

US EPA ARCHIVE DOCUMENT

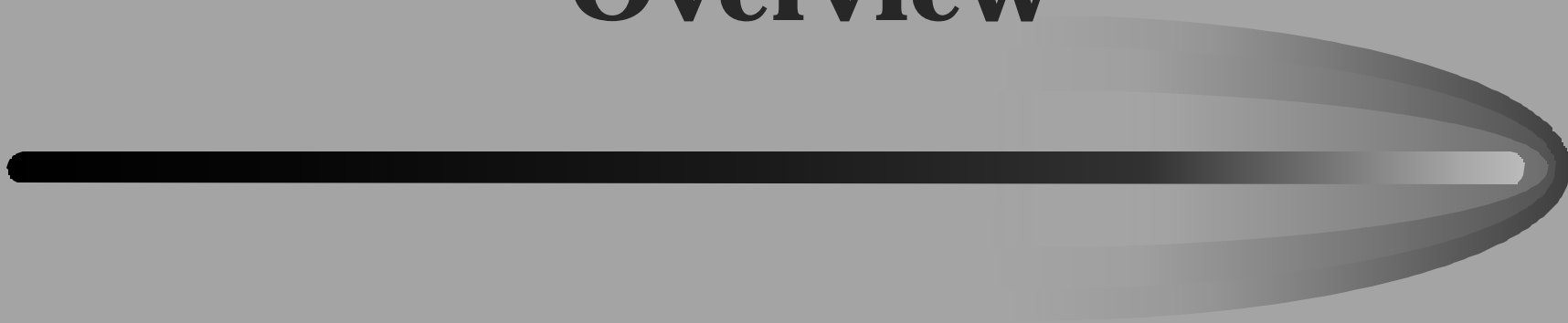
# Appendix A: Workshop Training for Module 1

## EMS Guide Meat Processing

### Getting Started



# EMS Implementation Overview



# How Did We Get Here?

- US EPA Sustainable Industries Partnership Program
  - Began working with meat processors in 1998.
  - Conducted backward mapping analysis.
  - Validated findings with stakeholders and developed the program.
    - Industry partnership agreement
    - EMS
    - External stewardship with livestock suppliers
    - Compliance tools
    - Other issues (chloride phosphorus and rendering)



# The Guidance Manual

- Developed specifically for meat processors.
- 10 Modules to complement 10 Workshops.
- Send out electronically in future to facilitate using tools and worksheets.
- Revised at the end of pilot.
- Comments/suggestions welcome at any time.



# Pilot Project Goals

- To develop an EMS at your plant over the next year.
- To test the Meat Processing EMS Implementation Guidance.
- To demonstrate the benefits of implementing an EMS to other meat processors.



# Overview of Pilot Project Process

- Workshops (10 - about once per month).
- Homework.
- Bi-weekly conference calls.
- Site visits.
- One-on-one technical assistance.



# Workshops

- Each plant must have at least one person in attendance at every workshop.
- Combination lecture and hands-on activities.
- Ask questions at anytime.
- Use the time in the workshops to your advantage.





# Workshops

- Scheduling
  - Whole year or at each meeting?
  - Time of day?
  - Where?



# Homework

- Building new elements of EMS or adapting what you have for your EMS.
- Everyone is expected to keep up with the group.
- Do a little bit of the EMS at one time with help.



# Bi-weekly Conference Calls

- Each plant should have someone on each conference call.
- Help and support for EMS.
- Chance to ask questions.
- Learn from others in the group.
- Schedule.



# Site Visits

- Four are planned, but more can happen if needed.
- IWRC and IDNR operate confidentially.
- Concentrated one-on-one help.



# Technical Assistance

- One-on-one help via the phone or e-mail.
- Confidential.
- Available anytime during the process.
- Support for your EMS.

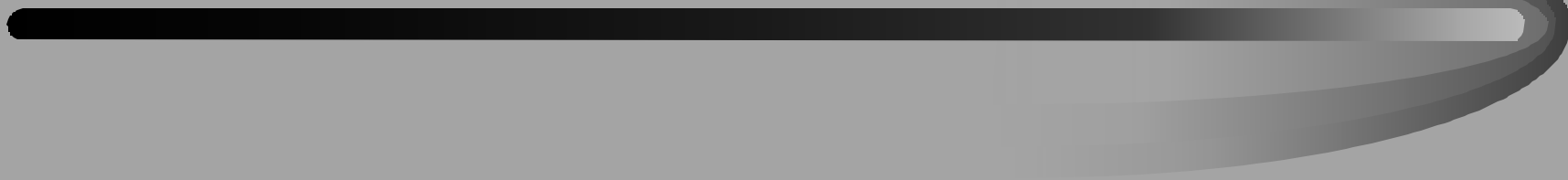


# Feedback

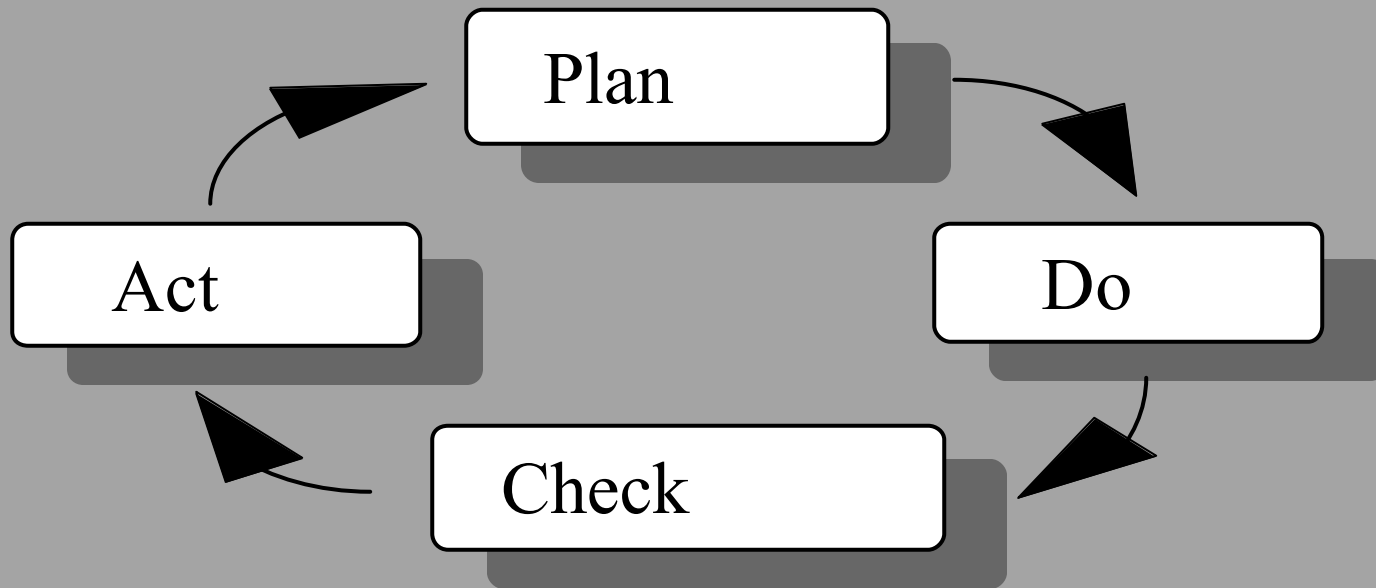
- We believe in continual improvement, if there is a better way - tell us.
- Bad news should travel fast.
  - If it isn't working don't quit - let us know so that we can try and fix it.
- Implementing an EMS isn't easy, but nothing worth having is easy.



# EMS Refresher



# EMS Framework





# Plan

- Where are we? Where do we want to go?
  - Environmental policy.
  - Identify environmental impacts (aspects).
  - Identify legal and other requirements.
  - Prioritize.
  - Set objectives and targets.
  - Establish environmental programs.



# Do

- Put programs and resources in place to get where you want to go.
  - Structure and responsibility.
  - Training.
  - Communication.
  - EMS documentation and records.
  - Operational control.
  - Emergency preparedness and response.



# Check

- Ensure your goals are met.
  - Monitor and measure.
  - Identify non-conformances.
  - Corrective and preventive action.
  - Audit and assess.



# Act

- Improve system when, and if, needed.
  - Management review.



# Relationship Among Environmental Management System Elements



# Environmental Policy

- Appropriate to the nature, scale, and environmental impacts of activities, products or services.
- Commitment to continual improvement and P2.
- Commitment to comply with regulations.
- Provides framework for setting and reviewing objectives and targets.
- Documented, implemented, and maintained and communicated to all employees.
- Available to public.



# Environmental Aspects

- Procedure to identify aspects
- Activities, products, or services
- Controllable
- Have significant impact on the environment
- Prioritize
  - Potential harm
  - Frequency
  - Regulated



# Environmental Aspects

- Employees
- Environmental aspects
- Process flow chart
- Process hazard analysis
- Emission inventory
- Risk assessment
- Compliance audit





# Environmental Aspects

## ASPECTS

- Packaging waste.
- Refrigerant use.
- Transportation emissions.

## IMPACTS

- Increased material to landfill.
- Depletion of ozone.
- Degradation of air quality.



# Objectives

- Objectives - overall environmental goal.
- Targets - detailed performance requirement.
- Documented.



# Objectives / Targets

## OBJECTIVES

- Reduce packaging waste.
- Utilize different refrigerants.
- Reduce vehicle emissions.

## TARGETS

- Reduce packaging waste by 5% in 5 years.
- Research alternative refrigerants – ongoing.
- Evaluate vehicle usage by December 2001.



# Legal Requirements

- Procedure to identify legal requirements.
- USEPA.
- US Small Business Administration.
- State Agencies.
- Trade/Industry Associations.
- Internet.



# Environmental Programs

- Describes how company will achieve objectives and targets.
- Designates responsibility.
- Defines the means and time frame.
- Integrate with existing programs and business plans.



# Structure and Responsibility

- Top management support.
- Roles, responsibility, and authority well defined, communicated, and documented.
- Ensures that EMS requirements are established, implemented, and maintained.
- Reports on the performance of the EMS to top management.



# Training, Awareness, and Competence

- Identify training needs.
- Establish training and awareness procedures.
- Match training to potential environmental impacts.
- Track effectiveness.
- Improve training as needed.



# Communication

- Procedures for internal and external communication.
- Between levels and functions of the company.
- Receive, document, and respond to relevant communication from external parties.





# EMS Documentation

- Describes the core elements of the EMS such as the policy, objectives and targets, structure and responsibility, etc.
- Provides direction to related documentation such as training records.



# Document Control

- Have procedures for document control.
- Specific location for documents.
- Periodic review of documents.
- Documents are current - obsolete versions are removed.



# Operational Control

- Decide which activities need documented procedures.
- Risk/complexity of activity.
- Skills/training.
- Degree of frequency.
- Procedures and requirements for suppliers and contractors.



# Emergency Preparedness and Response

- Procedure for identifying response to accidents.
- Identify potential emergencies and accidents.
- Reduce potential for accidents.
- Update existing emergency plans.
- Conduct training for responsible personnel.
- Emergency drills.



# Monitoring and Measurement

- Documented procedure to gauge environmental performance.
- Analyze root causes of problems.
- Identify areas where corrective action is needed.
- Improve performance.
- Equipment calibration.
- Documented procedure for evaluating environmental compliance.



# Nonconformance and Corrective and Preventive Action

- Develop procedures for investigating, correcting, and preventing problems.
- Assign responsibility and authority for handling, investigating, and mitigating nonconformance.
- Revise procedures or other EMS documentation based on corrective action.



# Records

- Procedures for identification, maintenance, and disposition of records.
- Determine their retention time.
- Set up a good storage and retrieval system.



# EMS Audits

- Procedure for audits.
- Determine audit frequency.
- Select and train EMS auditors.
- Maintain audit records.
- Provide findings to management.





# Management Review

- Establish a process for periodic review of the EMS.
- Document the results.
- Follow up on action items.

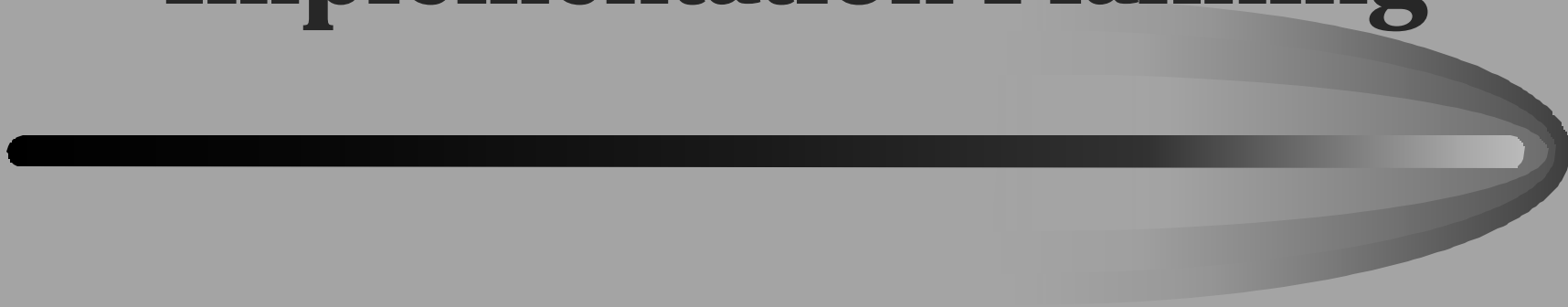


# EMS Growth

	<u>Global</u>		<u>United States</u>
• 1996	1,491	• 1996	4
• 1997	5,017	• 1997	83
• 1998	5,446	• 1998	188
• 1999	9,700	• 1999	450
• 2000	23,721	• 2000	1,340



# Gap Analysis and Implementation Planning



# Gap Analysis

- Programs already in place.
- Roadmap for future.
- Business challenges.
- Environmental challenges.
- Areas for evaluation.



# Implementation Planning

- Starting point based on gap analysis.
- Set schedule:
  - Use modules;
  - Set intermediary dates within modules.
- Determine staffing requirements.
- Estimate time/resource needs.



# Implementation Planning

- Use resources provided through this pilot project, including:
  - Site visits
  - Phone calls
  - E-mails
  - Faxes



# Introducing EMS to The Facility: The Business Case

Denise Rayborn

Waste Reduction Assistance Program

Iowa DNR



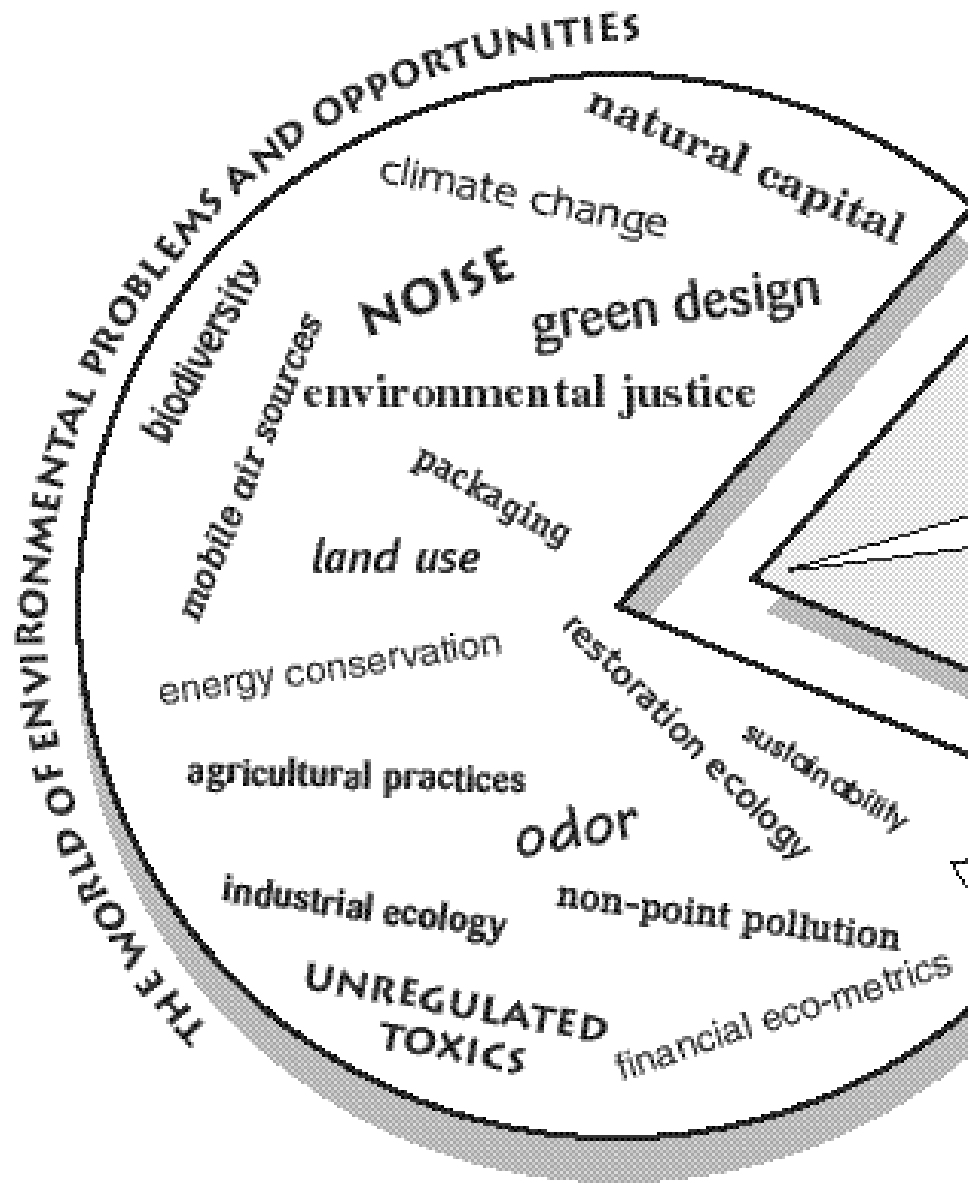
# The Challenge

- Market pressures
  - World market
  - Increasing cost
  - Growing stakeholder expectation
- Fire-fighting mode

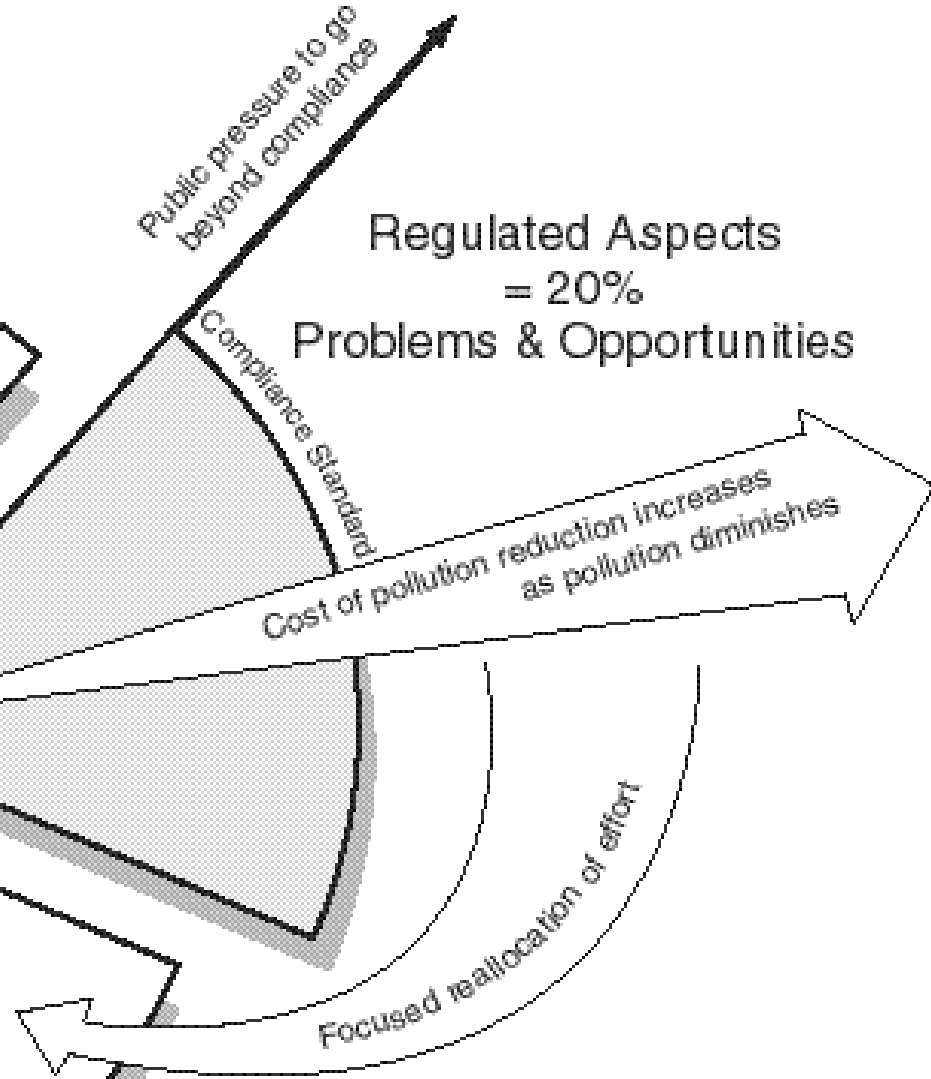




Unregulated  
Environmental Aspects  
= 80%  
Problems & Opportunities



Regulated Aspects  
= 20%  
Problems & Opportunities



# Environmental Management Efforts: Taking Charge!

- EMS can help.
- EMS not required, but...
- Plan-Do-Check-Act.
- One size fits all?
- Don't do everything at once!



# Taking Charge! continued...

- EMS steps that will help you:
  - 1 Evaluate and define success
  - 2 Prioritize environmental issues
  - 3 Identify objective and tracking mechanisms
  - 4 Promote ownership of environmental issues
  - 5 Improve controls over environmental impacts
  - 6 Develop internal processes
  - 7 Report progress



# What It Takes

- Sustained effort.
- Support:
  - Secure, maintain, communicate
  - Engage management
- Measure results.
- Communicate.
- Keep spark alive!



# Taking Charge: Results

- An EMS will help you achieve:
  - 1 More control over an important business factor
  - 2 Better planning - fewer surprises
  - 3 Improved efficiency - lowers costs
  - 4 A more valuable work force
  - 5 Better relations with regulators and community
  - 6 Potential regulatory benefits
  - 7 Stronger customer relationships - competitive position



# Results continued...

## Corporate Culture Change

### Today

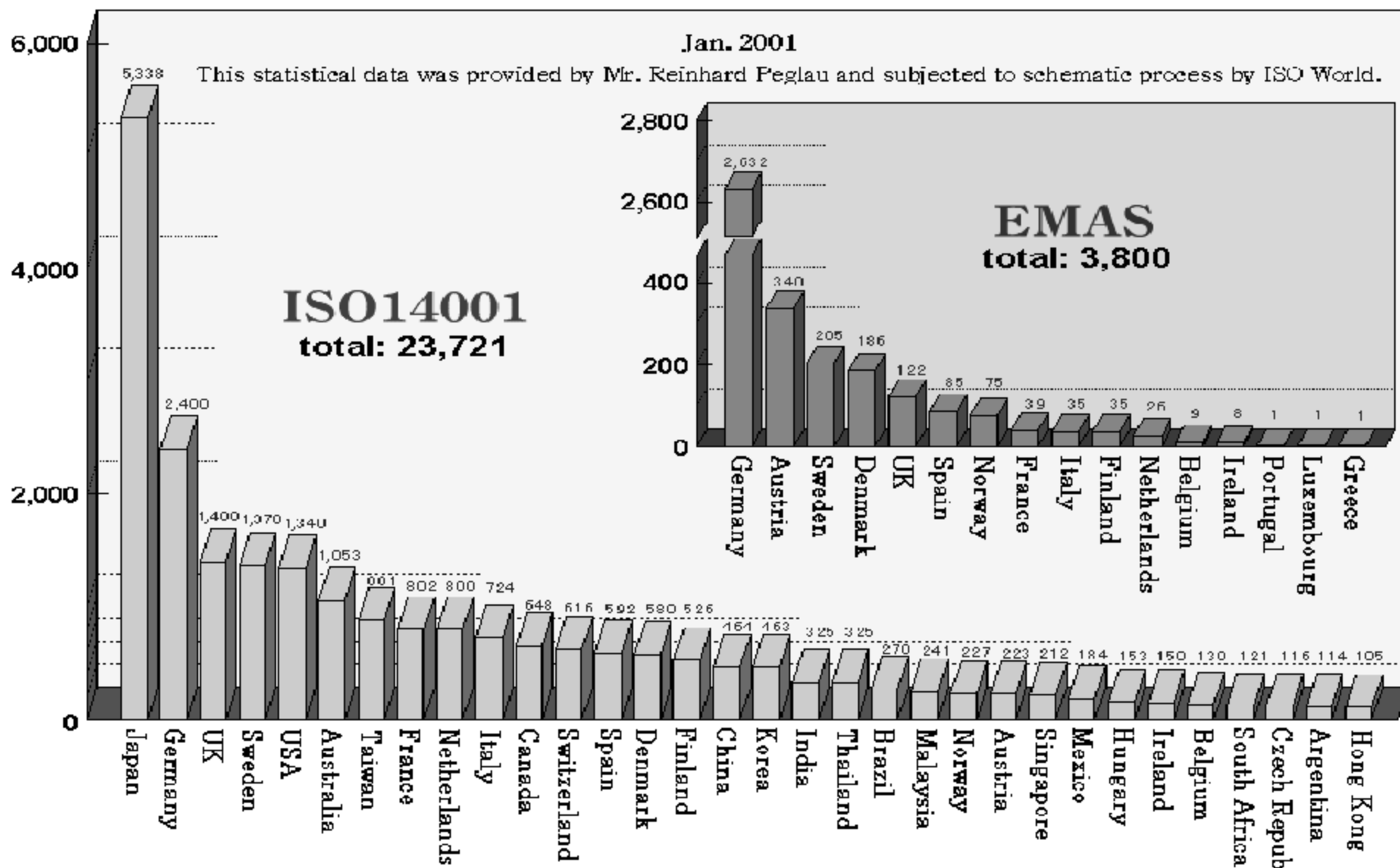
- Environmental management is an unpredictable cost center.
- Fear of enforcement is primary motivator.
- Employees are pessimistic and apathetic.

### Tomorrow

- Environmental management is a profit center.
- Environmental decisions align with corporate values.
- Employees are enthusiastic and innovative.



# The number of ISO14001/EMAS certification/registration of the world



# Environmental Policy





# Environmental Policy

- Statement of corporate values
  - Mission statement
  - Quality policy statement
  - Unwritten
- Corporate



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# Homework

