



# **Environmental Assurance Tools for Municipalities:**

## ***The City of Calgary's EnviroSystem Experience***

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The City of Calgary***

**Canadian Pollution Prevention  
Roundtable  
Halifax, June 14 & 15, 2006**



# Outline

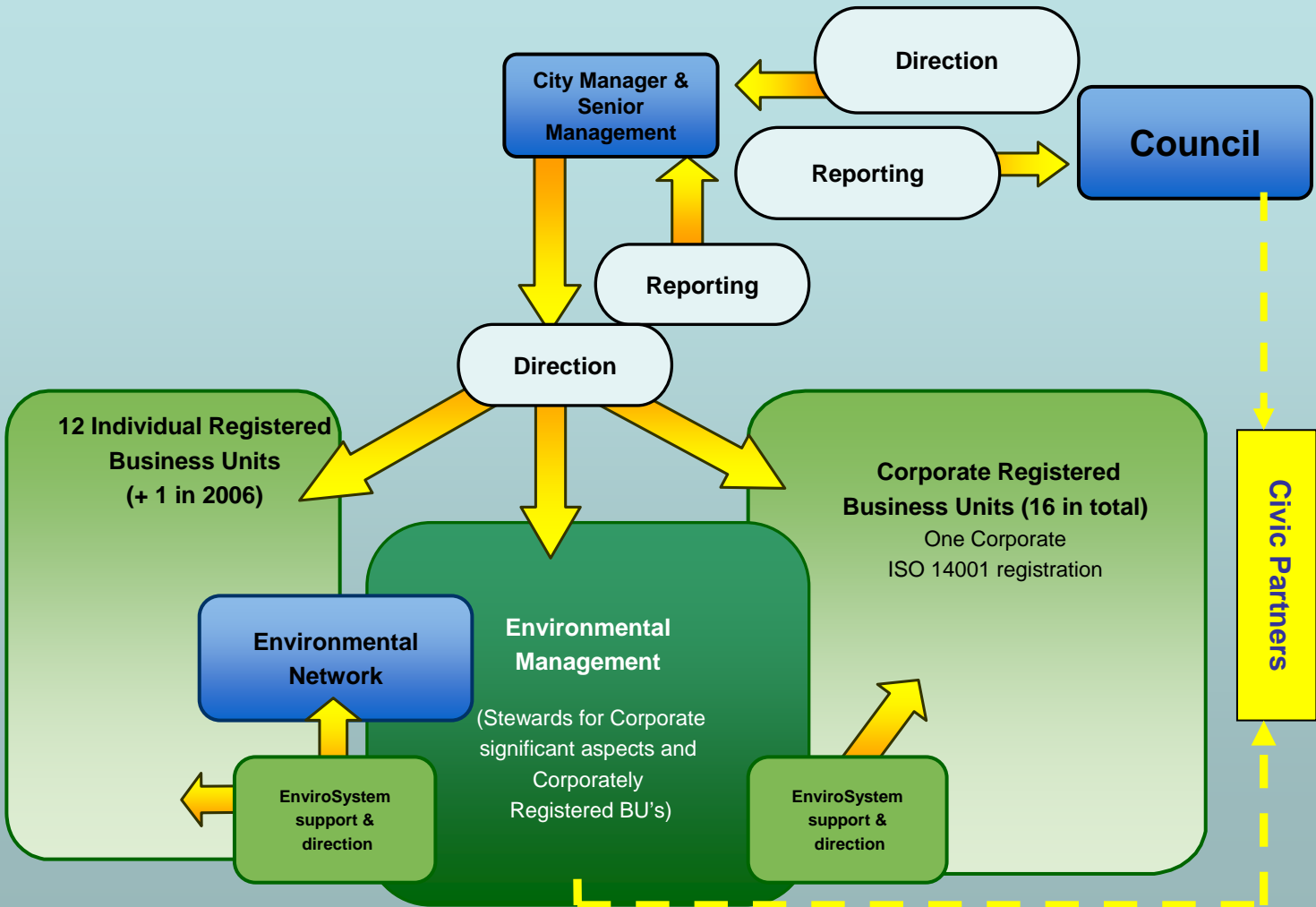
1. ISO 14001 EnviroSystem
2. Environmental Assurance Tool Kit
3. Beyond compliance
4. ISO 14001 – link to sustainability



# ISO 14001 – The Foundation

- Calgary's path toward sustainability began as a result of compliance and liability.
- City Council determined to demonstrate environmental leadership among municipalities and to community
- 12 individual registrations for operating business units and one registration for 17 office-based business units
- In 2003 The City of Calgary achieved corporate-wide ISO 14001 registration

# ISO 14001 – “EnviroSystem” Reporting/Organizational Structure





# ISO 14001 – Key Benefits

1. Systematic way to identify and manage environmental priorities:
  - Risk ranking
  - Objectives
  - Targets
  - Assigning responsibility/accountability
2. Non-conformances, corrective action and root cause analysis



# ISO 14001 – Key Benefits

## 3. Management Review

- *Continual* dialogue with managers and directors
- *Monthly* reporting to our senior management
- *Quarterly* reporting to City Council

# Environmental Policy – Cornerstone of EnviroSystem

## The 3C's of The City of Calgary's Environmental Policy

1. **Comply** with applicable legislation.
2. **Conserve** resources and prevent pollution.
3. **Continually** improve our environmental performance.



**EnviroSystem**  
The City of Calgary's  
Environmental Management System

<http://envirosystem>



For current program information visit the EnviroSystem Intranet or contact your EnviroSystem Coordinator.





# Assurance Tools - Audit

- Internal Audit Program – conformance to ISO 14001, compliance – promotes consistency, best practices, findings/corrective actions reported quarterly to senior management and Council
- Registrar/external audit – provides assurance of independent verification of conformance – benchmarking, assesses requirement for pollution prevention, continual improvement

# Assurance Tools – EnviroTracker/Compliance audit



THE CITY OF  
**CALGARY**

Welcome  
*Patricia Grief*  
**LOGOUT**



## EnviroTracker

The City of Calgary's  
Environmental Management  
Regulatory Compliance System

Substance Release  
Form / X-217

Regulatory  
Infractions

Nonconformances &  
Corrective Actions

Compliance  
Protocols

Reports

Edit Your  
Profile

Admin  
Module

Calendar

### Compliance Protocols:

- [By-Law](#)
- [Federal - Guideline](#)
- [Federal - Legislation](#)
- [Federal - Regulation](#)
- [Industry - Standard](#)
- [Municipal - Guideline](#)
- [Municipal - Policy](#)
- [Provincial - Approval](#)
- [Provincial - Guideline](#)
- [Provincial - Legislation](#)
- [Provincial - Regulation](#)





# Assurance Tools – Management Review


ISO 14001 standard requires specific inputs and outcomes from management review process:

- Review of audit results, environmental performance
- Communication/complaints from external parties
- Extent to which objectives and targets have been met
- Recommendations for improvement



# ISO 14001 – Key policy Success Stories

1. Sustainable Building Policy (LEED)
2. Wetland Policy
3. Climate Change Action Plan
  - Green energy
4. Establishment of **corporate** objectives and targets



# EnviroSystem – Key Corporate Objectives

- Reduction of GHG emissions from corporate operations to 50% of 1990 levels by 2012 (recent agreement with Enmax Corporation to build new wind powered generating facility in southern Alberta).
- Reversing current ratio of recycled to landfilled waste (20/80) to 80/20 by 2020.
- Reducing community water consumption by 30% from 2003 levels by 2030.

# Calgary's Ecological Footprint is highest in Canada

- Calgary = 9.86 ha/capita
- Average Canadian City = 7.25
- Over 5 times the global carrying capacity of 1.8 ha/person





# Reduction of Calgary's Footprint – Key Objective

- Next step is to demonstrate environmental stewardship and model behavior to community (business and public).
- Lead key initiatives to reduce footprint through community outreach, partnerships

# imagineCALGARY....100 year visioning

1880



1947



2005

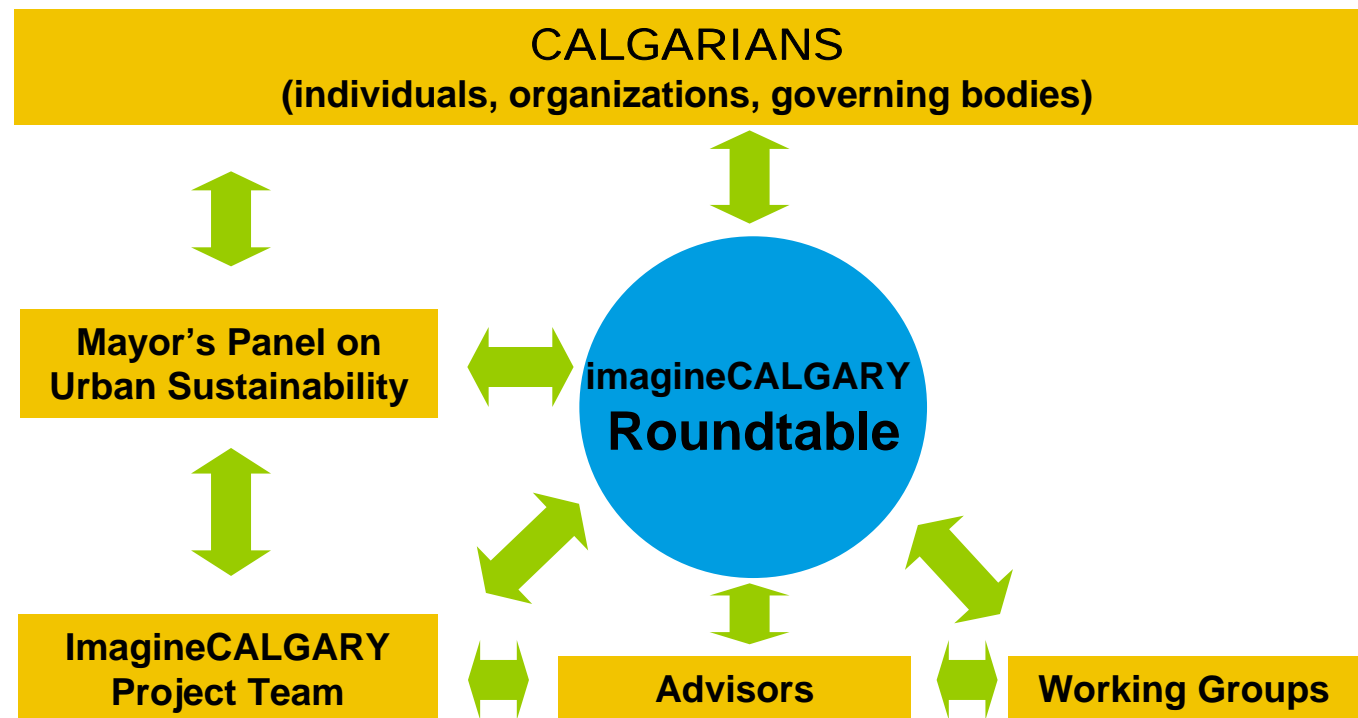


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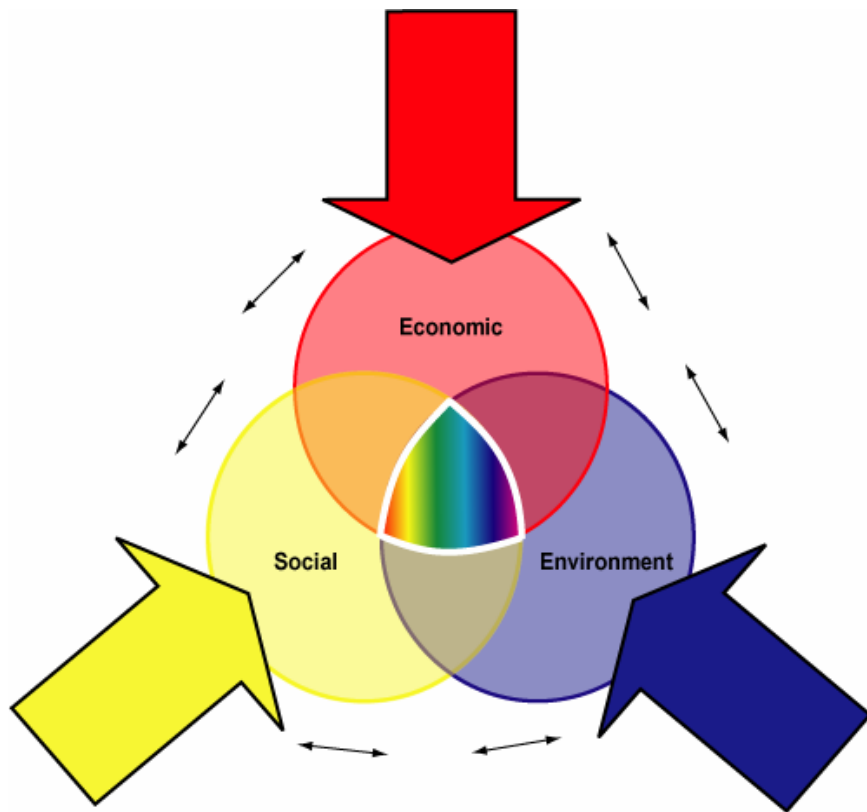


**imagine**CALGARY  
Shaping our city's future

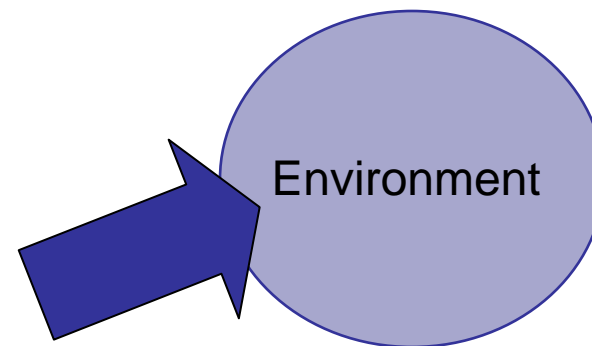
# Project Structure - (Stakeholder Engagement and Collaboration)



# Triple Bottom Line and ISO 14001



Through ISO 14001 we are strengthening the **environmental component** in our sustainability vision



A logical extension to our management system to now address **economic** and **social** implications



# A Long Range Urban Sustainability Plan - Three Stages Over 12 Months

## Vision

- 100 year time frame
- Broad public engagement
- End state descriptions

## Strategies

- Sustainability in a generation
  - 30 year targets and strategies

## Legacy

- Endorsed by Organizations
- Individual & Community Action
- Keeping the conversation going
- Creating a coordinating body
- Resourcing ongoing efforts

# imagineCALGARY Outcomes





# ISO link to Sustainability

Our ISO 14001 environmental management system has created the climate within the corporation to:

- Implement TBL
- Engage in imagineCALGARY visioning project
- Set stretch goals and targets for corporation and the community

# ISO link to Sustainability

- Demonstrate leadership to the community
- Manage environmental issues systematically
- Incorporate business plans into the system structure and manage in a systematic way
- Improve accountability and transparency
- Improved citizen perception of The City of Calgary as an environmental leader

# Our Future

**“We are calling upon Calgarians to dream big, embrace the challenges of local and global citizenship, and take bold decisive steps that will put us on a clear path toward sustainability.”  
(State of Our City Report)**

