



Toronto Environmental Alliance

**Toronto Smog
Report Card
2002**

Final Grade - D⁺

Toronto Smog Report Card

2002

Subject	Results	Grade
Smog Prevention and Reduction	<ul style="list-style-type: none">x TTC needs a rescue planx No green power purchasex No action on leafblowers✓ Good start on making Toronto more bike-friendly	D
Budget	<ul style="list-style-type: none">x The City Auditor said it best: "There is a lack of political support for the Environmental Plan, as is evidenced by insufficient funds being allocated to fund environmental initiatives."	F
Intergovernmental Relations	<ul style="list-style-type: none">✓ Support for Kyoto and opposition to electricity privatizationx Little new from the province or feds at Toronto Smog Summit	B
Public Education	<ul style="list-style-type: none">✓ Launched the new <i>20/20 The Way to Cleaner Air</i> public education campaign	B
FINAL GRADE		D+

Toronto Action on Smog: 2002

Since drafting the original Toronto Smog Plan in 1997, the Toronto Environmental Alliance (TEA) has published annual Smog Report Cards to evaluate progress made by the City on reducing the environmental and health impacts of smog.

This year, TEA is awarding the City of Toronto a 'D+' grade for their anti-smog actions, based on an assessment of how many of their clean air commitments have been honoured. This is a moderate improvement on last year's 'D' but still falls short of even a 'satisfactory' grade.

High points of 2002 included:

- Adopting a new Bike Plan which will create a 1,000 km long bikeway network and double the number of bike trips in Toronto over the next 10 years and providing adequate funding for the first year of its implementation.
- Launching a new public education campaign – *20/20 The Way to Cleaner Air* – which will give Toronto residents the information they need to reduce smog-causing emissions at home and on the road.
- Keeping the heat on senior levels of government by endorsing ratification of the Kyoto Protocol on climate change and opposing privatization of the provincial electricity system.

There was a general lack of leadership from Council on smog, but the low points of 2002 were:

- Narrowly defeating a motion to increase funding to the TTC by \$10 million.
- Stalling on the commitment to buy clean electricity from green power sources like the wind, the sun and small-scale hydro.
- Dropping a compromise proposal to restrict the use of heavily polluting leafblowers from the noise by-law.

How to Improve

In last year's report card, TEA presented a five point plan to reduce smog and proposed using savings from energy efficiency improvements to fund clean air programs. Moderate action was taken on energy efficiency, but there was little progress on the other four (green power, vehicle fleets, employee trip reduction and improving public transit).

This year, there are three major opportunities to integrate clean air measures into City planning and programs, as recommended by the City Auditor.

- The City will be developing a new Energy Management Strategy this fall. The core of this strategy should be to use less energy (i.e. conservation and energy efficiency, which save money) and to use cleaner forms of energy (i.e. the 'green' electricity purchase and alternative fuels for vehicles).
- The budget for the TTC must include a 'need to succeed' plan which reverses the decade-long decline and improves transit service levels while keeping fares down.
- The new Official Plan must incorporate, and then implement, measures to reduce auto dependency.

Toronto Smog Facts

As of August 1, the summer of 2002 is already the second smoggiest on record and on its way to being the worst ever.¹ The increasing levels of air pollution are cause for concern, as recent research has shown that:

- 1,000 Toronto residents die prematurely each year due to air pollution and another 5,500 are hospitalized.²
- In Ontario, 20% of hospital admissions for acute bronchitis, bronchiolitis and pneumonia in infants under the age of one can be attributed to ozone and very small particulate matter.³
- Elevated levels of fine particulate matter are associated with an increase in deaths due to lung cancer. The increased risk of mortality is roughly comparable to second hand smoke or obesity.⁴

- Ground level ozone is now thought to cause childhood asthma, and not simply trigger asthma attacks.⁵
- Toronto hospitals spend over \$150 million per year to treat the victims of air pollution and air pollution costs the Toronto economy at least \$128 million in lost productivity.⁶
- Ontario's levels of ground level ozone (a key smog component) are rising.⁷ Driving this increase are the greater distances we drive (car use is increasing at about 2% per year in Toronto and in the absence of better public transit and more compact, transit-friendly urban planning will continue to rise) and our greater reliance on coal-fired generating stations (electricity production from coal has doubled in Ontario since 1995).

Previous Smog Report Cards

Smog Report Card grades are based on whether or not the City has acted on clean air commitments made by Council. Toronto's municipal government has committed itself to act aggressively to reduce air pollution. The 1997 Smog Plan was the first municipal smog plan in Ontario and these commitments were re-affirmed in 1998 by the amalgamated City of Toronto. In 2000, Council unanimously endorsed an ambitious Environmental Plan. Additional measures have been promised at the three Toronto Smog Summits.

Previous Smog Report Card Grades

Year	Grade
1998	D (old Toronto) F (Metro)
1999	D
2000	C-
2001	D

Detailed Smog Report Card 2002

What Council Promised	What was Actually Done in 2002	Grade
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Smog Reduction and Prevention

Develop a Plan

To develop a comprehensive Air Quality Strategy for the City of Toronto that would:

- 1) assess the progress of and integrate current air quality initiatives;
- 2) set priorities for City action;
- 3) set targets where they do not now exist;
- 4) consider air emissions and their impacts;
- 5) identify areas where the City can be involved with the Toronto business community and how it can best apply its resources to maximum effect; and
- 6) facilitate monitoring and reporting to the public.

Two years later, Toronto still lacks a coherent plan for reducing air pollution because Council and senior staff haven't made this a priority.

The commitment to develop an Air Quality Strategy was made as part of the Environmental Plan, passed unanimously by Council on April 12, 2000. Last year, TEA commented that the development of the Strategy was stalled due to a lack of leadership and resources.

This year, the City Auditor has echoed these concerns:

*"There is a lack of political support for the Environmental Plan, as is evidenced by insufficient funds being allocated to fund environmental initiative... Poor air quality poses the most significant environmental and health risk to the City [but]... Completion of the [air quality] strategy was stalled due to staff time constraints and the need for additional funding."*⁸

The Air Quality Strategy is now scheduled to be completed in 2003. The City must make good on this promise of a 'comprehensive multi-year strategy' as it represents a great opportunity

F

Energy Efficiency

Increase energy efficiency in City operations and facilities by 15%.

Retrofit 40% of all buildings in Toronto to increase energy efficiency by 2008.

The City is dragging its feet on implementing its energy efficiency commitments. The Better Building Partnership and the Better Transportation Partnership were cut by \$160,000 in this year's budget. These are key programs for achieving energy efficiency within the City and in the private sector. The BBP has helped finance the retrofit over 400 buildings in Toronto, resulting in 3,800 person years of employment and \$19 million in energy savings per year, while the BTP helped finance last year's purchase of 96 cleaner vehicles for the City.

The City's Office of Energy Efficiency is encouraging City staff to participate in the Action By Canadians program which gives individuals information on how to reduce their energy consumption at home and the City is initiating a program to encourage employees to reduce electricity consumption at work.

The Toronto Atmospheric Fund launched an innovative \$500,000 pilot project in 2001 which provides homeowners with cash rewards for energy efficiency retrofits which should be expanded. TAF has also financed most of the City's existing energy efficiency initiatives.

C

Energy Efficiency (cont'd)

By not acting more aggressively on its energy efficiency targets, the City is wasting money. Conservative estimates show that the City could achieve its 15% target and save an additional **\$22 million per year** in energy costs for a one-time investment of between \$68 and 106 million.⁹ If electricity privatization and deregulation continue, future prices (and hence savings) could be much higher.

The City already saves \$13 million per year as a result of investments in energy efficiency made since 1990. With a minimum 20% annual return on new investments, it is clear that cutting the budget for energy efficiency is short-sighted.

One promising new initiative is the plan, approved by Council in July 2002, to replace 4,500 refrigerators, 223 washing machines and 223 clothes driers with high-efficiency appliances in apartments owned by the Toronto Community Housing Corporation. Through an innovative financing arrangement organized through the Toronto Atmospheric Fund, the cost of renewing the stock of appliances will be paid for out of the energy savings, so there is no new capital cost to the City. TAF's \$5 million dollar investment will be repaid over six to eight years and can be re-invested in comparable projects.

There are another \$30 million dollars worth of similar projects ready to go and these win-win (environment – economy) solutions should be the cornerstone of the energy management strategy the City will be developing this Fall. This strategy should be built around the twin goals of using less energy (through conservation and increased efficiency) and using cleaner energy (see section on green power below).

Energy Efficiency

Encourage improved building design to increase energy efficiency and integrate environmentally-friendly techniques such as use of solar heating, waste heat recovery, green roofs, etc.

One of the most short-sighted cuts to this year's budget was the \$10,000 which would have improved energy efficiency standards for new buildings in Toronto. This simple and cheap initiative could have prevented the release of up to 8,000 tonnes of greenhouse gases. This is equal to the amount of carbon dioxide absorbed by a new forest eight times the size of High Park or the emissions from 2,300 cars.

F

Green Power

Purchase 25% of electricity from 'Green Power' sources (wind, solar, micro-hydro and landfill gases) by 2005.

To date, no purchase has been made even though it is available from the City-owned Toronto Hydro. A staff report has recommended that the City substitute energy efficiency measures for green power purchasing.

F

This is a flawed strategy for three reasons:

- 1) The City already has an energy efficiency target and this would, in effect, involve double-counting the environmental benefits;
- 2) The City should ensure that the energy it does use comes increasingly from clean, environmentally sustainable sources like the wind, the sun, small-scale hydro or methane from landfills;
- 3) Toronto, and its wholly-owned company Toronto Hydro, is missing an opportunity to be a Canadian leader in the movement towards the new energy economy which will dominate the 21st century.

The City is developing an energy management strategy this fall, and TEA will be working to ensure that green power is a part of that strategy.

The City's support for the Toronto Renewable Energy Cooperative's Windshare wind turbine should be continued.

Public Transit

Encourage the Toronto Transit Commission not to cut any more of their services and to develop a strategy for Smog Alert Days.

Council committed to funding 20% of public transit operating costs.

Transit didn't get any worse this year, but the City is not doing anything to improve it in a time of crisis. Over the last twelve years, transit fares have doubled while bus and streetcar service levels have declined by 10 and 20% respectively.¹⁰

Toronto's public transit system receives less governmental support than any other major city in North America. Renewed investment and improved service on the TTC and other forms of public transit are a critical part of any smog reduction strategy.

The City and the TTC are to be congratulated for their successful advocacy campaigns which have had the federal and provincial governments begin (or return) to funding public transit, but Council must also pay its share.

The TTC received a modest increase in its subsidy from City Council in 2001/02, but overall increases over the last six years have fallen behind inflation, while riders are still paying 83% of the TTC's operating costs. During this year's budget debate, a proposal to increase the TTC's budget by an additional \$10 million was narrowly defeated by a vote of 21-20. Ultimately, the TTC was able to hold the line on fare increases and service cuts, but only because the federal government gave an unprecedented contribution to the transit system.

There is a \$70 million hole in the transit budget for next year and in the absence of new public investments, Toronto's transit system will continue its decade-long decline.

D

Employee Trip Reduction (1)

- a) To undertake a survey of employee travel patterns every two years, to facilitate emission reductions and evaluate employee trip reduction initiatives.
- b) To develop and implement a program to reduce employee commuting emissions including:
 - Effective Dec. 31, 1997 revise employee parking policy at all City work locations so that free commuting spaces become pay-for-parking;
 - Establish a Clean Air Fund with \$100,000 in seed money and/or directed revenue from the employee parking facility;
 - Seek other funding to provide incentives for employee trip reduction.

The 1998 travel pattern survey was analysed and released last year, but is now long out of date. No new survey has been undertaken and no program is in place, beyond an electronic intranet (staff-only) web-site for potential carpoolers which isn't promoted.

The parking policy has not been revised and parking revenues have not been dedicated for trip reduction programs.

The Employee Trip Reduction program remains on the backburner, primarily because there are no staff or other resources to develop or implement the necessary policies.

This is particularly regrettable, because a City-sponsored car-pooling, bike, transit and tele-commuting program could be a catalyst and provide central nodes for similar initiatives at nearby offices (similar to the Black Creek Transportation Management Association described below).

F

Employee Trip Reduction (2)

Develop with area employers a program to promote and facilitate smog-friendly commuting practices.

As noted in last year's report card, the City played a leadership role in establishing the Black Creek Transportation Management Association (www.bcrmta.org). This partnership between employers in the North-West of Toronto (Bombardier, Knoll Furniture, York University and the Ontario Ministry of Transportation), the North York and Vaughan Chambers of Commerce, the TTC, GO Transit, TEA and local and regional governments was launched in September 2001.

Now it's time to replicate the Transportation Management Association concept in other parts of the City.

B

Green Fleets

- a) Evaluate adopting a Green Fleet target to reduce smog causing fleet emissions by 50% by 2005.
- b) Develop and implement a program to reduce emissions from City vehicles including:
 - Replacing motorized vehicles with non-motorized alternatives and more efficient systems;

The City's Green Fleet transition plan is not yet developed, but they now expect to have the plan completed by January 2003.

Last year, the City launched the Better Transportation Partnership (BTP), with a mandate to reduce greenhouse gases by actively supporting the City of Toronto's official goal of reducing CO₂ emissions by 20% relative to 1990 levels by the year 2005. The BTP's budget was cut this year, but there are still plans to purchase 14 new natural gas vehicles and one electric hybrid vehicle in 2002.

D

Green Fleets (cont'd)

- Substituting currently used fuels with less polluting alternative fuels, increasing fuel efficiency and optimizing motor vehicle technology.

Nevertheless, the Fleets Services division maintains approximately 5,000 vehicles and we need a plan to address the whole fleet. More needs to be done to reduce vehicle-use and promote vehicle replacement with non-fossil-fuel-dependent forms of transportation.

Council is to be applauded for continuing its purchase of low-sulphur gasoline for City vehicles and for its purchase of (cleaner) on-road diesel for its off-road vehicles. The City is also considering buying bio-diesel for its fleet next year, pending budget approval.

This year, Council decided not to support Car Free Day, in spite of the demonstrated success of Car Free Days around the world and the thousands of hours of volunteer time put in by the local chapter of the Sierra Club and others.

Cycling

Implement the Toronto Bike Plan, which will:

- double the number of bike trips in Toronto;
- decrease the number of bicycle collisions and injuries.

In spite of early plans to cut the Bike Plan in half, the City ultimately provided full funding for the first year of this 10 year plan. They will be establishing six new bike lanes, adding 2,000 bike racks, undertaking initial design work for new trails, and negotiating with Toronto Hydro, Hydro One and the rail lines for access to hydro and rail corridors.

A

Incineration

Shut down the Ashbridges Bay sewage incinerator

First scheduled to be shut down in December 2000, the incinerator is still operating although the City now has replacement equipment in place and hopes to be able to close it permanently in the Fall of 2002. This is partially dependent on provincial policy developments on spreading bio-solids.

The Ashbridges Bay sewage treatment plant is the corporation of the City of Toronto's largest single consumer of energy. There is an enormous capacity for energy conservation through co-generation (collecting the methane gas given off by decomposing organic matter and using it to produce electricity, then using the waste heat to dry the sewage), a shift to 'bubble aeration' which uses less energy, and through more conventional retrofitting of lighting and other equipment.

C

Action on Smog Alert days

On forecast smog days, the City reduce its own emissions by ensuring that City staff suspend the following polluting activities:

- Pesticide spraying;
- The use of gasoline powered equipment (lawn mowers, leaf blowers, etc.);
- Use of oil-based paints, solvents, cleaners and other volatile organic compound (VOC) emitting products;
- All non-essential vehicle use;
- Street sweeping;
- Re-fuelling for all non-essential vehicles, at least until after dark;
- All road re-surfacing activities;
- Reset air conditioning units in municipal offices to warmer temperatures and allow staff to dress casually.

The increased number of smog days in the last two years has made it increasingly difficult to delay 'regular' activities. And given that the most recent health studies show that there is no 'safe' level for the primary air pollutants, the emphasis must now be on reducing air pollution every day.

Rather than attempting to change behaviour only when a smog day is predicted, the City should:

- phase out the cosmetic use of pesticides on municipally and privately-owned land within the City limits;
- always use low-VOC paint;
- implement a Green Fleets strategy to reduce vehicle use;
- use parking revenues to subsidize employee transit passes;
- permanently reset air conditioning units and encourage staff to dress appropriately.

City Council missed a significant opportunity this year to limit highly-polluting leaf blowers when it voted to allow year-round use rather than the 10 month/year ban proposed in the draft noise by-law.

Hopefully Council will adopt a by-law this Fall banning the use of pesticides for cosmetic purposes, as pesticides are not only toxic but also contribute to smog creation.

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Budget

Environmental Plan

In April 2000, Council unanimously endorsed the Environmental Plan and its 66 recommendations. This Plan included elements addressing air quality, energy use and sustainable transportation.

According to the City Auditor: *"There is a lack of political support for the Environmental Plan, as is evidenced by insufficient funds being allocated to fund environmental initiatives."*

f

The auditor singled out action on air pollution as an area which needs more secure funding, since the existing budget process has failed to finance the necessary programs and investments in spite of the fact that air pollution has been identified as the most significant environmental and health risk to the City.¹¹

Currently, no one knows how much the City spends on smog-reduction. In 2000, the Toronto Atmospheric Fund calculated that Toronto spends \$0.77 per capita on smog and climate change measures, compared to \$1.29 per capita in Vancouver, \$1.63 in Ottawa and \$4.53 in Los Angeles.

Cuts to the City's anti-smog plan will mean more polluted air. In the 2001-2002 budget process, \$716,000 was eliminated from the promotion of more efficient buildings and vehicles, the purchase of clean energy from wind and solar power, and plans to make Toronto more bike- and pedestrian-friendly and a motion to increase the TTC's operating subsidy by \$10 million was defeated 21-20.

This is short-sighted, given that research has shown that the energy efficiency measures alone would save the City \$22 million per year in energy costs. The City is already saving \$13 million per year in fuel costs due to energy efficiency measures undertaken since 1990, the City should aggressively pursue these measures directly through its Office of Energy Efficiency and earmark the potential \$22 million in additional savings to new smog- and greenhouse gas reduction measures.¹²

Economic Benefits

Develop a Plan to monitor economic benefits that result from City's actions.

The City is not monitoring economic benefits of environmental actions and the City Auditor says that he doesn't even have enough information to assess whether or to what extent City departments have met environmental goals.

f

The Ontario Medical Association has calculated that air pollution costs the Toronto economy at least \$128 million per year in lost productivity and that Toronto-area hospitals spend over \$150 million to treat the victims of air pollution.¹³

Many smog reduction measures will save money due to reduced fuel costs. Tracking reductions and the economic savings associated with them is vital, yet no such plan has been developed. The ICLEI report cited above is a good first step, but more needs to be done.

Inter-governmental Relations

Develop legislation, policies, programs and partnerships with business, other levels of government, non-governmental organizations, individuals and international agencies required to implement the Anti-Smog Blueprint.

The third Toronto Smog Summit, took place in June 2002. There were no significant new announcements from senior levels of government, with the exception of the provincial government's announcement that they will add Particulate Matter to the Air Quality Index. This announcement was largely a result of excellent research and advocacy work by the Toronto Board of Health and the Ontario Medical Association and they should continue to work on having the province implement the other four recommendations in the Toronto Medical Officer of Health's report on the AQI.

Toronto, and in particular the Toronto Atmospheric Fund/Clean Air Partnership, have played an important role in getting other GTA municipalities to consider green power purchases through the Clean Air Council. They should formalize these commitments for next year and encourage local industry and institutional users to join them in a 'green power buyers club.'

The Medical Officer of Health's report Assessing the Health Impacts of Diesel Exhaust in Toronto contains useful recommendations to the federal government, but ignores avenues which are open to the City for action on carcinogenic diesel exhaust such as stricter enforcement of the anti-idling bylaw and promotion of alternative fuels (bio-diesel, hybrid electric vehicles, natural gas or hydrogen).

The Medical Officer of Health's report on Cancer Prevention highlighted the role of air-borne carcinogens such as benzene, dioxins and polyaromatic hydrocarbons (PAHs), but more action needs to be taken on reducing or preventing the release of these toxic compounds in Toronto.

Toronto Public Health has initiated a two year research project, funded by Health Canada, which should provide useful information on the interaction between heat and air quality in Toronto.

City Council has endorsed the Kyoto Protocol, and international treaty on reducing greenhouse gases, and called on the federal government to ratify it. Ratification is important because action on climate change will also reduce smog.

Council has also opposed the province's ill-conceived electricity privatization plan, which will likely increase smog.¹⁴

The City does, however, need better follow-up on its policy recommendations to the provincial and federal governments.

B

To request Ontario Hydro reduce emissions at the coal burning Lakeview Generating Plant on forecast smog days.

The Lakeview plant is most likely to be used on smog days because that is when demand peaks (due to air conditioning).

The Toronto Board of Health is to be commended for their support of a phase out of the City's coal-fired electricity purchases through energy efficiency and green power procurement.

B

Public Education and Communications

Launch a public education campaign on smog.

The City's new educational campaign, *20/20 The Way to Cleaner Air* was launched in June 2002. It provides useful tools for individuals to reduce their smog-causing emissions at home and on the road.

A

TAF and CAP are working on a Clean Air Consumers Guide – 300,000 households in Toronto in September 2002.

Promote the City's actions and challenge Toronto businesses to follow suit.

The Clean Air Partnership (an offshoot of the Toronto Atmospheric Fund) has been some interesting work on trying to involve corporations in clean air actions, but more needs to happen on this front.

C

Develop a publicly accessible, manageable, and interpretable data base on air quality sources from beyond Toronto, ambient air quality within Toronto, and specific source problems within Toronto.

The City's air quality monitoring program was cut by \$131,000, so the database is still inadequate and access is limited.

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Toronto Environmental Alliance

Endnotes

1. As of August 1, 2002, the Ontario Ministry of the Environment has issued 8 smog advisories covering 18 days (Toronto has had 7 advisories covering 12 days). In 2001, Ontario experience 9 advisories covering 23 days, although there had only been 6 advisories covering 16 days as of August 1 2001. The previous high was in 1995 when there were 6 advisories covering 11 days. According to preliminary data from the MOE's web-site, air quality monitoring stations within Toronto have registered 'poor' air quality on 15 days this summer.
2. D. Pengelly et al., *Air Pollution Burden of Illness in Toronto*, (Toronto Public Health, May 2000).
3. Dr. John Last, Dr. Konia Trouton and Dr. David Pengelly, *Taking our Breath Away: The Health Effects of Air Pollution and Climate Change*, (The David Suzuki Foundation: October 1998).
4. C.A. Pope, R. Burnett, M. Thun, E. Calle, D. Krewski, K. Ito and G. Thurston, "Lung Cancer Cardiopulmonary Mortality and Long-Term Exposure to Fine Particulate Air Pollution", *Journal of the American Medical Association* (March 2002).
5. California Air Resources Board. "Children's health study: part of the Long-Term Exposure Health Effects Research Program" Online: www.arb.ca.gov/research/chs/chs.htm#asthma. Last updated 23 January 2002.
6. Ontario Medical Association, *The Illness Costs of Air Pollution in Ontario*, (OMA: June 2000).
7. Ontario Ministry of the Environment, *Air Quality in Ontario 2000*, (Queen's Printer for Ontario, 2002).
8. City Auditor, "Environmental Issues and Audit Plan" (report to City of Toronto Audit Committee, May 30, 2002).
9. International Centre for Local Environmental Initiatives, *Opportunities for Budget Cost Savings in the City of Toronto's Corporate Facilities: A report prepared for the City of Toronto* (Toronto: April 2001).
10. Steve Munro and the Rocket Riders, *Transit's Lost Decade: How Paying more for Less is Killing Public Transit*, (Toronto: April 2002); available at www.torontoenvironment.org/rocketriders.
11. City Auditor, "Environmental Issues and Audit Plan" (report to City of Toronto Audit Committee, May 30, 2002).
12. International Centre for Local Environmental Initiatives, *Opportunities for Budget Cost Savings in the City of Toronto's Corporate Facilities: A report prepared for the City of Toronto* (Toronto: April 2001).
13. Ontario Medical Association, *The Illness Costs of Air Pollution in Ontario*, (OMA: June 200).
14. Keith Stewart, *Greening Public Power: Protecting the Public Interest in Electricity Restructuring* (Toronto Environmental Alliance: March 2002). Available at www.torontoenvironment.org/greenpower/open_market.html