

TORONTO SMOG

REPORT CARD 2007

The Year of Uncertainty

Final Grade e+



Toronto Environmental Alliance



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Prepared by the Toronto Environmental Alliance

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November 2007

Toronto Smog Report Card 2007

SUBJECT	COMMENTS	GRADE
Sustainable Energy	Developed good plans Some new money Little new action	22/30
Sustainable Transportation	Adopted TTC Transit City Fare Hike and service improvement delays Bike lane construction slow	19/30
Community Engagement	Developed good plans No new money Little new action	14/20
Targets, Monitoring and Reporting	Adopted aggressive targets Promised better monitoring and reporting Limited current monitoring and reporting	14/20

FINAL GRADE = 69 OR C+

Details

Category	Creating the Right Policies	Providing Adequate Funding	Implementing the Policies	Score
Sustainable Energy	8/10	7/10	7/10	22/30
Sustainable Transportation	7/10	6/10	6/10	19/30
Community Engagement	5/6	5/8	4/6	14/20
Targets, Monitoring and Reporting	5/6	5/8	4/6	14/20
Total	25/32 B+	23/36 C-	21/32 C+	69/100 C+

2007: The Year of Uncertainty

2007 saw remarkable leadership on smog and climate change countered with a summer of smog and ongoing disappointment in the funding and implementation of key initiatives. The City's budget woes brought four months of great uncertainty to the future of Toronto's efforts to clean the air.

Toronto City Council adopted an aggressive plan to fight smog and climate change, called "Change is in the Air." The plan provides a framework to meet Mayor Miller's election commitments to reduce smog pollutants in Toronto's air by 20% by 2012 and to cut greenhouse gas emissions by 6% from 1990 levels by 2012. It also fulfills the key recommendation in last year's Smog Report Card calling for vision and leadership on smog reduction.

"Change is in the Air" is the most comprehensive smog and climate change action plan the city has ever adopted. Much credit can be given to the Parks and Environment Committee who spearheaded it, with the help of the Executive Committee.

If the plan is carried out, Toronto will make a dramatic dent in the 1,700 annual smog-related deaths in this city.

The bad news is that 2007 has seen the second-highest number of smog alert days since records have been kept. At 29 days, only 2005 saw more smog alert days (48).

While the City focused on the essential task of developing a new smog and climate change plan, not enough was done "on the ground" to reduce pollutants. Energy efficiency retrofits of city buildings continued along with the purchase of more green vehicles, but delays to improving TTC services, a fare increase, little action on building new bike lanes and almost no movement in purchasing more green power shows the City still has a long way to go in implementing existing plans.

And the City's ongoing financial woes created even more problems. Hours before Toronto City Council unanimously adopted "Change is in the Air," a slim majority of Councillors deferred adoption of two new revenue tools the City needed to invest in the smog and climate change plan. The deferral threw implementation of some smog and climate change initiatives, like public transit, off the tracks.

From July through to end of October, the conversations at City Hall turned away from implementing the plan to whether the plan would ever see the light of day. Even previously committed funds were affected: the TTC was forced to break a promise it made earlier in the year for much-needed service improvements.

Council wisely adopted the new revenue tools at the October 22 City Council meeting. Yet, the damage of 4 months of uncertainty and inaction has been done.

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-
2006	C-

2007: The Year of Uncertainty

Keeping all of these factors in mind, TEA has given the City a C+. This is a marked improvement from last year's C-.

Two reasons for this better grade are the creation of the Transit City plan and Council's unanimous adoption of "Change is in the Air." Without these actions, the City's grade would likely have remained a C-.

The grade would have been higher (B) had City Council adopted the revenue tools in July. Because they didn't, the plans to expand the TTC were scuttled and an unnecessary transit fare increase was passed in September.

With the adoption of the revenue tools, some capacity now exists for the City to fund and implement "Change is in the Air."

That means the 2008-9 Budget Process now becomes the test of how serious City Council is about cleaning the air.

Torontonians witnessed from July until October what happens when there isn't enough money to fund services, like the TTC, that help reduce smog.

Many of the recommendations below set out what funds TEA believes must be invested by City Council in the 2008-9 budget.

With adequate funding, Torontonians will be able to breathe easier in the future. Without adequate funding, a good plan will do little to clean the air.

Key Recommendations:

1. Commit to signing a long term contract with Toronto Hydro Energy Services Inc. by October 2008 to purchase 50-100 MW of green power.
2. Provide comprehensive detail about how and when the \$84 million set aside in "Change is in the Air" will be spent.
3. Put a moratorium on further TTC fare increases until the end of this City Council term.
4. Ensure planned service improvements for 2008, addressing overcrowding and implementing the Ridership Growth Strategy (RGS), happen as scheduled.
5. Adopt a Community Right to Know Bylaw by October 2008.
6. Earmark appropriate funds in the 2008 operating budget to engage Torontonians through the Live Green Program.
7. Direct staff to publish an annual "State of Toronto's Air" report. This report should provide Torontonians with a summary of actions taken by the City on reducing smog over the past twelve months including:
 - status of city targets related to smog reduction;
 - how air quality has been affected by these actions;
 - money invested in improving air quality

Smog Facts: The Year in Review

Toronto Smog by the Numbers:

1,700: the number of people who die prematurely every year in Toronto because of smog-related illnesses.

4: the number of full Jumbo Jets crashing into Lake Ontario that would equal the same number of smog deaths in 2007.

6,000: the approximate number of people who are admitted to hospital annually with smog-related illnesses.

2: the number of Air Canada Centres needed to seat all the people admitted to hospital since 2001 suffering from smog-related illnesses.

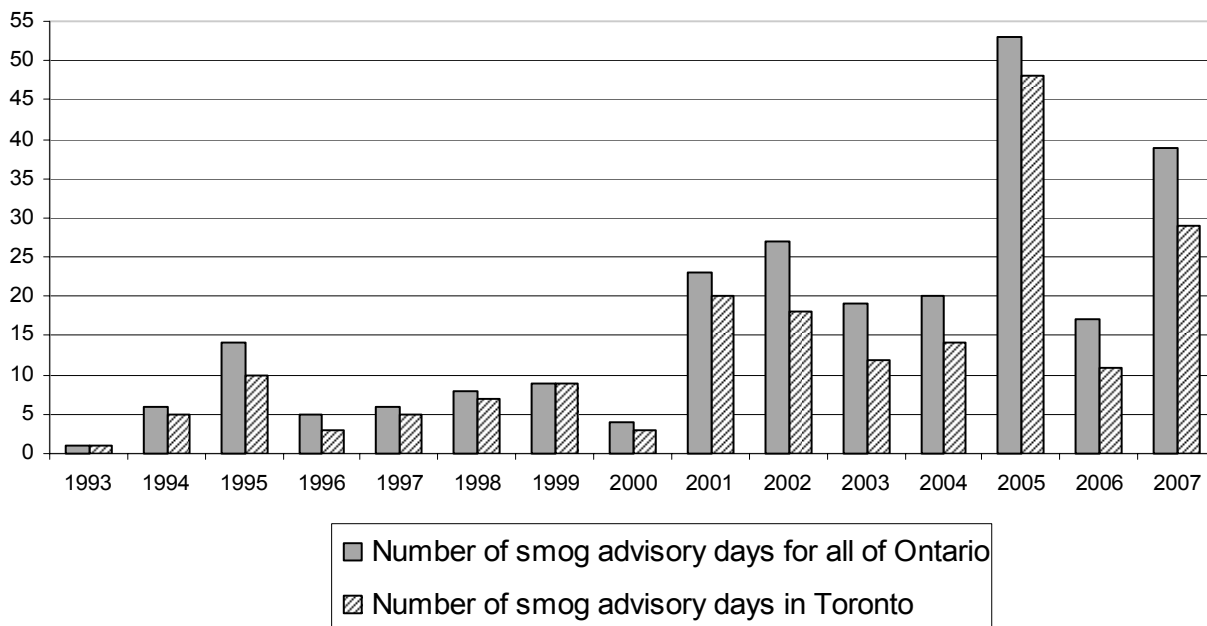
2007 saw some disturbing new reports providing yet more evidence of the negative health impacts of smog.

The February 2007 issue of the New England Journal of Medicine¹ reported on the growing evidence between increased levels of fine particulate matter (eg. PM_{2.5}), a known smog pollutant, and higher rates of death and complications from heart diseases.

Another study, reported by Reuters News Service² in September, suggests that fine particulate matter can trigger blood clotting, leading to heart problems.

In early October, a study published in the Journal of Immunology suggests ozone, another smog pollutant, kills off good bacteria in our lungs.³

**Smog Days in Ontario and Toronto, 1993 - 2007
(as of October 18, 2007)**



Smog Facts: The Year in Review

In mid October, Statistics Canada reported that smog pollutants are on the increase. In particular, ozone exposure increased in Southern Ontario over the past 15 years.

In short, 2007 provided us with mounting evidence about how smog pollutants harm and kill people.

Notes:

¹Douglas W. Dockery, Sc.D., and Peter H. Stone, M.D. "Cardiovascular Risks from Fine Particulate Air Pollution" **New England Journal of Medicine** February 1, 2007, p. 511.

²Julie Steenhuisen, **Air pollution triggers blood clots: study**. Reuters News Service, September 20, 2007.

³John W. Hollingsworth, Shuichiro Maruoka et al. "Ambient Ozone Primes Pulmonary Innate Immunity in Mice" **The Journal of Immunology**, 2007, 179: 4367-4375.

New Evaluation Criteria for 2007

In previous years, TEA's evaluation of the City's action on smog was based largely on how well the City was progressing in implementing the 1998 Smog Plan, elements of the 2000 Environmental Plan, the 20/20 The Way to Cleaner Air Plan, and the Ridership Growth Strategy.

The City's new Smog and Climate Change Action Plan, "Change is in the Air" consolidates many of these activities with new initiatives in a more comprehensive package.

Accordingly, TEA has developed a new evaluation process framed on the City's new plan that allows for the continued evaluation of pre-existing programs.

The 2007 Smog Report Card has identified four key categories that reflect the actions in the plan as well as those found in previous plans:

- Sustainable Energy
- Sustainable Transportation
- Community Engagement
- Targets, Monitoring and Reporting

We evaluate the actions in each category using three criteria:

- Creating the Right Policies
- Providing Adequate Funding
- Implementing the Policies.

Put simply, we assess the City on how well it "talks the talk," if it puts its "money where its mouth is," and whether it "walks the walk."

Chart 1 below shows how we've weighted the criteria. The funding criterion is weighted slightly more than the other two criteria to acknowledge the importance of a sound financial commitment in any policy implementation process.

Chart 1: New Evaluation Criteria

Category	Creating the Right Policies	Providing Adequate Funding	Implementing the Policies	Score
Sustainable Energy	/10	/10	/10	/30
Sustainable Transportation	/10	/10	/10	/30
Community Engagement	/6	/8	/6	/20
Targets, Monitoring and Reporting	/6	/8	/6	/20
Total	/32	/36	/32	/100

Sustainable Energy

Highlights:

- "Change is in the Air" moves forward in developing aggressive energy efficiency and renewable resource initiatives.
- \$84 million earmarked in 2007 for sustainable energy.
- Over 200 retrofits on city buildings completed.
- City at a standstill on green power purchases.

FINAL GRADE: 22/30

Every time we use electricity we create smog. That's because Ontario's energy system still relies on highly polluting coal-fired electricity. Every time we heat our houses with oil or natural gas we create smog. While the City of Toronto cannot single handedly change province-wide energy systems, it can provide Torontonians with the tools they need to conserve energy and to use renewable energy. This section evaluates City actions designed to conserve energy and promote green power, two separate but complementary strategies.

Creating the Right Policies 8/10

2007 saw further movement in developing the right policies that would transform Toronto into a Canadian leader in sustainable energy. "Change is in the Air" contains recommendations to move forward on developing aggressive energy efficiency measures that will go a long way towards reducing smog emissions from buildings. As well, "Change is in the Air" contains recommendations to support further development of renewable energy sources, in particular geothermal, deep lake water cooling and solar. Many of these recommendations came from the City's new, comprehensive Sustainable Energy Plan, which was prepared at the same time as "Change is in the Air."

While the recommendations in "Change is in the Air" are welcome, they don't focus enough on actions. Rather, too many of

them call on City staff to report back over the next few months on possible policies that would further promote energy efficiency and renewable power production.

Providing Adequate Funding 7/10

"Change is in the Air" commits the City to finding \$84 million in this budget year to fund the Toronto Energy Conservation Fund (\$42 million), the Toronto Green Energy Fund (\$20 million), implementing Deep Lake Water Cooling (DLWC) (\$9 million), and continued energy efficiency and sustainability upgrades at City Hall (\$13 million).

One glaring problem is that too little money was set aside in 2007 to increase the City's purchase of green power. City Council first promised in 2000 to purchase more green power. Unfortunately, the money needed to fulfill this promise has yet to materialize.

Implementing the Policies 7/10

In 2007 the City moved forward in retrofitting buildings to make them more energy efficient and developed some modest green power sources. For example, 86 fire stations, 97 arenas and 14 civic centres were retrofitted to reduce energy use.

As well, 4 solar water heating systems were installed in City pools, another 2 in fire halls, while 2 solar photovoltaic systems were also

Sustainable Energy

installed in fire halls. One of the corporation's largest energy users, the Toronto Community Housing Corporation (TCHC), replaced almost 30,000 inefficient fridges and stoves with new, energy efficient models.

Toronto Hydro also contributed to reducing energy consumption. Building on the success of the 2006 initiative which saw over 30% of Toronto Hydro customers reduce their energy use by 10% during the summer months, this year Toronto Hydro continued helping Toronto customers reduce electricity use.

Since 2006, Toronto Hydro has helped its customers save greater than 210 MW of peak electricity. It did this partly by helping place over 1 million compact fluorescent

lights in residential properties, "retiring" more than 50,000 strings of incandescent holiday/festival lights and helping recycle over 18,000 inefficient room air conditioners.

These are promising results.

In contrast, the City's success in implementing its green power purchase promises is sad, at best. After years of promising to buy more green power, another year has passed without any new significant green power purchases. Put simply, there have been almost no actions taken to meet our target of having 25% of the City's electricity needs met by green power. In the last 12 months, the City has been effectively treading water. This is a major problem that needs to be addressed next year.

Recommendations:

1. Commit to signing a long term contract with Toronto Hydro Energy Services Inc. by October 2008 to purchase 50-100 MW of green power.
2. Provide comprehensive detail about how and when the \$84 million set aside in "Change is in the Air" will be spent.

Sustainable Transportation

Highlights:

- “Change is in the Air” calls for Sustainable Transportation Implementation Plan
- City Council adopts Transit City Plan
- Cost containment measures jeopardize transit service improvements
- Fare increase makes TTC fares the most expensive in North America
- Bike plan barely moving – only 2.7 km of new lanes added since June.

FINAL GRADE: 19/30

How we move ourselves and the goods we produce has a major impact on air quality. It doesn't take an air quality expert to know that walking and cycling creates no dirty air and taking the TTC creates a lot less dirty air than driving a car. It also doesn't take an expert to realize that to clean the air we have to start using vehicles that pollute less. In this section we evaluate the actions taken by the City to promote sustainable transportation.

Creating the Right Policies 7/10

“Change is in the Air” calls for the preparation of a Sustainable Transportation Implementation Plan. The intent of this implementation plan is to provide a comprehensive and integrative approach to transportation. In early October, the Works and Public Infrastructure Committee adopted a staff report that begins the process of developing this plan. For example, the Committee directed city staff to assess the feasibility of enacting some interesting pedestrian-friendly policies. While this is a very good sign, the City is still at the stage of planning for the plan, not passing the plan.

In contrast, Spring 2007 saw the TTC and City Council adopt a new plan to grow public transit service in Toronto by building 7 new light rail rapid transit routes, namely street-car lines with dedicated lanes. In total, 120 km of service will be added throughout the entire city. By 2021, the new lines will carry 175 million riders per year. The estimated cost including vehicles is \$6.1 billion.

This new “Transit City” plan answers a call TEA has been making for years to strengthen the system with cost effective surface routes before building capital intensive subways. The City also won provincial commitment to Transit City, through its “MoveOntario 2020” plan, which represents new recognition by the province that funding Toronto's transit priorities is good for the Greater Toronto Area.

Transit City was slightly overshadowed by a continued policy of fare increases to fund a growing transit budget. 2007 saw the third fare increase in three and a half years, clearly indicating that the TTC and City Council have chosen user fees over general tax revenues as a way to fund transit.

Sustainable Transportation

Providing Adequate Funding 6/10

The funding required to implement Transit City has yet to be earmarked in the City's long-term budget.

Money that was set aside in the 2007-8 budget for service improvements to address overcrowding and the Ridership Growth Strategy (RGS) ended up being cut *after* the proposed new revenue tools were not adopted at the July Council meeting. Put simply, by deferring the new revenue tools, City Council effectively cut transit service.

Then, on September 12th the Commission voted unanimously to raise fares by \$.15 on tickets/tokens and prorated to other fares, except cash fares which stay the same and Metro Passes which go up 9% to \$109. The TTC's fares are now the most expensive in North America with the Metro Pass costing \$30 more than the next highest thirty day pass in comparable transit systems¹.

Implementing the Policies 6/10

While the City has been great at planning for sustainable transportation, it has performed poorly in actually implementing existing policies.

Having enough vehicles and people to drive them has been a constant barrier to implementing better transit. In a step to avoid the same barrier when implementing Transit

City, the TTC released an Request for Proposal (RFP) this year for the necessary street cars, with delivery to start 2011. Also, by the end of this year the TTC will finally receive some the additional vehicles it needs to realize its current service improvement plans. Ironically, those improvements are now delayed due to budget concerns.

In reaction to Council's July deferral of the new revenue tools, the Toronto Transit Commission voted to delay service improvements, meant to address rampant overcrowding on 77 bus and streetcar routes by at least 6 months. The earliest implementation of these improvements will now be February 2008.

Also, Commission decisions on July 20th and September 12th, put further implementation of the Ridership Growth Strategy (RGS) in jeopardy. Peak service improvements scheduled for September 2007 and the Mount Dennis Garage opening – essential to implementing RGS – have at best been delayed 6 months and at worst delayed indefinitely. Both the 2007 improvement and the Mount Dennis Garage were part of the 2007 budget and will now only be implemented "if funding is available". Service improvements for off peak periods (full day service on surface routes to match subway service hours) scheduled for 2008 are in jeopardy.

¹Fare structures for major transit systems in the following cities were compared: Chicago, New York, Toronto, Montreal, Los Angeles, Vancouver (Zone 1 fares only). The TTC's fares are on par with other GTA fares, but other GTA transit systems are not comparable to the TTC.

Sustainable Transportation

Moving from transit to bikes, it's been six years since the City passed the Bike Plan that promised to increase bike paths from 242 km to 1094 km by 2012. According to a June 2007 City report, in that time a total of 128 km of bike lanes have been added, or about 21.3 km per year. It doesn't take a math whiz to figure out that at this rate, the City won't come close to meeting its target.

In June, the City announced its plan to increase bike lanes by 27 km this year. By October 7th, only 2.7 km have been added. While there has been some very recent activity at City Council aimed at dramatically increasing the speed of bike lane construction, next year's report card will assess whether this flurry of activity actually led to new bike lanes.

Bikeway Type	km at Start of Bike Plan	Status May 2007	Total km at Completion of Network
Bike Lanes	35	69	467
Shared Roadway	37	118	317
Park Roads	20	20	20
Off-Road Paths	150	163	290
Total	242	370	1094

Source: City of Toronto, **Toronto Bike Plan Update Newsletter** Summer 2007

The truly good news this year once again comes from the City's Green Fleets program as it continues to implement the Green Fleet Transition Plan adopted in 2003. This past year saw the City purchase 21 hybrids and

18 Smart Cars bringing the city's green fleet up to over 250 vehicles. Moreover, the City continued purchasing green fuels that help conventional vehicles emit fewer smog pollutants from their tailpipes.

Recommendations:

- Put a moratorium on further TTC fare increases until the end of this City Council term.
- Ensure planned service improvements for 2008, addressing overcrowding and implementing the Ridership Growth Strategy (RGS), happen as scheduled.

Community Engagement

Highlights:

- Mayor shows great leadership
- "Change is in the Air" promises intensive community activities
- Community Right to Know moves a step forward
- Minimal funding and implementation of specific initiatives

FINAL GRADE: 14/20

Cleaning the air in Toronto will only happen when Torontonians work together with City Hall. As we know, good ideas –even good policies– do little without the active engagement and buy-in of Torontonians. In this section, we examine how well the City has been in talking to and working with Torontonians on reducing smog pollutants.

Creating the Right Policies 5/6

A key element in creating effective community engagement is having high profile elected officials using public opportunities to bring attention to smog.

To that end, Mayor Miller has done an excellent job in using his high profile to reinforce the importance of cutting smog.

For example, at the December 5th, 2006 inaugural meeting of the new Toronto City Council, Mayor David Miller declared "I want to cut smog pollutants in the air we breathe by 20 per cent within six years. We'll implement a tough anti-smog plan, and we'll develop a climate change program for Toronto." This followed an election promise made by the Mayor to cut smog pollutants by 20 per cent by 2012 and greenhouse gas emissions by 6% below 1990 levels.

However it's not enough to simply talk about smog; it's equally important to get communities involved in developing solutions.

"Change is in the Air" has a number of recommendations to engage Torontonians, specifically residents and businesses. For example, it calls for the development of the Live Green Program aimed at individuals, residents' groups, Business Improvement Areas (BIAs), neighbourhood associations and community organizations. The Program will help these groups take actions that would reduce energy use and promote renewable energy, local food, green roofs, water conservation and the use of native plants.

The plan also recommends developing a marketing campaign, in collaboration with Torontonians, to ensure City programs are properly developed and communicated to the public.

In July, the City launched a new Air Quality Health Index (AQHI), in partnership with Environment Canada and the Ontario Ministry of Environment, to be piloted over the next year in Toronto. This new tool will give Torontonians information on how smog levels affect their health. If implemented properly, the AQHI will help Torontonians adapt their activities to air pollution levels and create even more pressure for effective action to reduce smog.

Toronto took another step towards giving communities the right to know what facilities are spewing smog causing pollution into Toronto's air. Seven years ago, City Council

Community Engagement

promised to adopt a Community Right to Know (CRTK) bylaw. The "Change is in the Air" Plan re-established CRTK as a priority. More importantly, the Medical Officer of Health was directed to report back to the Board of Health in Spring 2008 on a draft CRTK bylaw and implementation plan.

Providing Adequate Funding 5/8

Little money was set aside in 2007 to engage communities on Smog and Climate Change specifically. The City provided \$200,000 for the Green Roof Incentive Pilot Program and minimal resources for "20/20 The Way to Cleaner Air" and the Air Quality Health Index community education programs. No new money was earmarked in "Change is in the Air." Cost containment measures, triggered by Council's deferral of new revenue tools, has slowed work on the CRTK bylaw and delayed consultations on further measures to promote green roofs.

"Change is in the Air" was adopted after the 2007-8 budget was passed. TEA expects to

see specific funding earmarked in the 2008-9 budget process for community engagement. Accordingly, it will be much easier to assess this next year.

Implementing the Policies 4/6

Small steps were made towards engaging communities in 2007. The City held public consultations on a draft version of "Change is in the Air". Toronto Public Health did good community outreach when it launched its Air Quality Health Index in July. The City also extended the Green Roof Incentive Pilot Program for another year and greatly expanded the subsidy residents and businesses can receive for building green roofs from \$10 per square meter in 2006 to \$50 per square meter in 2007.

However, as of mid October 2007, implementing the community engagement recommendations in "Change is in the Air" has been slow, at best. It is unclear if this is due to lack of funds resulting from the City's financial crisis or other factors.

Recommendations:

5. Adopt a Community Right to Know Bylaw by October 2008.
6. Earmark appropriate funds in the 2008 operating budget to engage Torontonians through the Live Green Program.

Targets, Monitoring and Reporting

Highlights:

- Toronto has set strong targets - 20% reduction in smog pollutants, 1094 km of bike lanes, green power supplying 25% of City's electricity.
- Staff resources to monitor and report on progress potentially inadequate.
- No one-stop annual report to evaluate progress on tackling smog.

FINAL GRADE: 14/20

It's not enough to simply commit to cleaning the air. In order to know whether these commitments are being met requires knowing where you want to go *targets* whether you're getting there *monitoring* and telling people about your progress *reporting*. Without this crucial information, it becomes impossible to celebrate successes or to identify mistakes and correct them. This section evaluates the city's actions in setting targets, monitoring progress and reporting its actions to reduce smog pollutants to the public.

Creating the Right Policies 5/6

2007 saw the City continue its good practice of developing targets. As noted earlier, the Mayor committed to a 20% reduction from 2004 levels in smog pollutants by 2012. His commitment became official city policy when the "Change is in the Air" plan was adopted by City Council in July. This follows on the heels of previous targets including 25% of the city's electricity needs coming from green power, a bike lane commitment of 1094 km by 2012 and the Transit City commitment to build 120 km of light rail by 2021.

Moreover, "Change is in the Air" includes extensive monitoring and reporting requirements for various city bodies to provide the public with the data they need to measure the city's performance in meeting these targets.

Providing Adequate Funding 5/8

Typically, minimal funding is required to set targets, monitor activities that help meet the targets and report out on the results. What is required is adequate staff resources. It's unclear whether current staff resources are up to the task, given the cost containment circumstances the city currently faces. It's also unclear whether the Mayor and City Council think this is a priority area that should not be affected by cost containment measures.

Implementing the Policies 4/6

Every year, significant effort is required to bring together targets, monitoring and reports from the various plans the city has passed that help reduce smog pollutants. Members of the public have had to rely on TEA's Smog Report Card and other documents prepared by outside sources to get a comprehensive summary.

The City of Toronto still has some distance to go to provide effective monitoring and comprehensible reports on its progress in reducing smog pollutants. The June 2007 report on Greenhouse Gases and Air Pollutants is a promising start, but *only* a start.

With "Change is in the Air" the monitoring and reporting should make it much easier for the public to assess the city's progress. However, for this year, the City's performance is spotty at best.

Targets, Monitoring and Reporting

Recommendation:

7. Direct staff to publish an annual "State of Toronto's Air" report. This report should provide Torontonians with a summary of actions taken by the City on reducing smog over the past twelve months including:

- status of city targets related to smog reduction;
- how air quality has been affected by these actions;
- money invested in improving air quality.