

TORONTO SMOG

REPORT CARD 2006

Final Grade C-



Toronto Environmental Alliance



Toronto Environmental Alliance

Prepared by the Toronto Environmental Alliance with the support of the McLean Foundation.

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TORONTO SMOG REPORT CARD • 2006

SUBJECT	COMMENTS	GRADE
Energy	<ul style="list-style-type: none">• City was good on resolutions but weak on actions• Toronto Hydro was Good	15/25
Transit	<ul style="list-style-type: none">• Improved transit service• Better Fare policies• Fare Increase	19/25
Air Quality Plan	<ul style="list-style-type: none">• No vision for tackling the root of smog problem	2/10
Walking and Biking	<ul style="list-style-type: none">• Bike Funding renewed but few lanes built• No pedestrian funds	9/20
Fleets and Fuel	<ul style="list-style-type: none">• Green Fleet Transition on way to 23% reduced emissions	9/10
Intergovernment Action	<ul style="list-style-type: none">• Smog Summit held• Province lobbied on Portlands• Good Carbon Credit Plan Stalled by Harper government	7/10

FINAL GRADE = 61% = C-

2006: THE YEAR OF MUDDLING THROUGH

The summer of 2006 was one of the best on record. Regular rains washed our air clean so we only experienced 11 smog days in Toronto (to mid-September). During the super-hot days of late July, the conservation efforts of Toronto's homes and businesses kept us from the expected brown-outs (while the rest of Ontario broke electricity consumption records).

Against this supportive background, the City of Toronto government merely kept plugging along, achieving excellence in a few areas but less than acceptable in many.

Where there is a good plan and clear targets established – as in the Green Fleet Transition – significant strides continue to be made. But sometimes, even when there is a good plan – as in the 2001 Bike Plan to create a 1,000 kilometre network by 2011 – progress has been slow, with only 10% of the lanes in place after five years. *Toronto Council has a long and proud record of smog and air quality resolutions, but there is no bold agenda, no leadership.*

Grades in the Smog Report Card are based on whether Council has done what it said it would on clean air, not on whether they have done everything the Toronto Environmental Alliance would like them to do.

This Mayor and Council began its term with high hopes and good initial steps. Successful lobbying of the federal government for transit support and strong commitments to improving the City's own transport fleet caused TEA to award its highest ever grade, a B+, to the new Mayor and Council in 2004. Toronto seemed poised and ready for some real changes, as did the Province of Ontario with Premier McGuinty's pledge to close the coal-burning power plants.

Over the past two years, however, we at TEA have dropped our grade for the City of Toronto's performance to C-. A prime example of this not-good-enough performance is the City's Air Quality Improvement record. As scientific reports add new verifications to the growing evidence of the negative health impacts of our unclean air, especially for our senior citizens, the 2006 update on the Air Quality of Toronto focuses on the need to set up more measuring stations around Toronto to confirm precisely where and by how much our air is being

polluted. *At this pace, when will the City ever get down to tackling the real causes of this pollution that are within our control – motor vehicle exhaust and toxic pollution?*

The response of the people of Toronto to the strong conservation messages of Toronto Hydro demonstrates that we are ready. We are ready to do something important to improve our air, our transit, our waste disposal. *But the City of Toronto needs a Vision and some Leadership to take on these challenges.* In this election year Toronto citizens have to insist that these environmental issues are foremost in their needs from their elected leaders.

Previous Smog Report Cards

Year	Grade
1998	D (old Toronto) F (Metro)
1999	D
2000	C-
2001	D
2002	D+
2003	C-
2004	B+
2005	C-

TORONTO SMOG FACTS

Toronto smog by the numbers:

- 11 smog advisory days so far in 2006, the lowest in the past six years, a quarter of the 48 days of smog last year
- 1,480 premature deaths and 14,740 hospitalizations annually
- \$40 million in health care costs to Toronto hospitals annually
- Steadily rising Ozone and Nitrogen Oxide levels since 1981

The people of Toronto breathed easier this summer. For this unusual break from the past six years, we have largely the regular rains to credit for cleaning up our air and the fewer extreme-heat days. It was however still the second warmest summer on record for Canada.

This one year respite from smog should not reduce the urgency and the need for action to deal with the sources of so much particulate matter and noxious gases (especially ozone and nitrous oxide). The science on this issue is solid. Doctors call this a public health crisis.

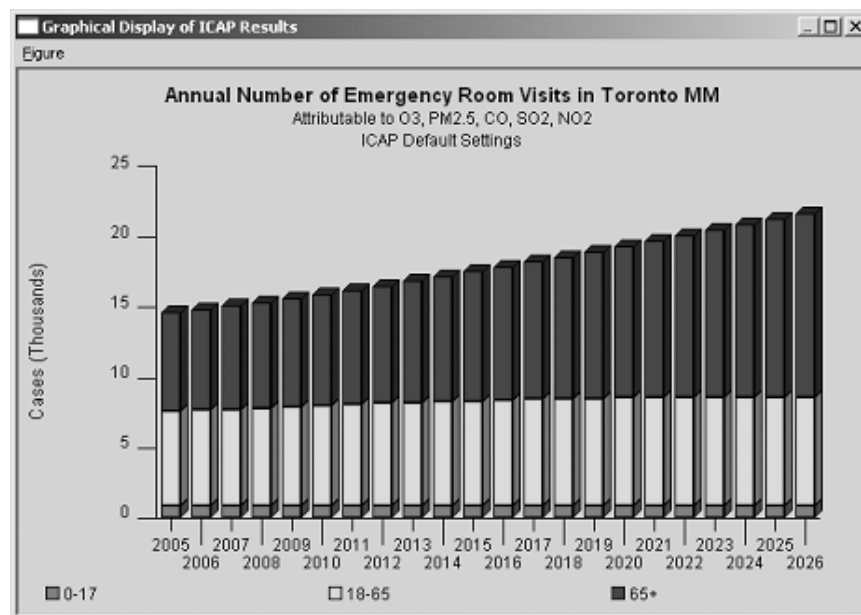
Studies reported this year have confirmed the linkage of smog elements and premature deaths.

The American Lung Association published a long term study showing that the risk of premature death

attributable to particulate matter is three times greater than previously reported.¹

The U.S. Environment Protection Agency conducted three meta-analyses of the relationship between ozone levels and mortality and all three independently reported a substantial association.²

The Ontario Medical Association reported in July that smog affects seniors much more than children, causing increased hospitalization and premature deaths among those older than 65. The OMA predicts that these numbers will rise dramatically over the coming twenty years. In Toronto specifically, premature deaths in the 18 to 65 age group are estimated at 250 per year and are expected to rise 16% to 290 by 2026. For those over 65, the increase is much greater: from 1,220 deaths presently to 2,210 by 2026, an 81% increase.³ See chart below.



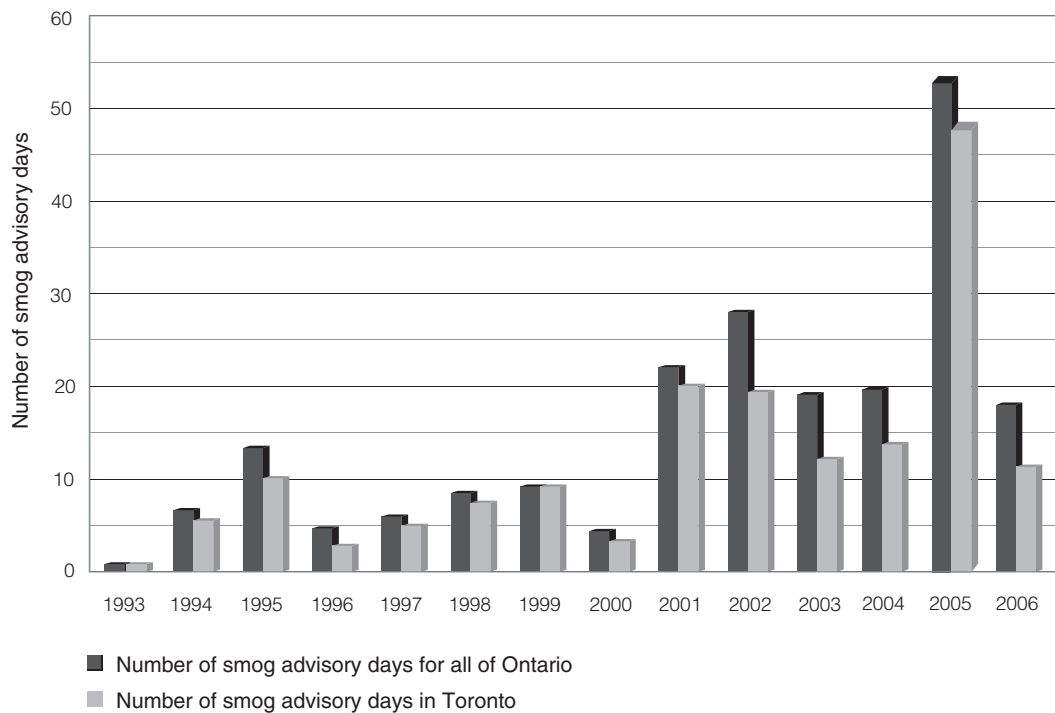
This same report demonstrated that smog has a greater effect on cardiac victims even than asthma sufferers, due to the role particulate matter plays in blocking veins and arteries.⁴

The number of Smog Advisory Days in 2006 – *eleven* – was mercifully fewer than last summer (48) in Toronto. It was still above the norm of the past ten years as the chart below shows. In terms of health impacts, average levels of smog elements (particulate matter, ozone and nitrous oxide) are more significant than the number of smog advisory days.

While it is true that the ozone levels in Toronto are approximately half produced by the long-distance sources in the United States, ozone is primarily an irritant. The much more lethal element of smog, particulate matter, is mainly local in origin.⁵ One should recall that all of the pollutants that this summer's regular showers cleaned from our air were still washed into our lakes and rivers.

Smog Advisory Days 1993 to 2006

(as of September 12, 2006)



Notes:

- 1 American Lung Association in Bell, ML, Dominici F, and Samet JM, "A Meta-Analysis of Time-Series Studies of Ozone and Mortality with Comparison to the National Mortality", *Epidemiology* 2005, 16:436-445.
- 2 Environmental Protection Agency, in Jerrett M, Burnett RT, Ma R, Pope III CA, Kerewski D, Newbold KB, Thurston G, Shi J, Finklestein N, Calle EE, Thun MJ, "Spatial Analysis of Air Pollution and Mortality in Los Angeles", *Epidemiology* 16: 727-736.
- 3 Ontario Medical Association, based on OMA Illness Costs of Air Pollution model/findings. Chart provided by John Wellner, Director of Health Policy.
- 4 Ontario Medical Association Report: Smog's Excess Burden on Baby Boomers, Toronto, July 31, 2006.
- 5 David Yap et al., *Transboundary Air Pollution in Ontario*, (Government of Ontario: June 2005).

HIGHLIGHTS

- **During the Caribana Heat Days, Toronto Hydro and citizens' efforts at conservation kept peak electrical consumption from browning-out Toronto**
- **Green Development Standards began implementation of reflecting roofing tiles on City buildings**
- **City (and Toronto Hydro) was a valiant champion for a conservation-first approach to meeting Toronto's energy needs, and while the provincial government has moved ahead with the 550 MW Portlands Energy Centre, pressure from the City did result in the province agreeing to fund an additional 300 MW of conservation in Toronto**
- **Still no green power purchased or built for the City**

The City Council recognized in 2000 that City operations have a substantial impact on the environment and that it has the responsibility to provide leadership in changing to a sustainable energy system. Its Environmental Plan – *Clean Green and Healthy: A Plan for an Environmentally Sustainable Toronto* – committed the City to reduce its own energy consumption by 15% and to meet 25% of its energy needs from green power sources (e.g., wind, solar, or small-scale hydro) by 2005.

In 2005 City Council further agreed to develop a “cool city” strategy to reduce the urban heat island effect and to retrofit low-income housing for comfort and energy efficiency.

And in July 2006 Council approved the Green Development Strategy which mandated minimum performance thresholds for site and building design, first on City-owned properties, and subsequently for private development. These standards included heat-reflecting roofing tiles to combat the urban heat island effect.

This last Council policy complements the work of the Better Building Partnership which has already retrofitted 39 million ft² in the institutional, commercial and industrial building sectors and thereby reduced 172,000 tonnes of CO₂ emissions.

However, no progress has been seen on retrofitting low-income housing for energy efficiency, some of the least energy efficient residences in the City.

Toronto Hydro and Toronto's citizenry deserve full credit for a growing commitment to conservation. On

the hottest day, Toronto reduced its one-day peak usage by 5 megawatts while the rest of the province increased its usage by 845 megawatts! Toronto Hydro, with its Peaksaver AC and Power Saver programs, has reduced average electricity demand by 145 megawatts over the past year and a half and should reach its 250 MW target by 2007.

This publicly encouraged energy conservation approach in Toronto supports the City's critique of the province's insistence on its Portlands Energy Centre. Instead of adding 550 more megawatts at a cost of \$700 million, the City supported a smaller plant and reducing demand through conservation programs (Toronto Hydro is on track to reduce demand by 250 MW at a cost of only \$40 million). The provincial government opted to proceed with the Portlands plant, but has also agreed to fund an additional 300 MW of conservation inside the City of Toronto.

On its original two commitments, however, there has been no significant purchase of green power sources for electricity, but the City has re-committed itself in its Air Strategy to meet 25% green-sourced power. Exhibition Place has now the largest solar installation in Canada and is committed to energy self-sufficiency by 2010.

The City has adopted a good framework for the Energy Plan – relying on a conservation-first approach. This plan, however, will not be developed until after the municipal election. Toronto Hydro has been very good on implementing conservation efforts.

HIGHLIGHTS

- **Improved transit service**
- **Innovative Fare Policies implemented**
- **Construction begun on new high-speed surface transit**
- **City Budget forced a Fare Increase**

The TTC's Ridership Growth Strategy (RGS) was adopted by the Commission in March 2003, after transit riders and TEA pushed for cost-effective programs to attract new riders and to support the City's Official Plan vision for transit-oriented urbanization in Toronto. The service and fare initiatives have begun to bear fruit. The new surface transit network was further developed in a 2005 report *Building a Transit City*, which is treated separately below.

Ridership Growth Implementation

Improve Off-Peak Service on Major Routes

Between June 2004 and September 2005, 118 service increases were made on 39 routes. On the routes where ridership counts have been taken since, the average increase in ridership has been 15%.

Improved Peak Service

This phase of RGS will result in service increases in the morning or afternoon peak period on approximately 50 busy routes. One hundred additional buses are required and are scheduled for delivery in 2007. An additional garage to store and maintain these buses will be completed in the fall of 2007.

Metropass Changes

Discount Metropass by \$5.00

This has been effectively implemented by restraining price increases on the Metropass at the same time as other fares have been increased. The Adult Metropass price is currently one percent higher than in 2003 while, at the same time, the Adult tickets/token price has increased by 11%. This gives an effective price cut for the Adult Metropass of approximately \$9.00 over three years.

Reduce Senior/Student Metropass trip rate by six

The trip multiple, which is the price of the pass expressed as the equivalent number of ticket trips, was reduced from 66.6 to 62.8 in March 2005 and further from 62.8 to 59.8 in April 2006. The trip multiple for the Senior/Student monthly Metropass is now approximately seven fewer than in 2003.

VIP Green Pass

This proposal, which offers discounts ranging from 10% to 12% for bulk purchases of Metropasses by employers, schools, and other groups, was introduced on a trial basis in June 2003, and was made permanent in September 2005.

Weekly Pass

Two new weekly passes, for Adults and for Students/Seniors, were introduced on September 1, 2005.

Transit City Implementation

In 2005, the TTC and the City Planning department released *Building a Transit City*, which expands on the proposal to implement new transit rights-of-way throughout the city, in order to establish a Toronto-wide grid of surface rapid transit. In many instances this will require that road space be converted for exclusive use by transit vehicles. The environmental assessments currently underway, or about to be started, will test Toronto's commitment to creating a sustainable and socially-equitable transportation system.

Increasing Transit Capacity

Scarborough RT

The Scarborough RT is full to capacity at peak times, and the technology is aging. In order to address this issue, staff are now completing a study of options for increasing capacity of this line, including upgrading the line to allow use of larger, new-generation RT cars, converting the line to bus or streetcar rapid transit. This review has led to the TTC and Scarborough councillors adopting the concept of a surface transit network throughout Scarborough.

512 St. Clair Streetcar

The conversion of the 512 St. Clair streetcar right-of-way is now under construction. The first phase of this project, covering the section from Yonge Street to Vaughan Road, will be completed by the fall of this year. The second phase, covering the section from Vaughan Road to Gunns Road (west of Keele Street), is planned to be completed in 2007.

York University Bus Rapid Transit

This proposal calls for high-frequency, high-capacity express bus service operating between Downsview Subway Station and York University, which would provide more reliable and faster service, and reduce trip times by as much as 45%. Construction is planned to begin in 2007, with the new roadways expected to be available for transit operations by 2009.

Fleet Street Streetcar Right-of-Way

A new streetcar right-of-way will be constructed this fall on Fleet Street between Bathurst Street and Strachan Avenue. This will ensure the quality of service needed to attract people to transit from the rapidly-developing Bathurst Quay-Fort York Railway Lands area. This initiative is also related to the ongoing planning and implementation of a Waterfront West streetcar rapid transit line, which will eventually connect the rapidly-developing area of southern Etobicoke with the central business district.

Environmental Assessments are underway or imminent for the following:

- Yonge Street bus rapid transit, between Finch Subway Station and Steeles Avenue
- Don Mills transit right-of-way, between Sheppard Avenue and Danforth Avenue
- East Bayfront/West Don Lands: rights-of-way on Queen's Quay East or Lake Shore Boulevard, and Cherry Street and/or Front Street East
- Bathurst Street streetcar right-of-way between Fort York Boulevard and Lake Shore Boulevard.

Council's Fare Hike

City Council approved TTC fare raises for both 2005 and 2006. For cash payers, the increase each year was 25 cents. Many low-income users pay cash and these increases undoubtedly hit this group disproportionately. For occasional-use car drivers, it reduced the differential between the subway and downtown parking costs. Both of these outcomes work against the City's proclaimed Rider Growth Strategy.

THE “NEW” AIR QUALITY MANAGEMENT STRATEGY

HIGHLIGHTS

- **After six years, there is still no plan to fight smog and climate change**
- **The draft Strategy is more laundry-list than comprehensive plan to achieve clear air and climate change objectives**

Back in April 2000 the City Council committed itself to develop a Comprehensive Air Quality Strategy, acknowledging then that most of its air pollution activities were very ad hoc and un-coordinated.

In January 2005, city staff released a plan “to develop this strategy”, focusing mainly on better data information and analysis, monitoring and evaluation and calls to other jurisdictions to take action. To their credit, the councillors and the Board of Health asked for new City actions – not just a strategy framework – to be in place for 2006 and 2007. No specific results have come of this resolution.

What we have in mid-2006 is a Central Coordinating Office, an Executive Environmental Team, and a promised Clean Air website. The promised-for-September 2006 Environmental Update/Three Year Action Plan is pushed forward to March 2007. Acknowledging that increased vehicle emissions are the key factor in poorer air quality, the City has carried out computer modeling on the impact of different transit options, but will not release it. The report commissioned on Certificates of Approval and “point sources” for toxic emissions within the City suggests that the City has no legal basis for enforcing either reporting or compliance – unlike the pesticide bylaw. A Greenhouse Gas/Air Pollutant Emissions Inventory for the whole city was to be completed this year.

Apart from the molasses-like, seven-year plodding pace on this issue of top concern to Toronto citizens, the Toronto Environmental Alliance’s concern is that the City’s management framework will focus on the cheapest things for the City to do, rather than situating

the City’s actions within a much broader range of actions to engage Toronto citizens and businesses to take actions that result in deep reductions in air pollution. The Phase One Report on Green Development Standards provides the best practices on new building and retrofit codes in 12 similar cities in the world, but transport and energy planning, incentives and penalties also need to be built into the framework – whenever it emerges.

Despite several resolutions and a few baby steps, this past City Council has not found the energy, leadership or conviction to deliver the Air Quality Strategy that Toronto citizens and businesses so clearly need. Better measurement is not enough.

WALKING AND BIKING

HIGHLIGHTS

- **Renewed funding support promises modest increase in bike lanes**
- **2003 Pedestrian Charter lacks any implementation plan and funding**

In response to our Smog Report Cards of previous years, City Council approved funds for one additional staff in 2006 and (possibly) two more in 2007. This allowed for the addition of 12 new kilometres of bike lanes in 2006 after none had been added in 2005. The number of bike lanes has now doubled (40) from when the Bike Plan was approved in 2001 (38), but is a far cry from the 421 new kilometres of lanes originally promised within ten years. A mid-way survey will occur in 2007 to see whether the other major goal of doubling the number of cycling trips is anywhere near target.

The slow process of councillor approval and public hearings for each segment inhibits any rapid expansion in bike lanes, particularly given the lack of

any strong public voices to promote them. Where the roadways are shared with automobiles (i.e., streets which are designated as 'good' for cyclists), progress this year has been much quicker, with 30 additional kilometres added.

As for the Pedestrian Charter adopted in 2003, there is still no implementation plan in the works, though Toronto's hosting of the Walk 21 Conference in 2007 should create some public pressure and ready professional advice. In an average year, cars kill 40 pedestrians in Toronto and many neighborhoods are poorly planned for walkers. Calls for setting up a Walkability Index by which local citizens can grade their own streets have been rejected by the City.

Status of Bikeway Networks by Bikeway Types as of June 2006

	<i>Bikeway type</i>			Total
	Bike Lanes	Shared Roadways (i.e. no separate lane)	Off-road Paths	
Km at start of Bike Plan	35	37	150	222
Km added in years 1 to 4 (2002-2005)	28	32	9	69
Km added in year 5	12	30	1	43
Proposed new km to be added	409	206	125	740
Total km at completion	484	305	285	1,074

FLEETS AND FUELS

HIGHLIGHTS

- **Green Fleet Transition Program is well on its way to reducing emission from City vehicles by 23% by 2007**

The Green Fleet Transition program, launched in 2004, committed the City of Toronto to replace 84% of its new light duty vehicle purchases with natural gas and hybrid electric vehicles, and for the City to use more than 20 million litres of blended biodiesel fuel. This should reduce emissions from the City of Toronto fleet by 23% by 2007.

Both the City and the TTC staff have shown how well they can implement this policy, once a clear policy commitment has been made. Even though the original expectation of having three different providers of natural gas pickups and vans fell through, the City has purchased 27 parallel hybrid vehicles. Where appropriate, 13 SMART cars have been taken on in the fleet. Since April, the Waste Department is trying out a hybrid garbage packer that runs on 100% biodiesel. This year the City has bought 10 million litres of blended biodiesel for its fleet, with an overall reduction in CO₂ emissions (including ethanol) of 1.26 million kgs.

The TTC has converted all of its yards/vehicles to B05 diesel, using 60 million litres.

Its 150 hybrid buses already serve Toronto passengers and 220 hybrid buses will be added during the year. Due to their smaller engine, these hybrids save 25% in fuel consumption. In addition 80 new biodiesel buses were purchased this year with 100 more planned for 2007. TTC does need to calculate the net savings in particulate matter and greenhouse gases it has achieved.

In this area the City is taking a major step toward reducing emissions.

2006 City of Toronto CO₂ Emission Reductions

B10 Diesel	629,000 kg
E10 Ethanol	504,000 kg
Alternate Vehicles	125,000 kg
Total:	1,258,000 kg

(TTC Emission Reductions not available.)

INTERGOVERNMENTAL ACTION

HIGHLIGHTS

- **The City continued to host other municipalities, provincial and federal environmental staff at its Smog Summit**
- **The City lobbied the Provincial government hard to encourage energy conservation rather than costly energy production at the Portlands Energy Centre**
- **The City set up a model Carbon Credits system – which was frozen by the federal government**

The 2006 Smog Summit was held in June with no major new announcements. For the first time the Federal Environment Minister did not attend.

City Council and Staff – together with Toronto Hydro – advocated strongly for their “Ten-Point Plan for the Portlands Energy Centre”. TEA assisted in preparing this alternative plan which stressed greater emphasis on energy conservation and efficiency rather than such a major increase (550 KW) in natural gas-fired energy production. Despite the City’s valiant championing, the provincial government did not accede to Toronto’s proposals, although as noted above, it did result in a commitment from the province

to fund an additional 300 MW of conservation in Toronto.

On improving transit service, the Toronto Transit Authority took delivery of its first set of hybrid buses under the federal New Deals for Cities Campaign funding. The TTC also assisted both Mississauga and Windsor to develop their own biodiesel Green Fleet Plans.

The City adopted a progressive policy on carbon credits, but the Harper government’s rejection of the Kyoto Plan left this policy without substance.

2006 SMOG REPORT RECOMMENDATIONS

OVERALL

The City of Toronto needs a Vision and some Leadership to take on the key challenges

SMOG

The Council needs to dig deeper into the major causes of smog production and engage citizens and businesses more actively in this campaign

ENERGY

Drawing upon the citizens' conservation-first response to this summer's Heat Days, Council needs actively to implement its Energy Plan

TRANSIT

Continue building a surface rapid transit grid throughout the City, granting new transit rights-of-way.

AIR QUALITY

Move beyond better measurements, to require more comprehensive actions to improve the City's air

WALKING AND BIKING

Establish budget to implement the Pedestrian Charter

FLEETS AND FUELS

Keep up the good work with a renewed Green Fleet Transition Program

QUESTIONS TO ASK TORONTO COUNCIL CANDIDATES

1. Will you support implementation of all outstanding actions in the City's existing smog plan within the first two years of the next term of Council?
2. Will you support the drafting of a new comprehensive plan that will reduce smog-causing pollution within the City of Toronto from current levels by at least 20% by 2012?
3. Will you support the Citizen's Environmental Assessment Team's continued work in creating a long term garbage solution?
4. Would you support better recycling collection and ensure a budget for a new organic program in all apartment buildings (the only way to get to our 60% recycling target)?
5. Will you support a City of Toronto sustainable business program which advises, encourages and rewards local industries to reduce the use and release of toxic chemicals?
6. Will you make implementing the TTC's Ridership Growth Strategy and Transit City plans your top budget priority?



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