

InfraGuide

Sustainable Infrastructure's Contribution To Environmental Protection

Presented To: 8th Canadian Pollution Prevention Roundtable
Presented By: Nancy Schepers, Project Director, InfraGuide
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National Guide to Sustainable
Municipal Infrastructure





Welcome

Introduction

InfraGuide Mandate

Key Areas

Sustainable Municipal Infrastructure

- Principles
- Guidelines

Best Practices that Complement
Environmental Protection

Conclusion





Introduction

What happens when infrastructure is unsustainable?

- Reduced land conservation (Urban Sprawl)
- Water quality & ecosystems at risk
- Increased GHG & Noxious Air Emissions
- Urban wildlife habitat compromised





InfraGuide Mandate

InfraGuide works collaboratively to create a network advantage within the broad infrastructure community, and to develop and disseminate best practices and tools that encourage innovation to support sustainable municipal infrastructure decisions and actions that protect and enhance the quality of life of Canadians.





Key Areas

Covering following key infrastructure areas

- Decision making and Investment Planning
- Municipal Roads and Sidewalks
- Potable Water
- Storm and Wastewater
- Environmental Protocols
- Transit





Sustainable Municipal Infrastructure Principles

- **Holistic Systems Thinking**
- **Equity over Space and Time**
- **Effective and Efficient**
- **Fosters Awareness, Learning,
Participation and Engagement**
- **Practical and Incremental**





Guidelines

1. **Human health and safety a priority**
2. Capture full intended and unintended costs
3. Engagement through consultation and participation
4. **Incorporates “reduce, reuse and recycle” philosophies**
5. Full cost disclosure





Guidelines (contd.)

6. **Life cycle costs across social, environmental and economic dimension.**
7. **Minimize community disruption**
8. **Balances demand with consequences**
9. **Identify impacts and manage risks**
10. **Continuous improvement and learning**





Best Practices that complement environmental protection



Strategic Commitment to the Environment by Municipal Corporations

Promotes:

- Going beyond compliance with regulations
- Adopting a cradle-to-cradle approach
- Implement precautionary principles
- Acknowledge the importance of environmental factors and setting clear environmental goals





Best Practices that complement environmental protection

Accounting for Environmental and Social Outcomes in Decision Making

Promotes:

- Making sure infrastructure investments do not degrade environmental functions and services
- Incorporating an integrated approach to decision making
- Taking an initiative towards holistic decision making



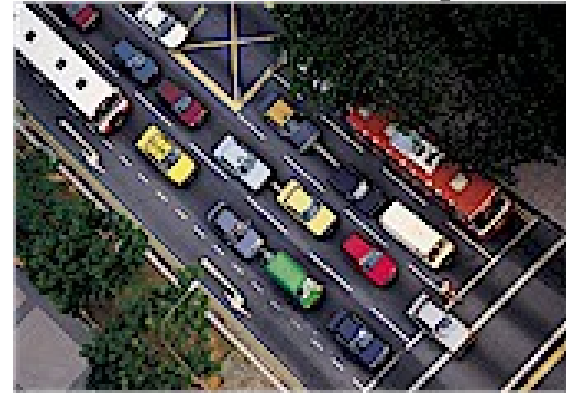


Best Practices that complement environmental protection

Investment Parameters for Municipal Infrastructure

Promotes:

- **Constructing good:**
 - roads
 - sewer systems
 - water distribution systems
- **Considering infrastructure renewal**





Best Practices that complement environmental protection



Biosolids Management Program

Promotes:

- Pollution prevention being initiated within the industrial sector of a municipality
- Wastewater treatment plants to manage the liquid and solid discharges they generate in an environmentally conscious way
- Implementing a contingency plan and emergency response procedures





Conclusion

Pollution Prevention is not the main driver of sustainable infrastructure, however it is a net result or benefit of sustainable infrastructure. Environmental protection is integrated holistically in the development of all InfraGuide Best Practices.





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Our Focus is Infrastructure, Our Strength Our Networks

www.infraguide.ca





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Contact Us

www.infraguide.ca

1-866-330-3350



www.infraguide.ca

