

Appendix A: Workshop Training for Module 1

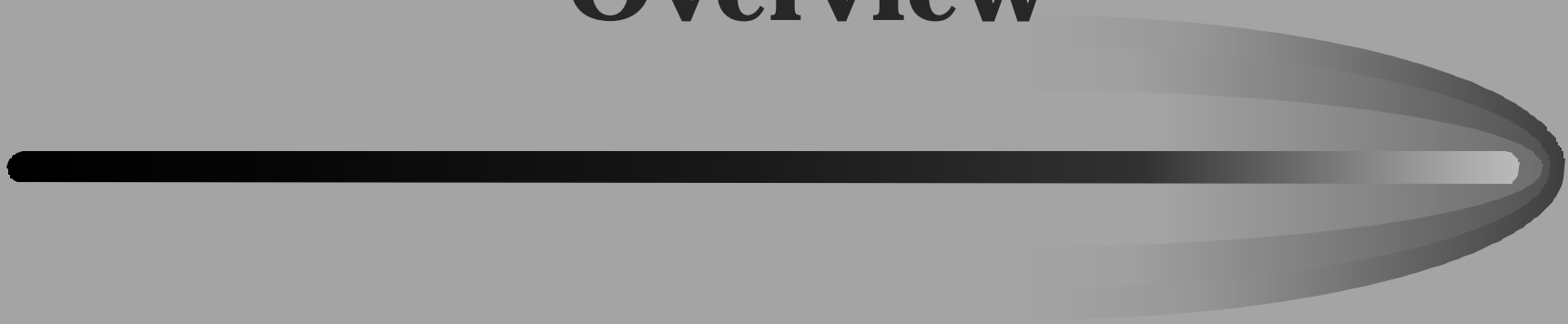
EMS Guide Meat Processing



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.

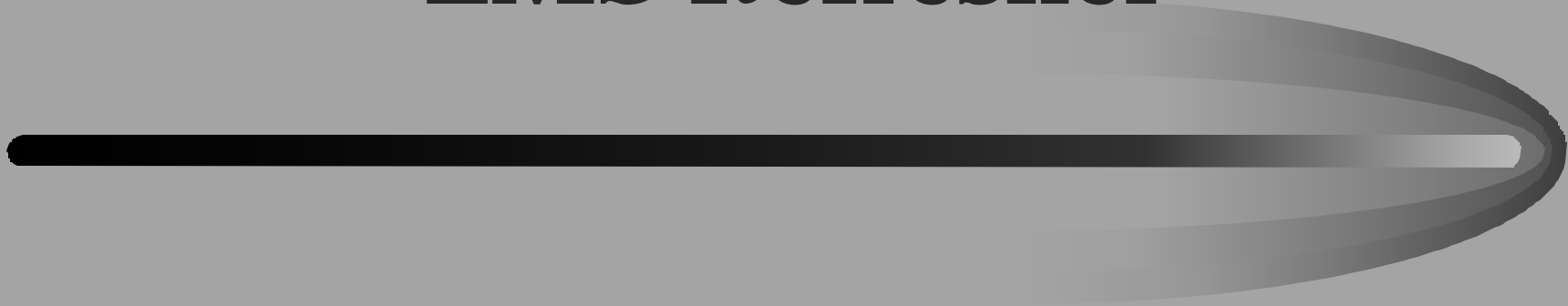


Feedback

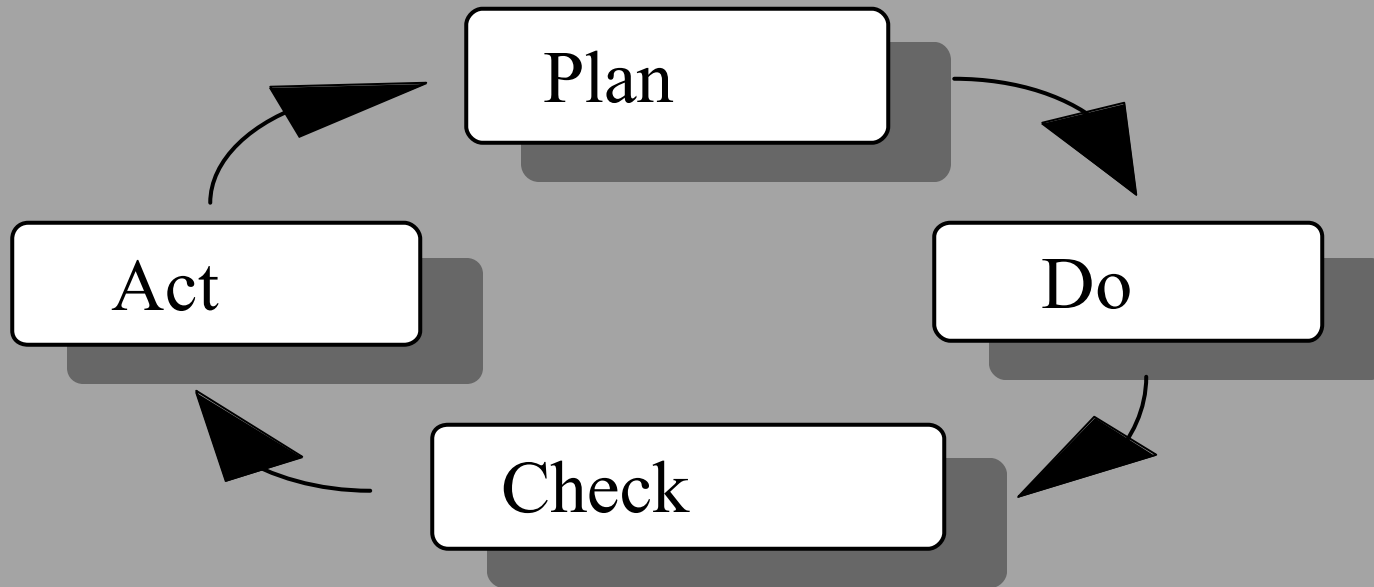
- We believe in continual improvement, if there is a better way - tell us.
- Bad news should travel fast.
 - If it isn't working don't quit - let us know so that we can try and fix it.
- Implementing an EMS isn't easy, but nothing worth having is easy.



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



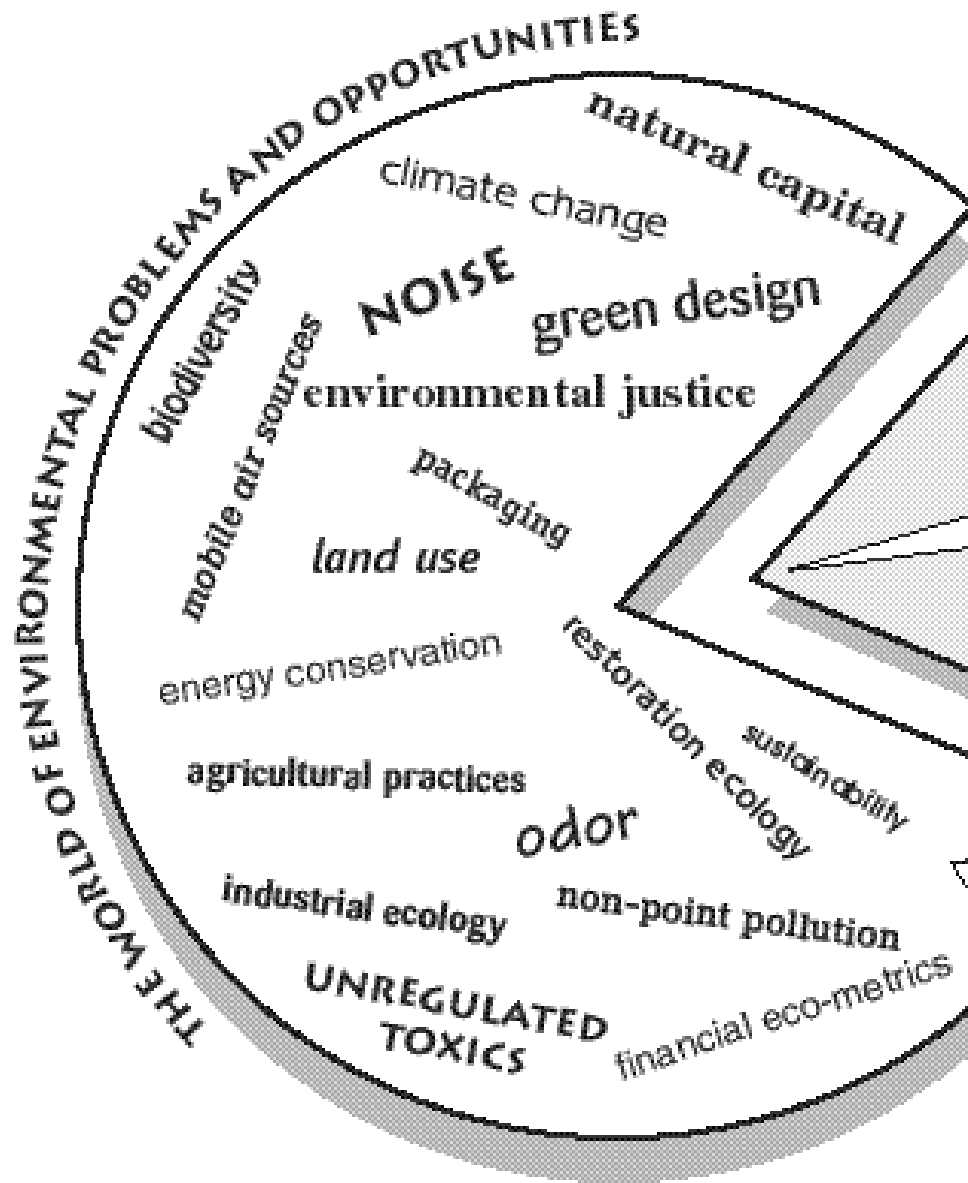
The Challenge



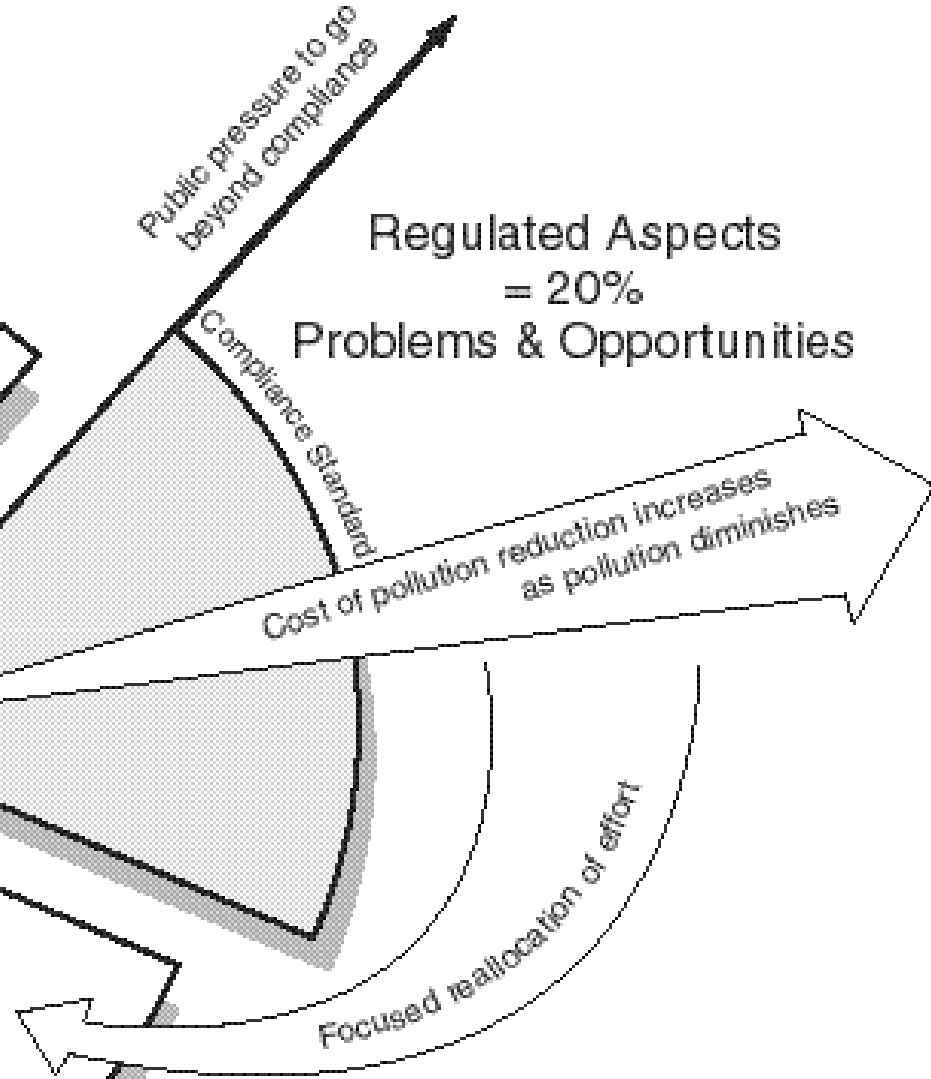
- Market pressures
 - World market
 - Increasing cost
 - Growing stakeholder expectation
- Fire-fighting mode



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

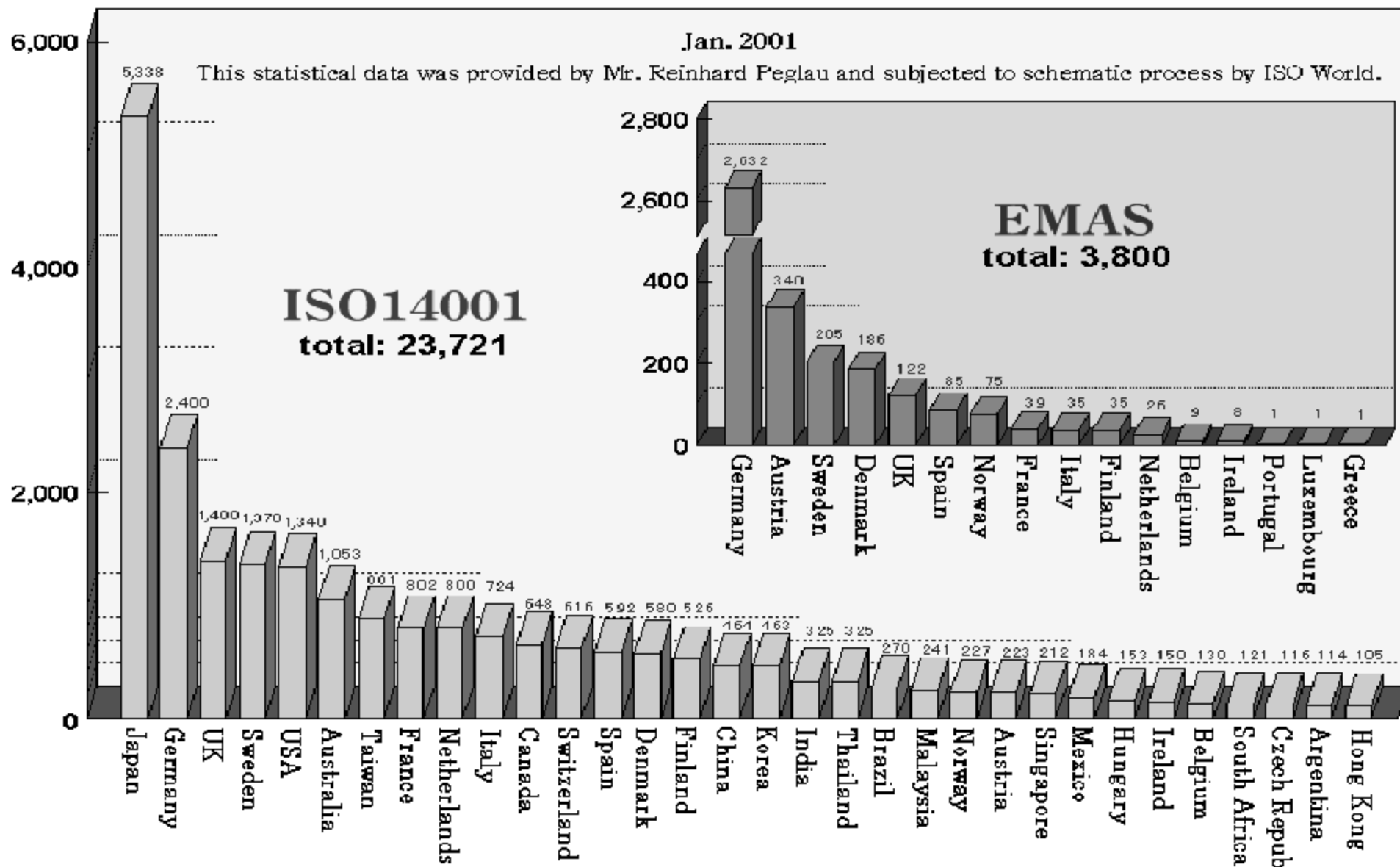
- Environmental management is an unpredictable cost center.
- Fear of enforcement is primary motivator.
- Employees are pessimistic and apathetic.

Tomorrow

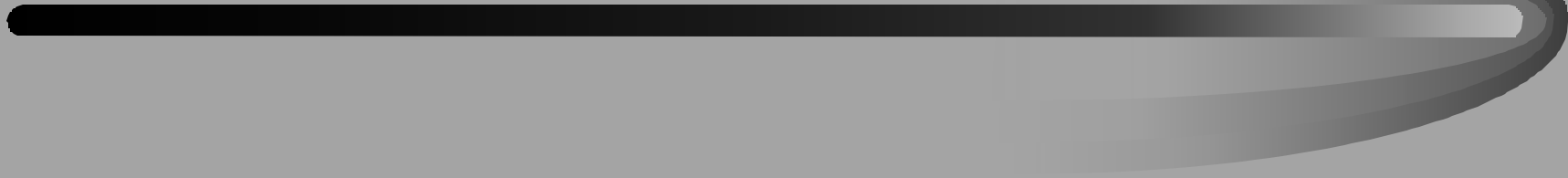
- Environmental management is a profit center.
- Environmental decisions align with corporate values.
- Employees are enthusiastic and innovative.



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

