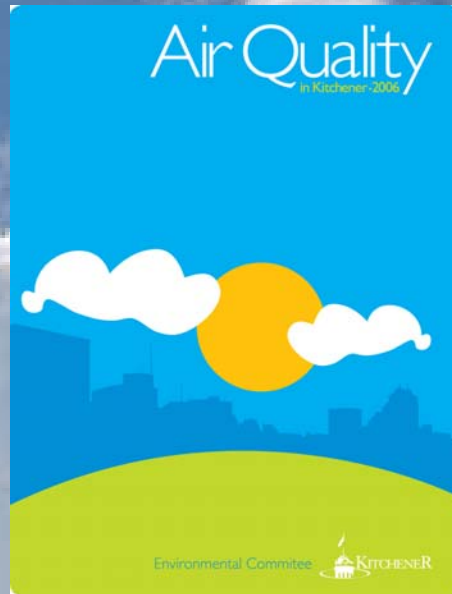




Citizens' Report on *Air Quality in Kitchener* & Annual *Five (5) Best Bets* for Air Quality





The City and the Air Quality Issue Late 1990s – Early 2000s



- **Federal and provincial jurisdiction (CEPA and OEPA)**
- **Indirect approaches used (energy efficiency, growth management, transit supportive policies, nature conservation, resource consumption)**
- **Partnered with Citizens' Advisory Committee on Air Quality (CACAQ in late 90s)**
- **Focus on Operational approaches: Kitchener's Clean Air Plan (1999) and Fleet Idling Protocol (2002)**
- **Idling Reduction Education Campaign with Region and CACAQ (2002)**



The City and the Air Quality Issue Early 2000s - Today



- Emerging environmental issues highlight cross connections with the ***healthy citizens*** and ***healthy communities***
 - Air quality, pesticide use vis-à-vis human health
 - Natural lands, walkable communities contribute to quality of life, social well-being
 - Livable communities attract the *creative class* and businesses that employ them
- Citizen concern has created the impetus at local level to address local ***physical environment vs. public health*** issues
- Healthy Citizens—and, therefore Clean Air—has become a ***Local Issue***



What?

Citizens' Report on *Air Quality in Kitchener*

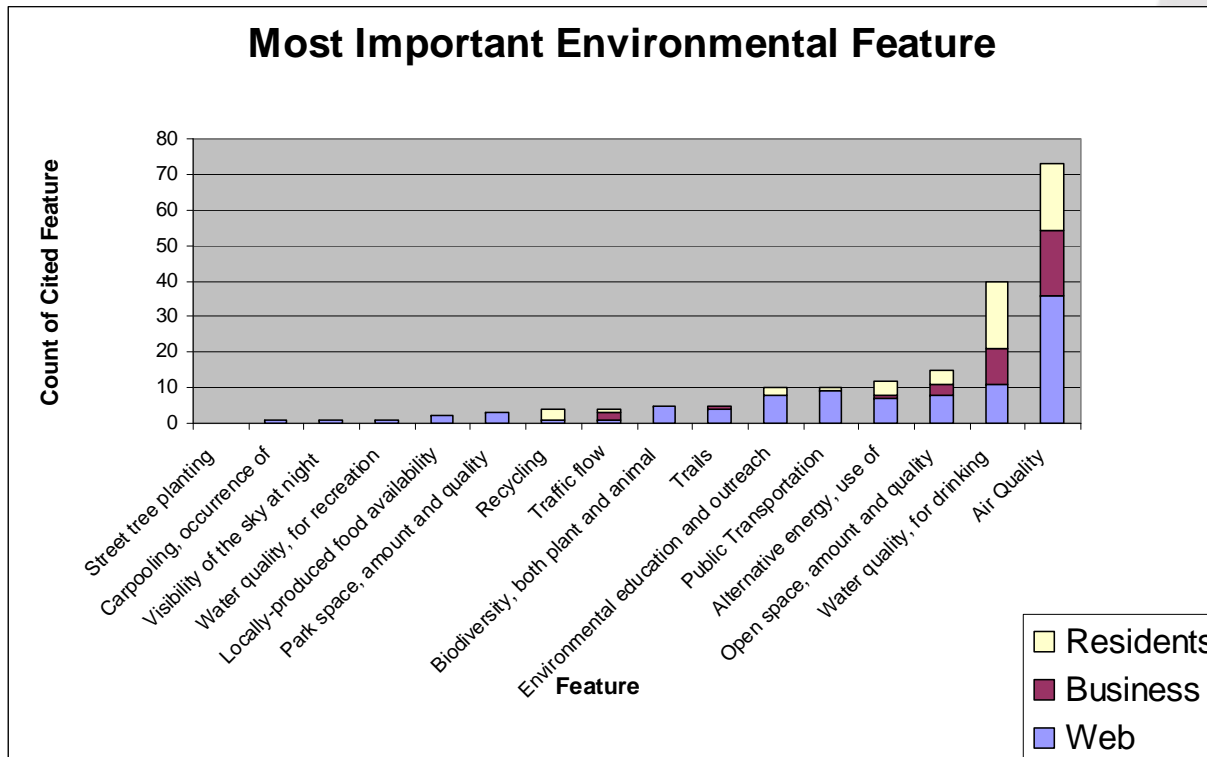


Oct. 2003	Kitchener Environmental Committee recommendation: "Stop Idling" signs
Oct. 2004	Staff recommendation: Council to fund \$21,500 "Stop Idling" sign program
Nov. 2004	Council request: Development of "long-term comprehensive air quality plan"
May 2006	Citizens' Report on <i>Air Quality in Kitchener</i> at Council



At the same time...

Kitchener citizens were saying...



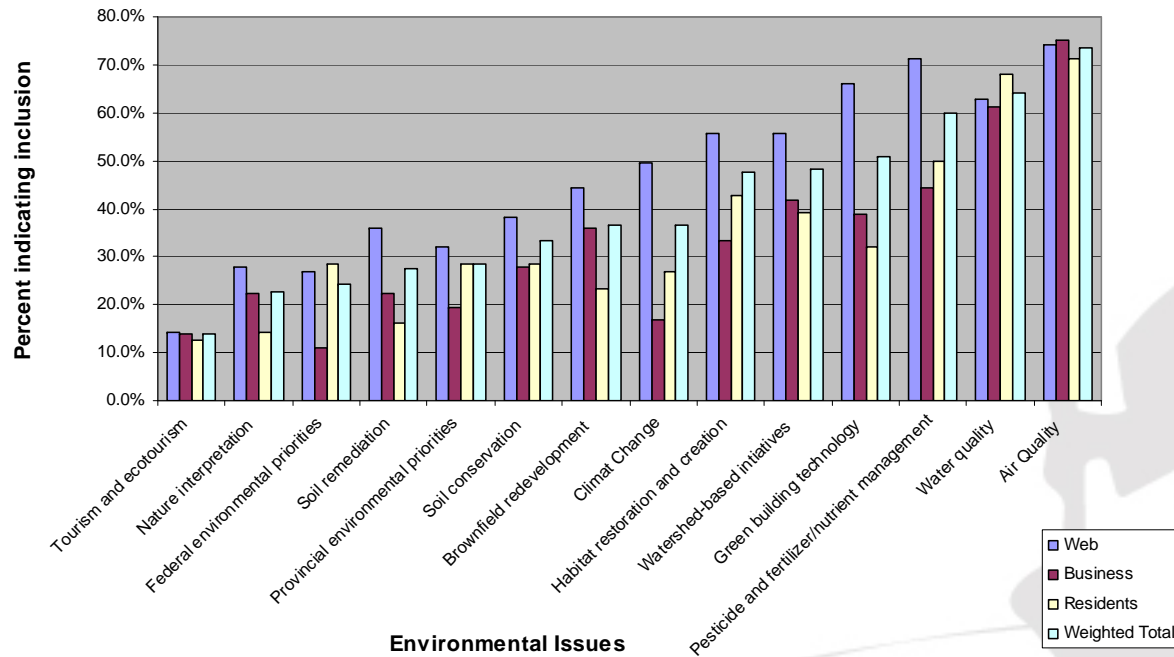


At the same time...

Kitchener citizens were saying...



Environmental Issues to Include in Strategic Plan



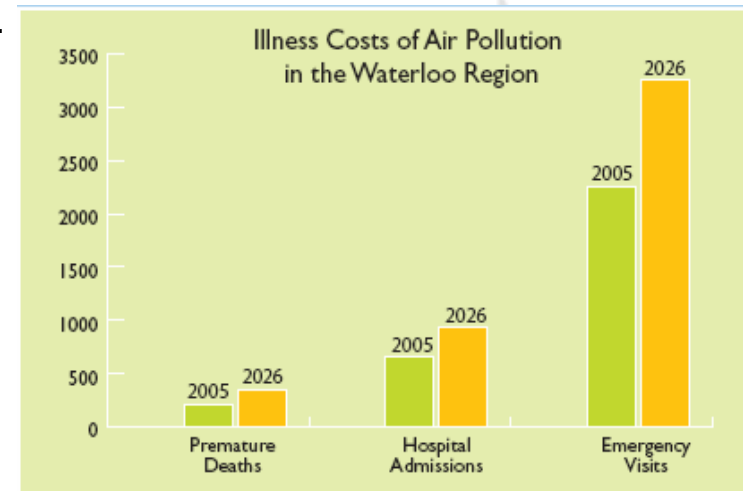
At the same time... Health Agencies were saying...



Cost of poor Air Quality, Waterloo Region p.a.

Ref: Health Canada & Ont. Medical Association, Lung Assoc.

- 200 lives
- 600 hospital admissions
- 2200 emergency visits
- Ontario numbers show the same trend:
 - 5800 premature deaths
 - 12,200 hospitalizations
 - asthma in 20% of children



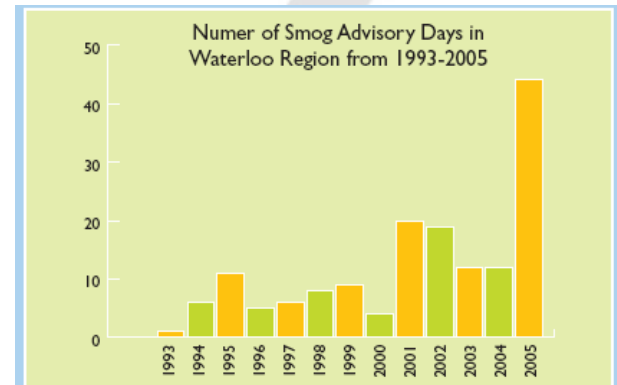


At the same time...

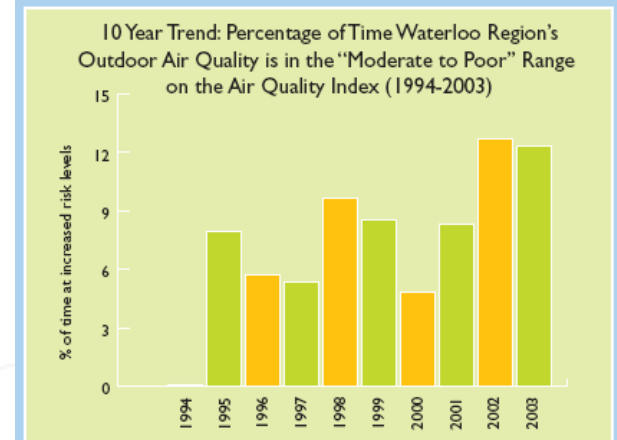
Air Quality Agencies were saying...



- Air Quality among worst now
- Air Quality deteriorating
- Pollutants are everywhere
 - 10km driving = 2.5 kg
 - 10min idling = 0.15 kg
 - Space heating & cooling
 - Gas-powered tools



Source: Ontario Ministry of the Environment



Source: Ontario Ministry of the Environment annual air quality report



What?

Citizens' Report on *Air Quality in Kitchener*



- Over 1 year of hard work by citizen-members of Kitchener's Environmental Committee (2005-6)
- Citizens' Report on *Air Quality in Kitchener* tabled at Council (May 2006)
- Over **50 actions** recommended for **long-term implementation**
- Actions meet one of three objectives:
 1. Reduce emissions from major regional sources
 2. Develop and implement local air quality initiatives
 3. Public Awareness

www.kitchener.ca/pdf/air_quality_kitchener.pdf

What now? ...*Moving Innovation Into Action*



How do we *implement* a “comprehensive long-term plan” for air quality?

- Manageable chunks
- Council support for specific actions
- Consideration of budget implications
- Work planning for staff
- Public education and community support

How?

Annual **5 Best Bets** for Air Quality



- **5 Best Bets** selected from 50+ Recommended Actions **each year**
- **5 Best Bets endorsed** through Council resolution and **referred** to staff for investigation and potential implementation
- **5 Best Bets announced** on **Clean Air Day** in June **each year**

How?

Annual *5 Best Bets* for Air Quality



Timeframe	Action
May Environmental Committee Meeting	Environmental Committee selects new <i>Five Best Bets</i> from 50+ Recommended Actions
May / Early June (Before Clean Air Day)	DTS and Council recommend <i>Five Best Bets</i>
June-September	Staff begins consideration of <i>Five Best Bets</i> , including any budget requirements
September Environmental Committee Meeting	Interim update by staff
February Environmental Committee Meeting	Interim update by staff after budget finalized
April Environmental Committee Meeting	Staff report back formally on all previous year's <i>Five Best Bets</i>

5 BEST BETS FOR 2006



1. ISO 14001 Environmental Management System (EMS) for Fleet and Fleet Operations
2. Reduce Non-Residential (ICI) Point Source Emissions
3. Increase Green Space & Natural Yard Care
4. Reach Out to School Boards
5. Promote Residential Energy Conservation

5 BEST BETS FOR 2007



1. Support compact urban development
2. Continue improvement in non-residential air pollution prevention (City facilities, awards)
3. Encourage bicycle transportation
4. Enhance greenspace management
5. Incentives for energy efficient development

ISO 14001 for Fleet



Implementation of ISO 14001 Environmental Management System (EMS)

- Accountable to a 3rd party for EMS
- Reliable Mechanisms with continuous improvement
- Recognized, Available and Effective
- Pilot for EMS for other City operations

- Council has supported certification of **City Fleet Operations** (Fire Department Mechanical, Roads, Drainage, Forestry, Golf courses)
- **Based on pilot results**
 - Add other operations successively
 - Promote program and transfer expertise to businesses, industry and institutions
- Costs = \$75,000 to register

ISO 14001 for Fleet



Areas of Anticipated Future Improvement

- Maintenance policies and procedures
- Operating policies and procedures
- Waste Stream policies and procedures
- Spills response procedures
- Environmental Performance Monitoring
- Continuous Improvement (*Plan-Do-Check-Act*)
- Ensures communication of policies and procedures

Anti-Idling Schools & City Facilities



- 115 **Stop Idling** signs installed in **school zones** and 142 at **City facilities** with media launch, public awareness
- Reinforces other City initiatives
 - Active and Safe Routes to School
 - Site design to encourage walking / biking
 - Increased enforcement in school zones
- Schools ideal for education campaigns
 - High numbers of most “at-risk” citizens
 - Long-term benefits by educating children
 - Self-sustaining through curriculum or student programs
- Cost = \$21,500





Green Building Design & Construction



- Minimum LEED™ **Silver** for all new City facilities >500m²
- Incremental construction cost of 3-7% for LEED™ **Silver**
- Twin Pad Arena LEED™ **Gold**, 1.5% to 2% increase in construction budget over LEED™ **Silver**, payback extended from 5.3 to 7.1 years





Other Air Quality Initiatives



- Kitchener Clean Air Plan
- Fleet Idling Protocol
- Residential Energy Efficiency Program (financial and in-kind support)
- Kitchener Energy Management Team initiatives
- Waterloo Region Partners for Clean Air
- Active and Safe Routes to School
- Walkable Communities
- Pedestrian Charter
- Partners for Climate Protection (member)
- Kitchener Bikeway Study
- Community Trail Planning



Council Direction + Citizen Ideas + Staff Action = Air Quality Improvement



- Started with a simple, but bold, **Council** resolution
- Required committed, dedicated **citizen** volunteers from Environmental Committee
- Needed **staff** to facilitate and frame the work of volunteers to create manageable, implementable actions and plan



Thank you!



Thank you to our
2005 - 2006
Environmental
Committee
members!

SUB•COMMITTEE
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Nirala Sonder

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Air Quality
in Kitchener-2006