

TAF—Toronto's Climate Revolving Fund



Global warming is urgent! TAF seeks to accelerate mitigation.

Five Key Strategic Directions

- Continue to support citizen action thru grants program
- Focus on ignored niches/gaps where TAF can make a difference
- Develop programs with long-term strategic impact—50% emissions reduction or more
- Accelerate market acceptance of technologies and programs
- Leverage TAF's funding thru partnerships and fundraising



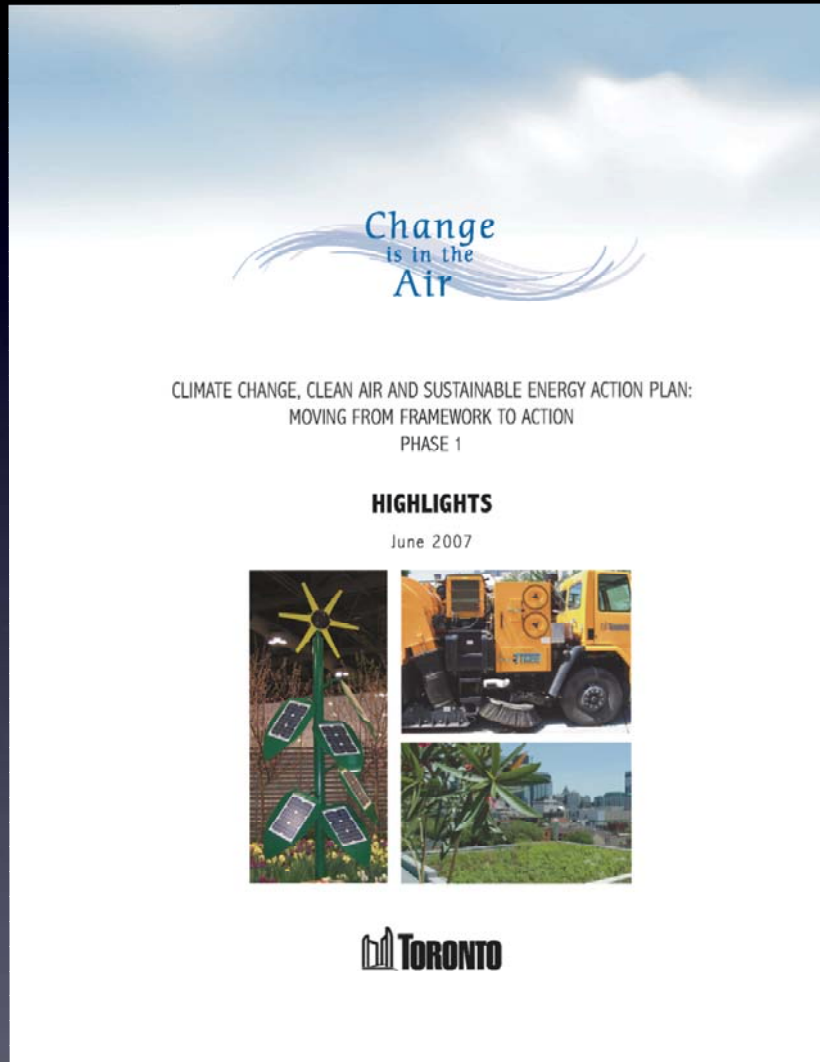
Thanks: Smart Living St. Lawrence

Increasing Funding Thru Partnerships



- TAF actively fundraises as a member of City partnerships
- Successful examples include:
 - GHG inventory with TEO with FCM
 - cogeneration project at Exhibition Place with FCM
 - 100 KW solar PV plant at Exhibition Place with FCM
 - Toronto Plug-in Hybrid Electric Vehicle Project with City Fleets and Hymotion

Climate Plan Priorities in TAF's Planning



LIVE GREEN TORONTO: Neighbourhood Actions for a Green Toronto

(Staff Report Recommendation 4, pages 4/5)



BECOMING THE RENEWABLE ENERGY CAPITAL OF CANADA

(Staff Report Recommendation 7, pages 7/8)



SUSTAINABLE TRANSPORTATION

(Staff Report Recommendation 8, pages 8/9/10)



GREENING CITY OPERATIONS

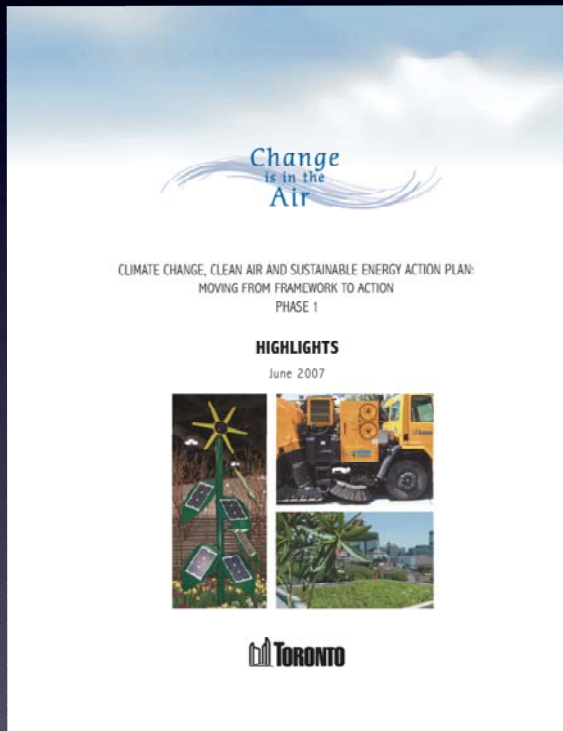
(Staff Report Recommendation 9, pages 10/11)



BUILDING PARTNERSHIPS FOR CHANGE

(Staff Report Recommendation 11, pages 12/13)

TAF's Program Strategies, 2008-2010



**LIVE GREEN TORONTO:
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TAF Programs

Citizen Action

Solarvision

Lightsavers

Towerwise

Fleet Futures

Other

TAF's Citizen Action Program Area

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TAF Strategy

- **Citizen Action** will continue TAF's long-term work of building climate mitigation capacity in the community
- Community grant program will support energy efficiency & renewable energy projects in **LIVE GREEN TORONTO** target groups
- Grants will support projects leading to framework for concrete high-rise buildings
- Grants will support advocacy to strengthen Province's building code

Current TAF Citizen Action Projects

- TAF is supporting thru its grants a residents' groups, BIAs, and neighborhood agencies:
 - Greening Sacred Spaces
 - greenTbiz
 - Smart Living St. Lawrence Cool Shops project
 - Our Power *(right)*
 - Chinese Cultural Centre
 - Smart Commute
- Grant to U of T to support concrete high rise research
- TAF will strategically coordinate with [LIVE GREEN TORONTO](#)



Thanks: Our Power

TAF's **Solarvision** Program Area

Pioneering solar energy solutions

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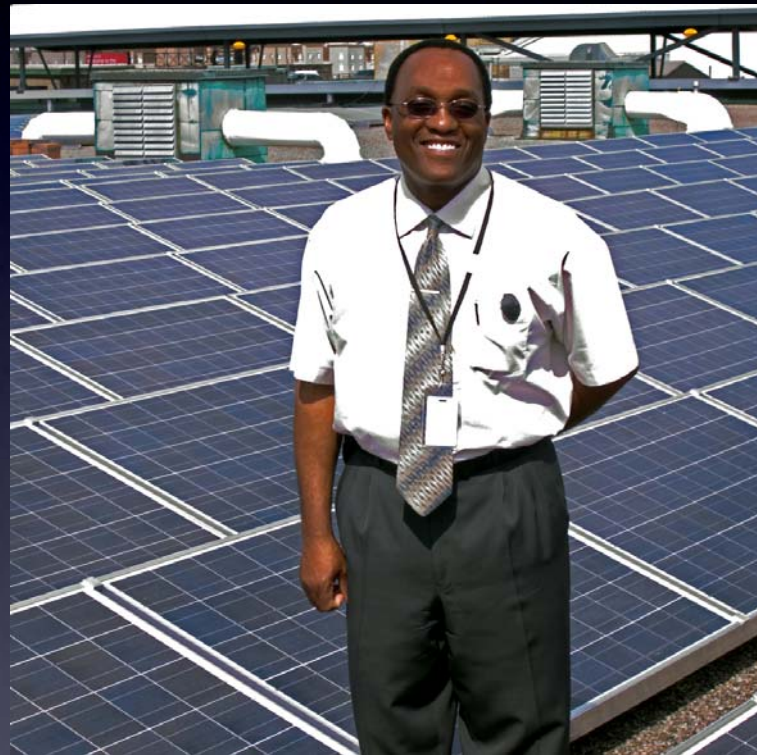


TAF Strategy

- **Solar Vision** will advance solar hot water and PV solutions
- Significant emissions reduction potential in Toronto long-term, e.g. 1 tonne CO₂/household for SDHW
- TAF Board has approved \$1M in principle for funding of pilot solar projects in City facilities
- TAF with City and Toronto Hydro is developing solar DHWS pilot for 150 homes
- Advocacy for more aggressive solar PV standard offer contract thru OSEA

Current TAF **Solarvision** Projects

- \$730,00 now supporting City and community projects:
 - 100 kW solar PV at Exhibition Place
 - 5 smaller City PV pilots
 - community solar pool trials
 - Solarshare start-up
 - Brickworks feasibility study
- \$500,000 to support design & implementation of the east Toronto SDHW pilot targeting 150 homes



TAF's Lightsavers Program Area

Advancing low carbon lighting

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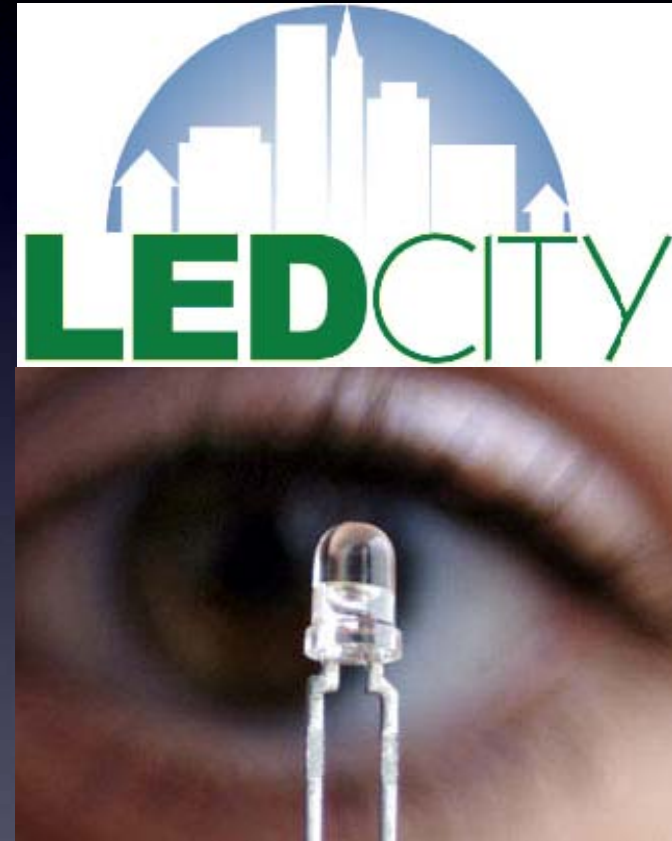
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- A market transformation program, **Lightsavers**, will accelerate LED and intelligent lighting control use in (a) parking areas, (b) roadways, (c) pedestrian areas, (d) architectural
- Outdoor lighting accounts for 8-to-12% of Toronto's electricity use
- Toronto Parking Authority & Ex. Place could assume leadership roles
- Possibility of P.N. Square upgrades
- Partnerships with greenTbiz, Toronto BIAs, local business
- Potential to expand to GTA thru GTA Clean Air Council

Current TAF **Lightsavers** Projects

- \$200,000 supporting City and community projects:
 - LED streetlight pilot at Exhibition Place
 - pedestrian LED pilots in BIAs
 - Adaptive control pilot in Exhibition Place garage
 - greenTbiz study of market potential for LEDs in Toronto
- Development of performance protocol with technical partners
- Requests into OPA and federal government for GTA-wide project



Thanks: Cree

TAF's Towerwise Program Area

Lowering energy use in high rise homes

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TAF Strategy

- **Towerwise** will accelerate CO₂ reductions in high rise sector, especially new condos
- High rise accounts for 40% of Toronto's residential CO₂ emissions & 10% of total Toronto emissions
- New condominiums adding the equivalent of Thackeray landfill emissions each year to inventory
- Partnerships evolving with major developers, resident associations, etc.
- An area where provincial building code not particularly strong



Current Towerwise Projects

- TAF Board has approved a \$10 M Green Loan Credit Enhancement Facility for energy efficient condos:
 - \$2 M TAF financing will leverage \$8 M private funds
 - \$2.2 M for new condos built by Monarch, Tridel, & tasDesignbuild
 - loans to condo boards only
- Funding of U of T study to support Mayor's concrete building initiative
- Dan Leckie Forum in November



Thanks: tasDesignbuild

TAF's **Fleet Futures** Program Area

Moving vehicles off oil

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- **TAF Strategy**
Fleet Futures will advance technologies that reduce or replace oil use in fleet vehicles:
 - hybrid cars & trucks
 - plug-in hybrid cars
 - full electric vehicles
- Vehicles and trucks account for 36% of the city's emissions
- Diesel trucks account for over 50% of city's NO_x emissions
- 1,500 litres oil/capita in N.A. compared with 6 litres in China!
- Oil may be peaking, and prices may rise beyond \$100/barrel

Current **Fleet Futures** Projects

- Toronto Plug-in Hybrid Electric Vehicle (PHEV) Pilot Project launched May 2007:
 - 3 PHEVs in City's fleets
 - 7 PHEVs in community fleets
 - doubles fuel economy
 - reduces CO₂ emissions 40%
 - partnership with Hymotion Canada & A123 Systems
- Fundraising for hybrid truck project with City Fleets



Thanks: EDrive

TAF's Other Projects

Tackling special opportunities as they arise

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The Thackeray Project

TAF Board has authorized \$300,000 for support of the installation of methane collection and flaring system at Thackeray Landfill, which will reduce the City's own emissions by 25,000 - 40,000 tonnes CO₂ annually.

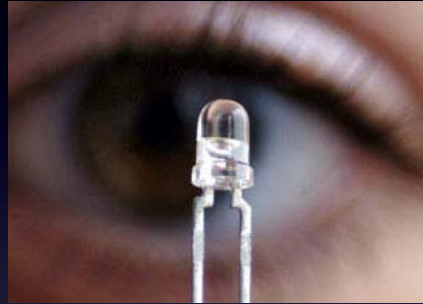
10 TAF Deliverables in 2008

Solarvision



- 1) Create 150 home SDHW pilot in east Toronto, a template for a citywide project
- 2) Enable 5 PV demos in different City & ABC venues

Lightsavers



- 1) Establish 4-6 LED & lighting control pilot projects measured by new protocol
- 2) Create GTA-wide consortium with provincial & federal funds

Towerwise



- 1) Develop 6 high rise showcase projects
- 2) Develop 2 high rise retrofit showcase projects
- 3) Enable full uptake of \$10 M Green Loan Credit Facility

Fleet Futures



- 1) Expand current PHEV pilot to 50-100 vehicles
- 2) Establish hybrid truck pilot with City Fleets & external funding
- 3) Link with C40 and Clinton Climate Initiative

Conclusion



Thanks: Humber Arboretum

- TAF has 15 years experience nurturing community mitigation capacity and incubating projects
- TAF is a team player—its program directions are based on key priorities in the *Change is in the Air*
- TAF will coordinate its programs with the TEO, EEO, BBP, ERP, Fleets, and other ABCs to exploit synergies and avoid duplication
- TAF will bring strategic thinking and new financial resources to help the City fulfill its climate plan