

# Environmental Management Systems and ISO 14001

December 7, 2010  
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# EMS?

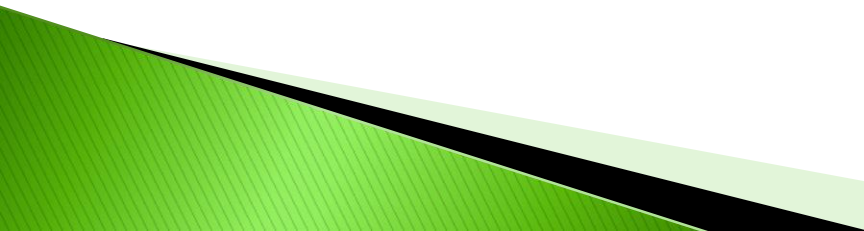
- ▶ Emergency Medical Service
- ▶ Emergency Management Services
- ▶ Express Mail Service
- ▶ Electromagnetic Spectrum
- ▶ Ethyl Methane Sulfonate
- ▶ Electronic Mail Service
- ▶ Excess Mileage Surcharge
- ▶ European Monetary System
- ▶ Earth and Mineral Sciences

**NO**


Well, yes, but  
not today!

# Environmental Management System


A proven tool that is specifically designed to help any organization manage its activities and allow successful pursuit of that organization's environmental policies and goals (including environmental aspects of energy and transportation activities).



# What does an EMS do?

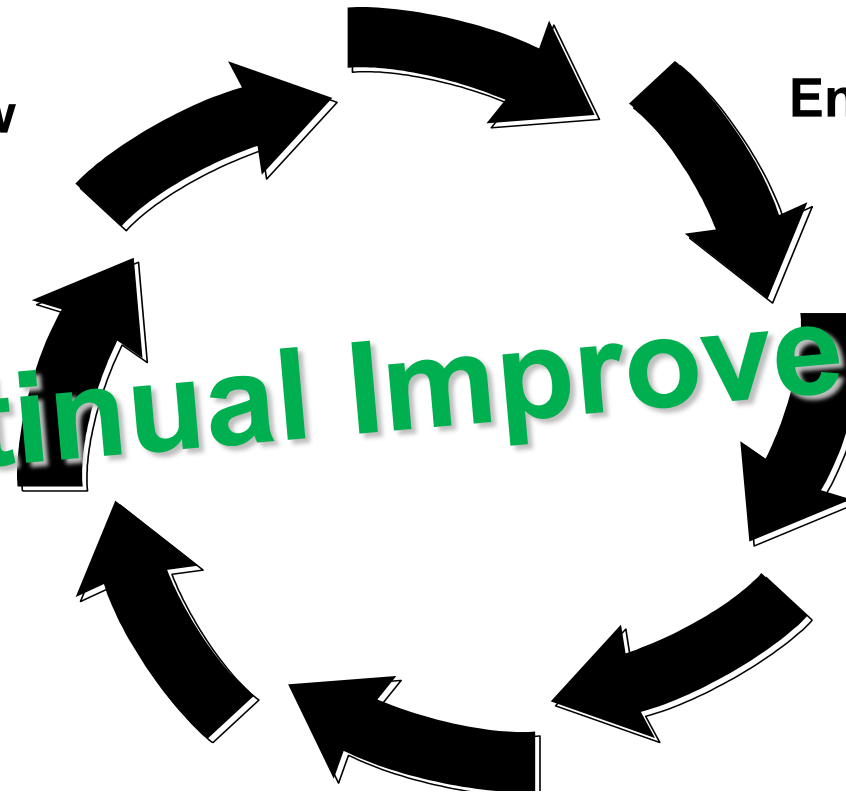
- ▶ Provides a systematic way of managing an organization's environmental affairs
  - ▶ Ensures environmental considerations are a priority
  - ▶ Gives order and consistency for organizations to address environmental concerns through the allocation of resources, assignment of responsibility and ongoing evaluation of practices, procedures and processes
  - ▶ Focuses on continual improvement of the system
  - ▶ An EMS follows a Plan-Do-Check-Act Cycle, or PDCA.
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# Why Implement an EMS?

- ▶ Helps to focus organization's priorities and avoid "flavor of the month syndrome"
  - ▶ Helps to prioritize and keep sustainability goals from competing with each other for resources and attention
  - ▶ Establish a framework to move beyond compliance
  - ▶ Vehicle for positive change; improved employee morale, enhanced public image
  - ▶ Helps to identify the root causes of environmental problems
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# EMS PROGRAM CYCLE

**MANAGEMENT COMMITMENT**



**Continual Improvement**

**Environmental Policy**

**Planning**


**Implementation and Operation**

**Management Review**

**Checking &  
Corrective Action**



# Environmental Policy

- ▶ The environmental policy is the heart of the EMS
  - ▶ The policy establishes the organization's commitment
    - Prevention of pollution
    - Compliance with environmental regulations
    - Continual improvement
  - ▶ The policy is established by the organization's management and sets the framework for environmental objectives and targets
  - ▶ Must be appropriate to the nature, scale and environmental impacts of the organization's activities, products or services
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# ISO 14001 Policy Statement

## NC Zoo

**G** *Growth in knowledge and continued improvement*

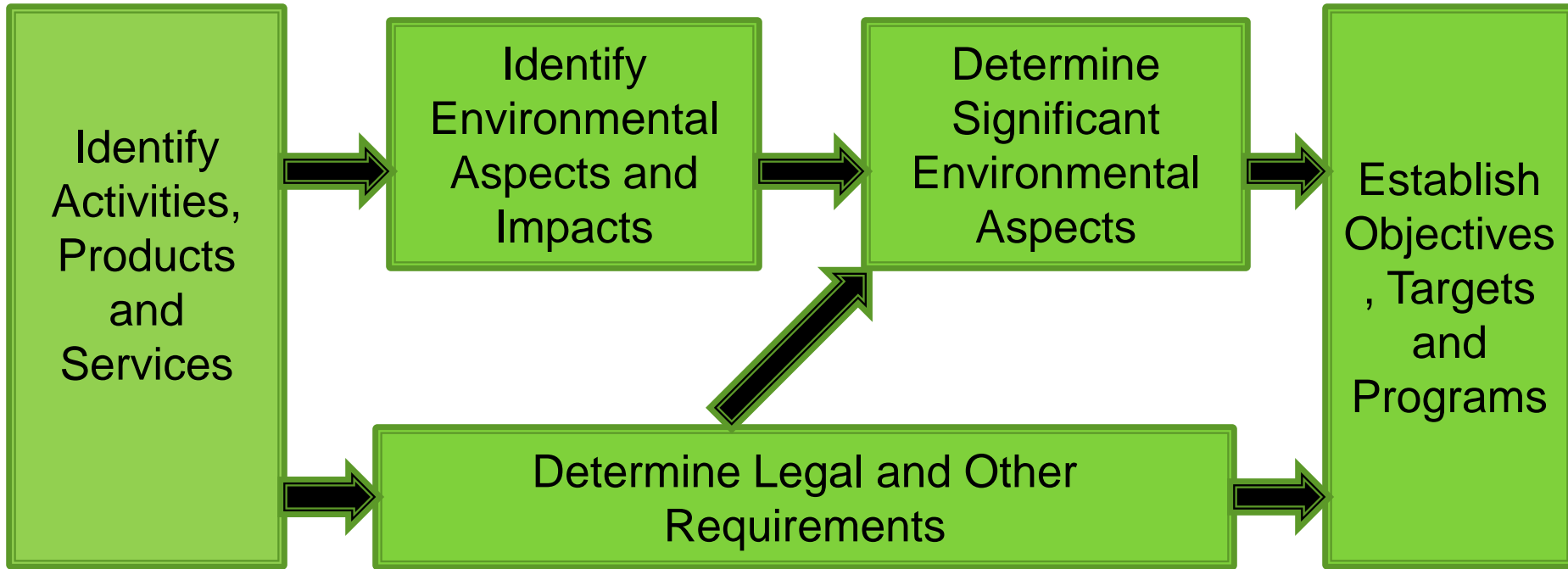
**R** *Reduction in use of resources and waste*

**E** *Environmentally responsible and sustainable operation*

**E** *Example to others*

**N** *Necessary compliance with environmental laws and regulations*

# Planning

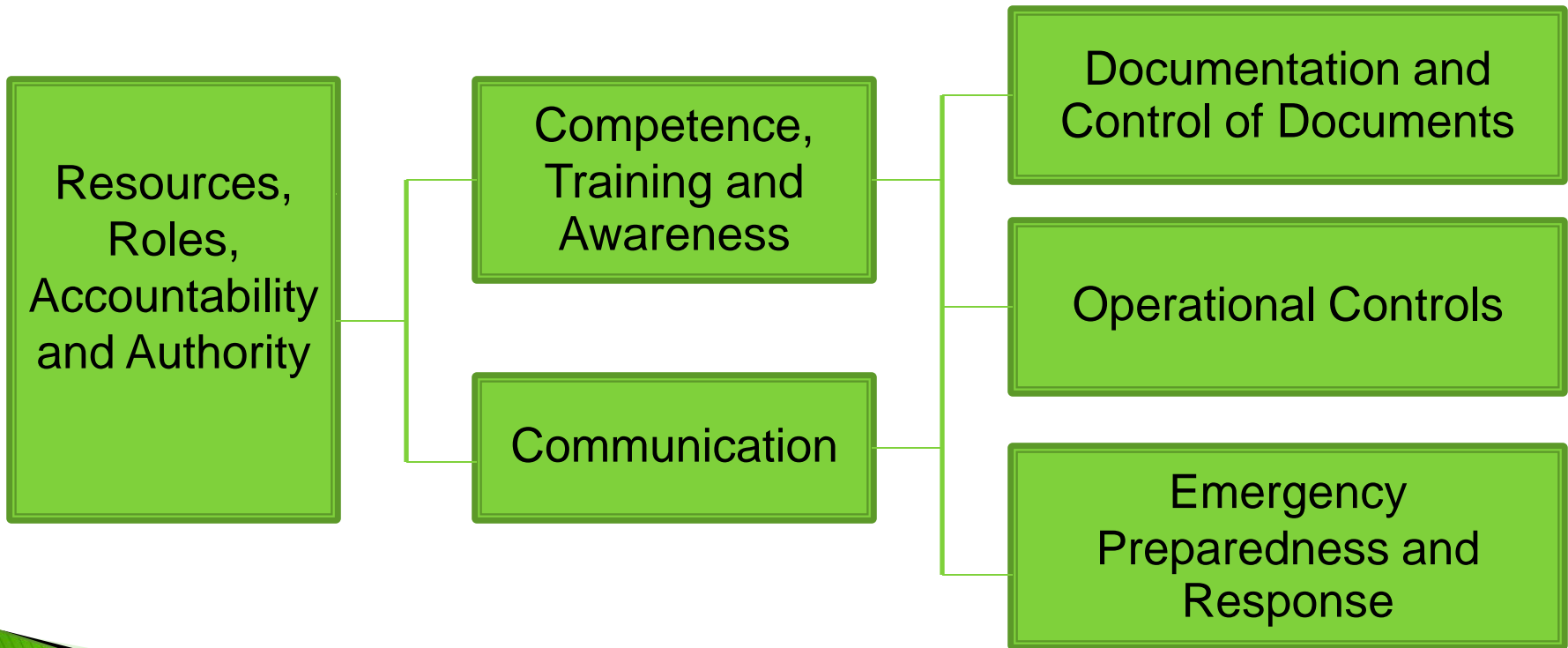


# Implementation and Operation

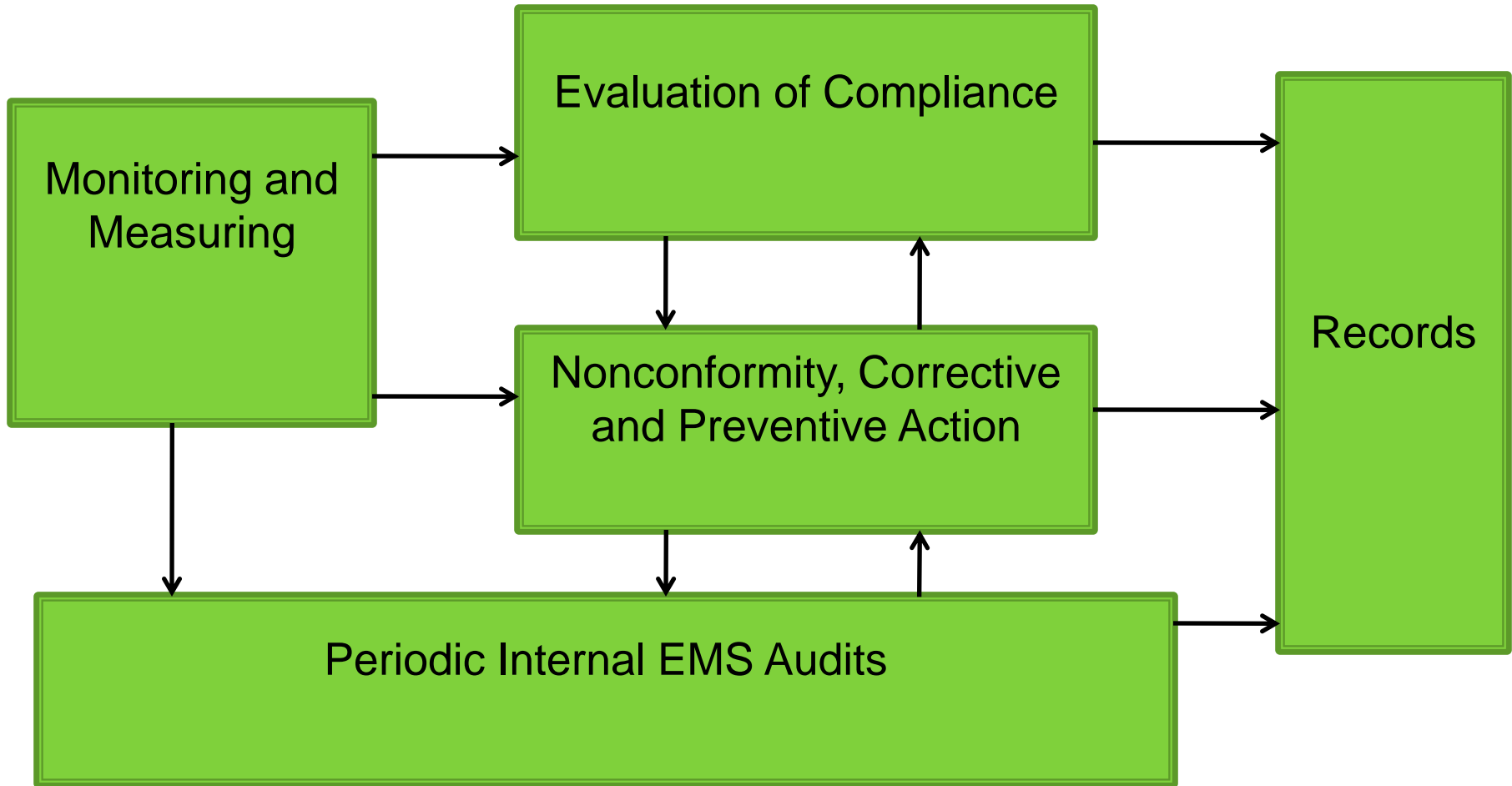
Organization &  
Accountability

Capabilities &  
Communication

Controls



# Checking and Corrective Action



# Management Review

## Take account of:

- audit findings
- progress on objectives
- changes to facilities
- changes in activities, products or services
- changes in technology
- concerns of interested parties
- other relevant information



## To Assess the


- suitability,
- adequacy, and
- effectiveness of the EMS



## In order to determine the need for change and improvement to:

- the environmental policy
- the objectives and targets
- other elements of the EMS

# Incentives to implement an EMS/ ISO 14001

- ▶ Supplier mandates/encouragement (ex. IBM, Ford, GM, health care)
  - ▶ Trade Association assistance and sector models (furniture, metal finishers, livestock, etc.)
  - ▶ Executive Order 4/00 requiring federal facilities to have an EMS
  - ▶ Recognition programs such as the NC Environmental Stewardship Initiative
  - ▶ Competitive business advantage
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# Does an EMS have to be ISO 14001 certified?

- ▶ Unless you are required by a mandate, NO
- ▶ 3<sup>rd</sup> party certification is a way to ensure your EMS isn't forgotten about



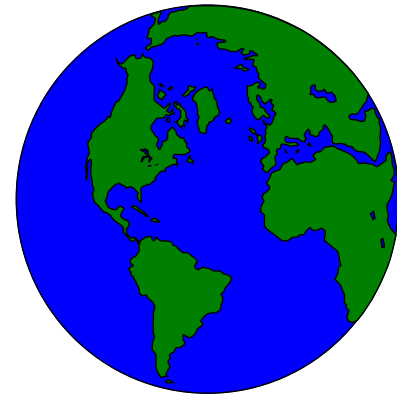
# ESI members

Local Gov ESI members who have fully implemented EMSs or are ISO 14001 certified:

- City of Gastonia – Long Creek, Crowders Creek, WTP
- City of Shelby – WWTP and WTP
- NC Zoo
- Mecklenburg County – Foxhole Landfill

ESI members working on EMSs:

- WSACC – 3 facilities
- Cape Fear Public Utility Authority



# How can ESI help with EMSs?

- ▶ Training modules, February 2011-July 2011
  - ▶ Help with Implementation
  - ▶ GAP analysis
  - ▶ Internal Audits
  - ▶ Functional Equivalency Determinations
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