

Pollution Prevention, Environmental Responsibility and EMS for Sustainable Communities

Phil Webber *CA, CEA, EMS(LA)*

Municipal EMS Services



Environmental Responsibility

Federation of Canadian Municipalities:

Sustainable Communities:

- live within carrying capacity of natural resources;
- employ environmentally responsible policies;
- address quality of life while minimizing environmental impact.




The Environmental Imperatives

1. Be a sustainable community → be environmentally responsible.
 - How to manage those “70 policies”?
2. Be fiscally responsible and exercise good governance?
 - Recognize that cost of protecting the environment is dwarfed by the long-term cost of not protecting it.
 - Due diligence requires a systematic approach to management



P2 in Perspective

Levels of Engagement:

- 
- Fixing Problems
 - 1. Environmental Compliance
 - 2. Environmental Responsibility
 - 3. Environmental Stewardship

Sustainability



Lower Levels of Engagement

Fixing Problems = “ Head-in-a-Bag”

- reactive, and ad hoc
- marked by short-term focus on financial performance

1. Environmental Compliance

- Meet laws and regulations
- Be duly diligent
- Minimize short-term costs



Higher Levels of Engagement

2. Environmental Responsibility

- Pollution prevention
- Precautionary approach
- Eco-efficiency

3. Environmental Stewardship

- Ecological integrity
- Life-cycle approach → extended product /service stewardship
- Consider future generations in decision-making



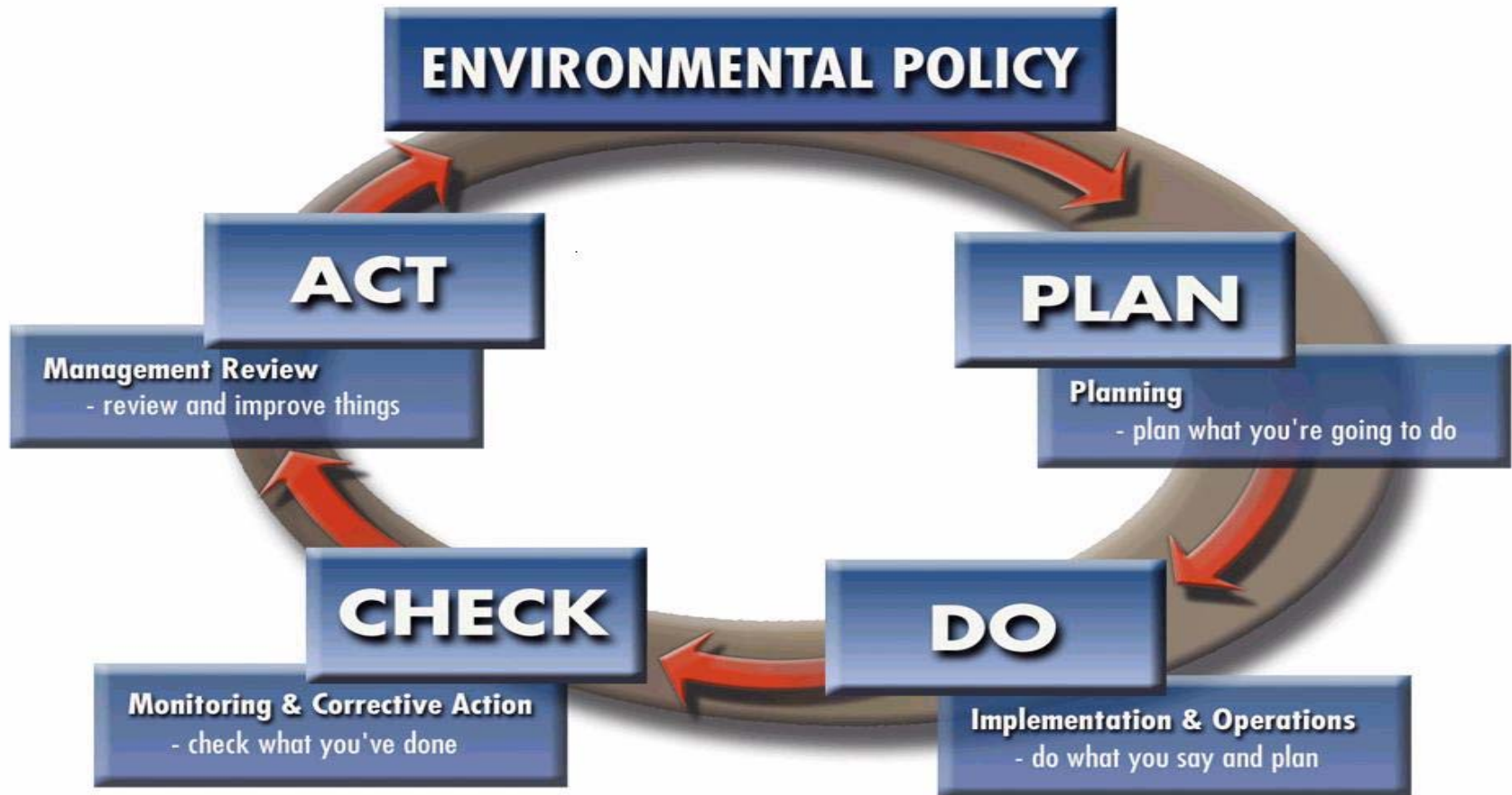
Environmental Management

Federation of Canadian Municipalities:

- Sustainable communities manage environmental aspects thru an integrated, systems approach... →
- Environmental Management Systems (EMS) are specifically identified as one of the tools that municipalities can employ to meet their environmental commitments.



EMS Continuous Improvement Cycle



Building Capacity...

An EMS provides the organizational and operational capability needed to turn strategic commitments to environmental stewardship and sustainability into reality.



Strategic Commitment into Action

1. Gap analysis of current performance →
2. Action plan and goals in key “Areas of Commitment”
3. For each Area, identifies:
 - Targets for Goals
 - Indicators
 - Managerial Needs
 - Potential Benefits

From InfraGuide “Strategic Commitment to the Environment by Municipal Corporations”



Areas of Environmental Commitment

- Pollution Prevention
- Energy Efficiency
- Greenhouse Gas Emissions
- Watershed Management
- Resource Use
- Ecological Integrity

*Indirect
P2
Aspects*



Pollution Prevention

Identified Management Needs:

- Policy
- Budget allocation
- Technological change
- Staff training
- Audits



Pollution Prevention

Management Needs and EMS Elements:

- Policy - Environmental Policy; Internal Communications
- Budget allocation
 - Environmental Management Program
- Technological change
 - Objectives and Targets, EM Program
- Staff training
 - Training, Awareness and Competence
- Audits - Monitoring and Measurement



Green Purchasing

Identified Management Needs:

- Policy and procedures
- Staff training
- Revised contracts / specifications
- Supplier discussions
- Technological change



Green Purchasing

Management Needs and EMS Elements:

- Policy and procedures
 - Environmental Policy
- Staff training
 - Training, Awareness and Competence
- Revised contracts / specifications
 - Operational Control
- Supplier discussions - Operational Control
- Technological Change
 - Objectives & Targets; EM Programs



Ecological Integrity

Identified Management Needs:

- Assessment of stressors / impacts
- Baseline and ongoing monitoring
- Establishing indicators / targets
- Implementing mitigations
- Ongoing research



Ecological Integrity

Management Needs and EMS Elements:

- Assessment of stressors / impacts
 - Environmental Aspects
- Baseline and ongoing monitoring
 - Monitoring & Measurement
- Establishing indicators / targets
 - Objectives and targets; M&M
- Implementing mitigations
 - Operational Control



Environmental Stewardship

Implementing the Strategic Commitment - overall management needs:

- Provide leadership direction (policy)
- Establish clear goals
- Employ indicators / measures
- Establish feedback loops:
 - Monitor performance
 - Drive continual improvement



Pollution Prevention in EMS

Key EMS elements addressing P2:

- Environmental Policy
- Environmental Aspects
- Objectives and Targets
- Environmental Management Programs
- Training, Awareness and Competence
- Operational Control
- Emergency Preparedness & Response
- Monitoring and Measurement
- Management Review



Banff as a Sustainable Community

“ per TOB: ... a sustainable community is environmentally and fiscally responsible, and preserves or improves quality of life without compromising the ability of future generations to meet their own needs.”

The [Environmental Stewardship Policy](#) is a lynch-pin that helps link the sustainability imperative to the Town's operations via the EMS.

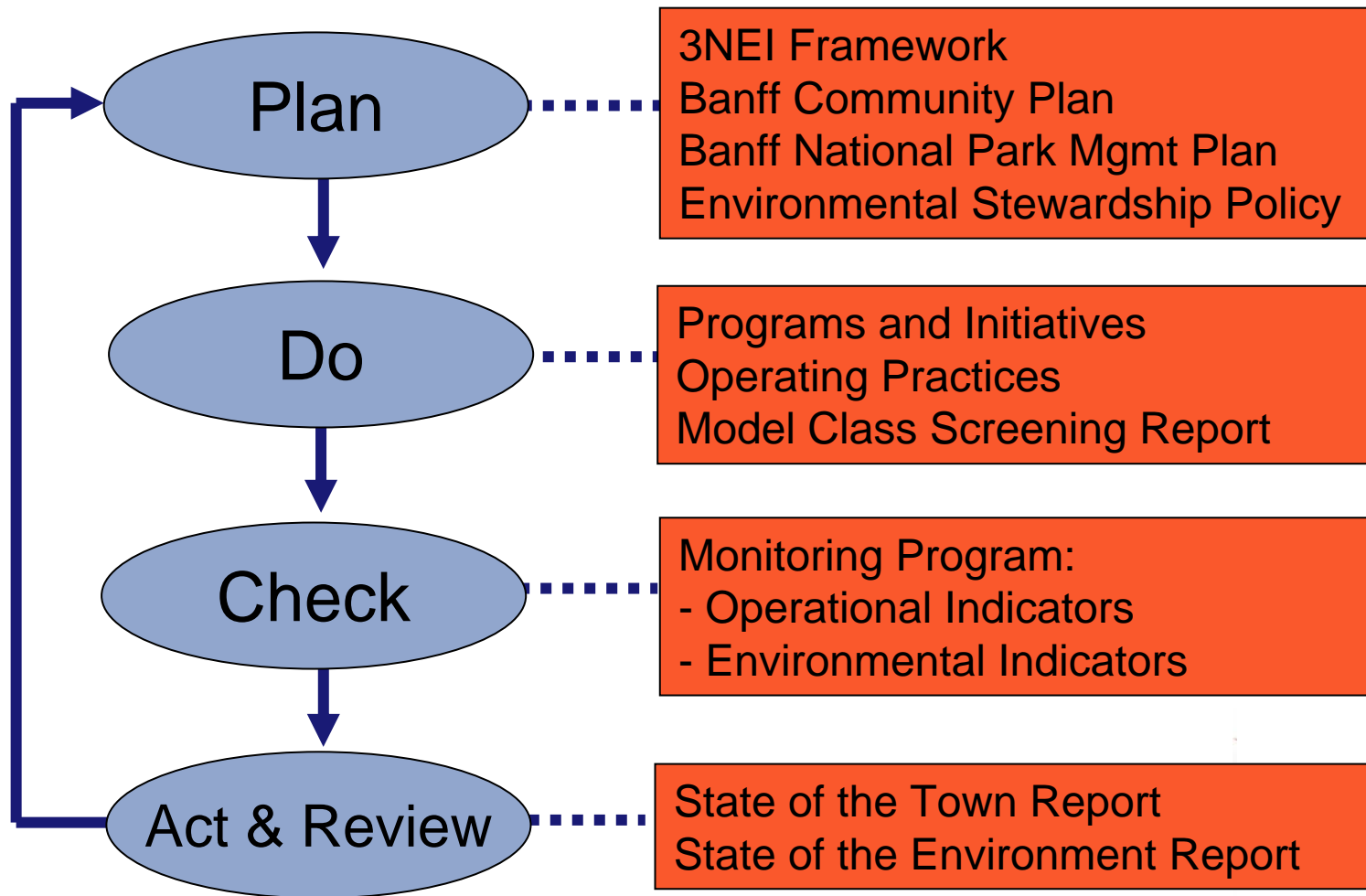


Banff: Commitment → Action

- A commitment to prevention of pollution is embedded in the Environmental Stewardship Policy.
- The EMS provides the organizational and operational capacity to translate the policy commitment into action, and to follow-up on performance.



Aligning Management Activity



Wrap Up

- Thank you for listening!
- Contact information:
 - Phil Webber
 - Municipal EMS Services
 - (604) 205-6933
 - Phil@municipalEMS.com
- Pick up a brochure on EMS.

