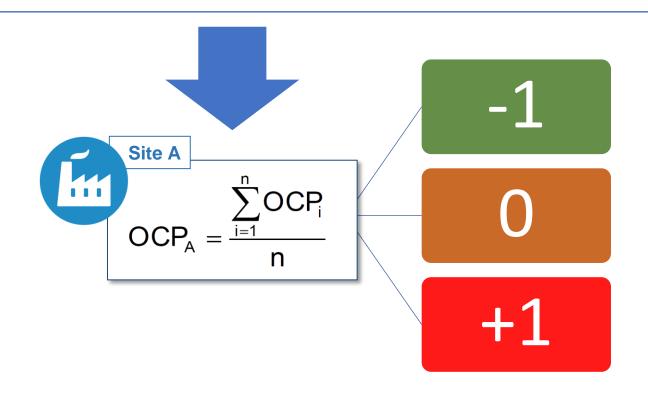
### The Environmental Inspection Programme The methodology of appraisal-Operator Performance criteria





### OPERATOR PERFOMANCE CRITERIA (OPC)

The final OPC is obtained as follows





### The Environmental Inspection Programme The methodology of appraisal-Risk Criteria





#### **SEVERITY**

source and environmental vulnerability

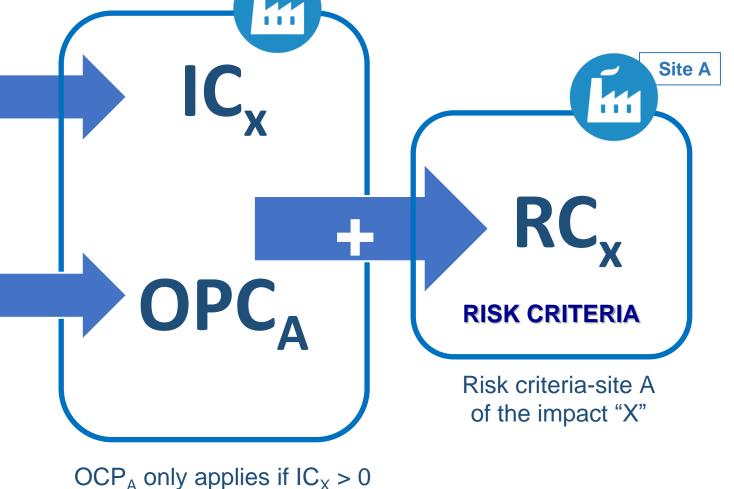
**IMPACT CRITERIA (IC)** 

#### **PROBABILITY**

related to the **organization** (environmental management,

level of compliance, attitude, age of the installation, etc.).

OPERATOR PERFORMANCE CRITERIA (OPC)



Site A

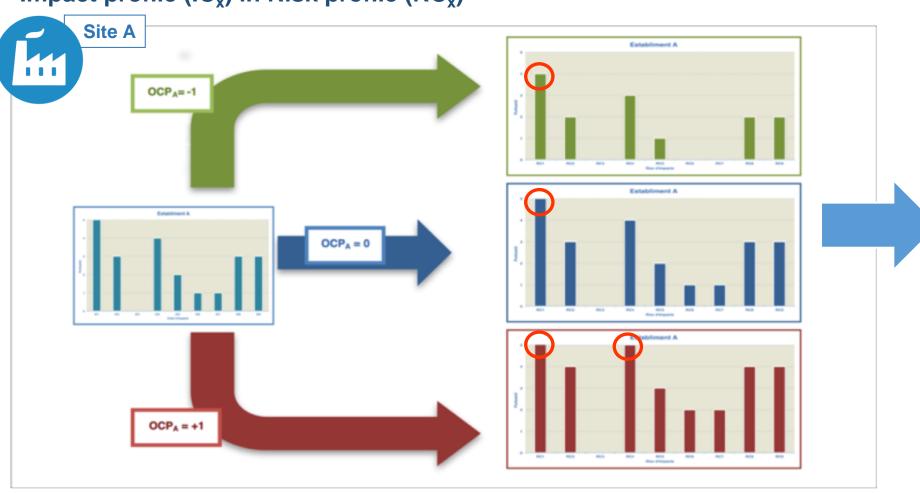
Generalitat de Catalunya
Government of Catalonia

# The Environmental Inspection Programme The methodology of appraisal-Risk Criteria





#### Impact profile (IC<sub>x</sub>) in Risk profile (RC<sub>x</sub>)



# RISK CATEGORY (RC<sub>A</sub>)

Taking into account the maximum score obtained

#### **The Environmental Inspection Programme** "The rule"



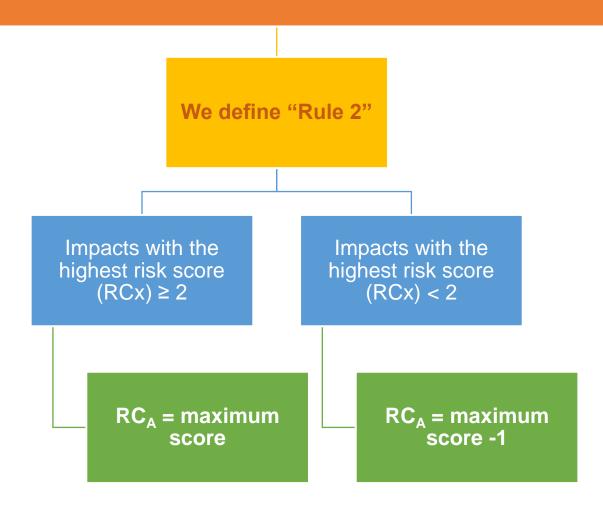








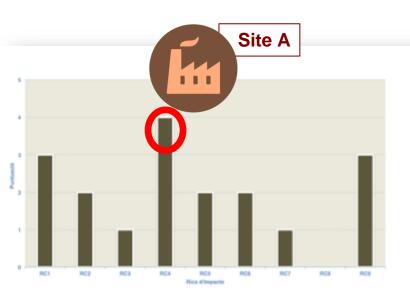
The RISK CATEGORY of the establishment (RCA) is calculated based on the highest score of all risk criteria (RCx) and the highest number of scores that have been established as a "The rule"



### The Environmental Inspection Programme "The rule"-Examples











- The maximum value of RC<sub>x</sub> is 4
- The number of impacts with the highest punctuation is 1.
- The number of impacts with the highest punctuation is lower to "the rule" (2).
- The Risk Category value is the maximum value lowered 1 step
- $RC_A = 3$

- The maximum value of RC<sub>x</sub> is 4
- The number of impacts with the highest punctuation is 2.
- The number of impacts with the highest punctuation is equal to "the rule" (2).
- The Risk Category value is the maximum value.
- $RC_A = 4$

- The maximum value of  $RC_x$  is 3
- The number of impacts with the highest punctuation is 3.
- The number of impacts with the highest punctuation is upper to "the rule" (2).
- The Risk Category value is the maximum value.
- $RC_{\Delta} = 3$

### The Environmental Inspection Programme Reduction to Risk Category value (RC<sub>A</sub>)



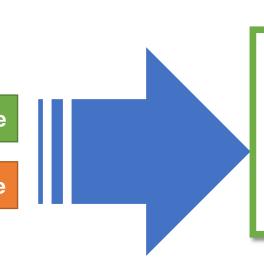


**EMAS** is again considered before the end of the methodology together with the results of the last inspection in order to influence the final RC<sub>A</sub>.





**Inspection report** 



RC<sub>A</sub> resulting from the application of "the rule" lowers 1 step.

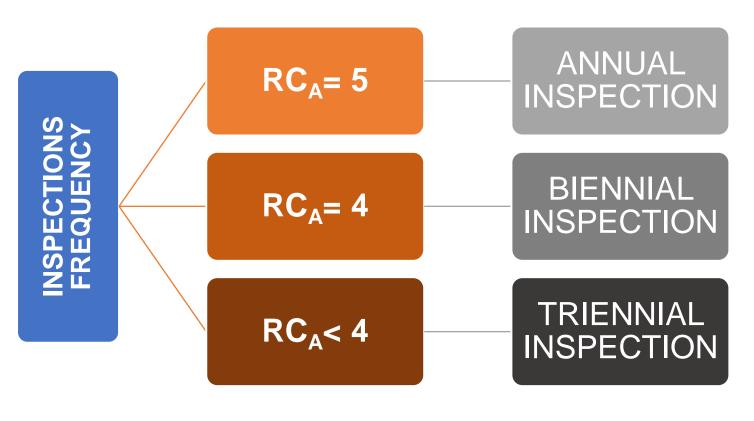
This sites don't have annual inspection



### The Environmental Inspection Programme Inspection frequency









### The Environmental Inspection Plan Distribution of organisations according to their EMS





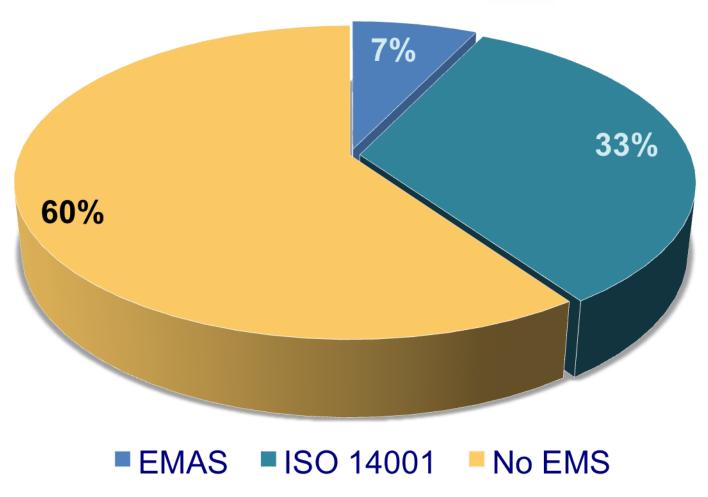
	IED	No IED	Total
EMAS	46	1	47
ISO 14001	217	1	218
No EMS	302	89	391
Total	565	91	656

Livestock farmers are not included

# 60% have no EMS 33% have ISO 14001



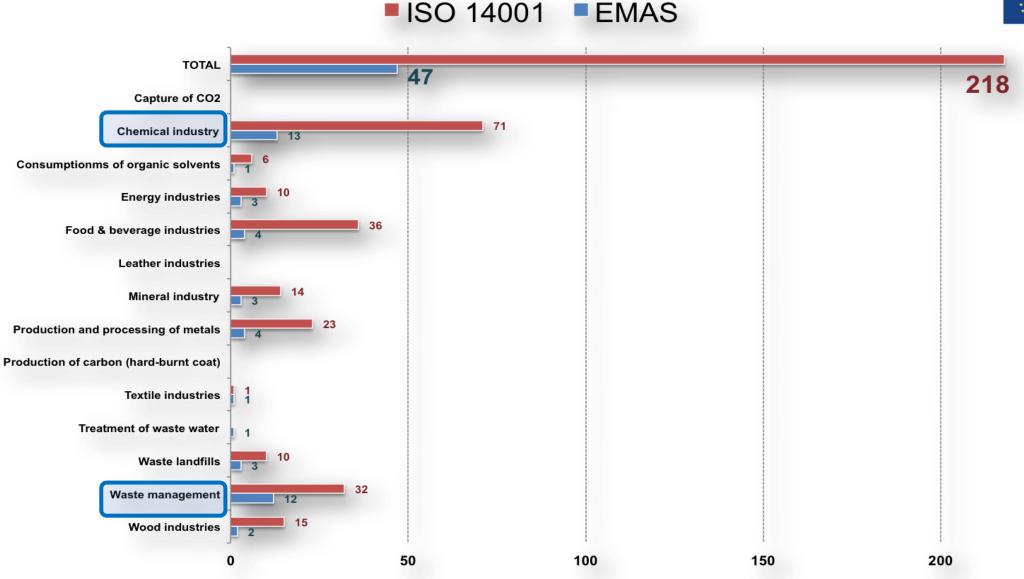
Potencial opportunity to influence theses organizations



### The Environmental Inspection Plan Current situation sector and type of EMS



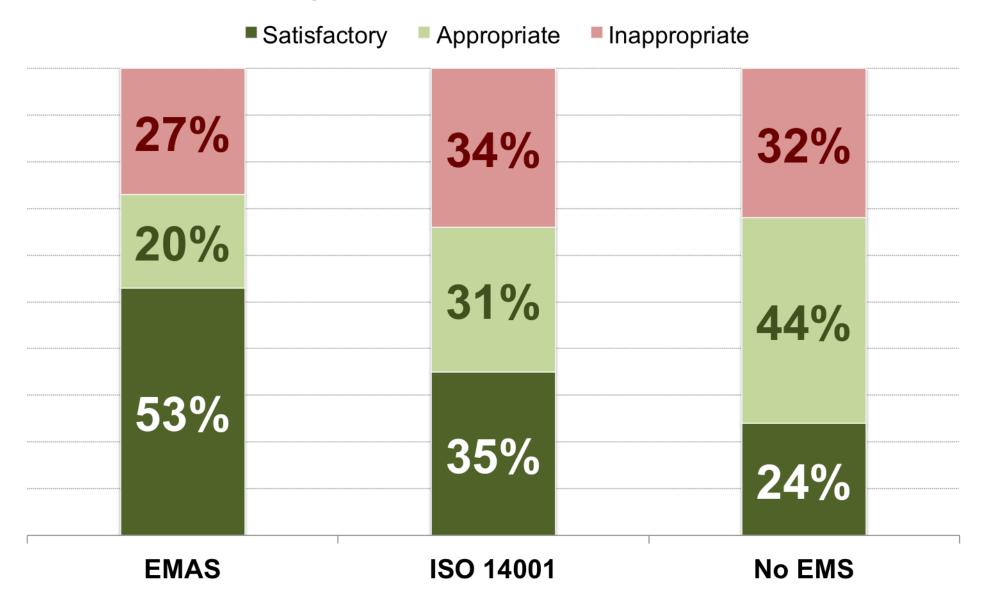




### The Environmental Inspection Programme Available data on last inspections



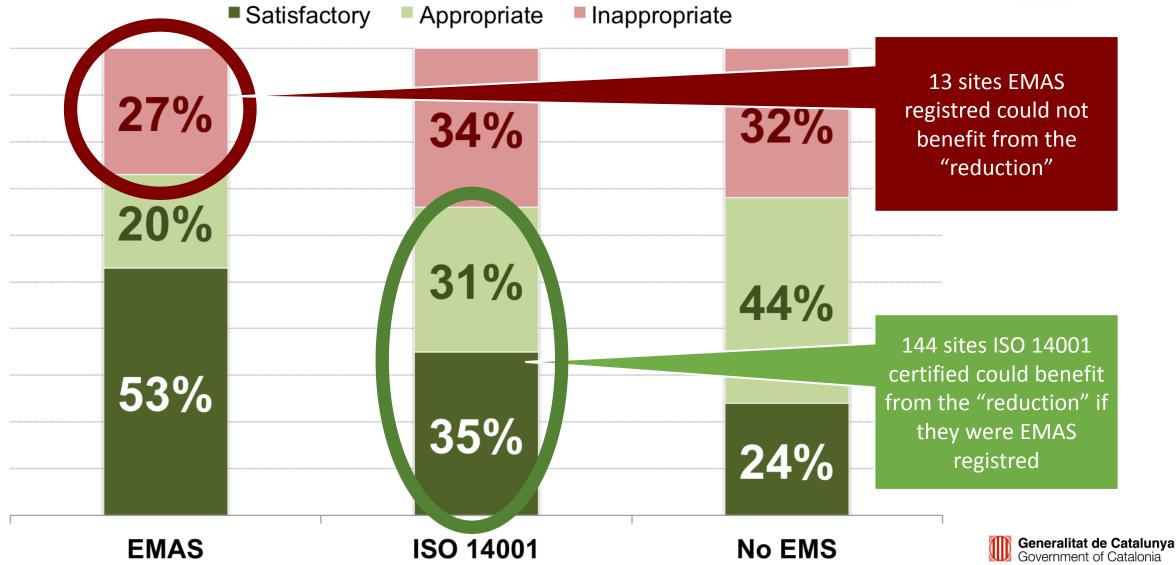




### The Environmental Inspection Programme Available data on last inspections







### **Questions/Topics to be covered**





•	Is EMAS part of the national legislation regarding environmental inspections? Is there a difference to the IED?	YES NO
•	How does the practical implementation of inspections work?	There exists a procedure that harmonizes the operative one of the inspections and the qualification of the non-compliances
•	What is the difference between EMAS organizations and Non-EMAS organizations regarding environmental inspections? (in theory and in practice)	The operative one of the inspection is the same for all sites. The sites with EMAS are better report inspections than sites without EMAS.
•	What experiences do EMAS organizations have regarding environmental inspections? (Challenges, benefits, burdens, costs, resources,)	If the report of inspection is satisfactory or appropriate: there is reduced the value of risk and the frequency of inspection.
•	What is the current role of the EMAS verifier regarding environmental inspections?	The verifiers do not take part in the inspection. The inspection is an action of competence of the competent authority
•	Please indicate the number of companies affected by environmental inspections and the number of EMAS companies affected by environmental inspections	656 establishments (livestock farmers excluded) are covered by Inspection Plan. 47 sites with EMAS



# Thank you!!



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