



# Environmental Activities of Toronto Community Housing

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# Green Plan

- Conservation programs in place since creation of Toronto Community Housing
  - Reductions in energy consumption
  - Reductions in water consumption
  - Environmental practice
  - Waste management
- Since 2003 driven by a Green plan
  - Sets targets
  - Provides policy guidance



# Major Environmental Activities

- **Building Renewal Program**
  - Renewal of 19 buildings / complexes
  - Delivers energy savings.
  - The total capital investment is about \$32 million. The estimated annual saving from BRP is \$3.36 million.
- **Development**
  - LEED buildings: Regent Park, 60 Richmond, 89/90 Carlton
  - 25% - 40% below modal energy consumption for all new buildings
  - Combined heat & power, solar thermal and/or ground source heat pumps; Low flow toilets, faucets & showerheads; Efficient lighting design; Light green roof for water retention



# Major Environmental Activities

- **Appliance Replacement Program**
  - Almost 70,000 fridges & stoves replaced since 2003 with a total reduction in greenhouse gas emissions of 13,500 tonnes and \$5.7 million in savings.
- **Single Houses Program**
  - Completed 800 energy audits, 20% retrofit for average savings of 40% reduction in space heating requirements.
- **Low Flow Program**
  - 17,268 toilets, shower heads and faucet aerators replaced since 2002.
  - Reduced greenhouse gas emissions by over 200 tonnes and saved almost \$900,000 as well as reducing the strain on the city's water infrastructure.



# Major Environmental Activities

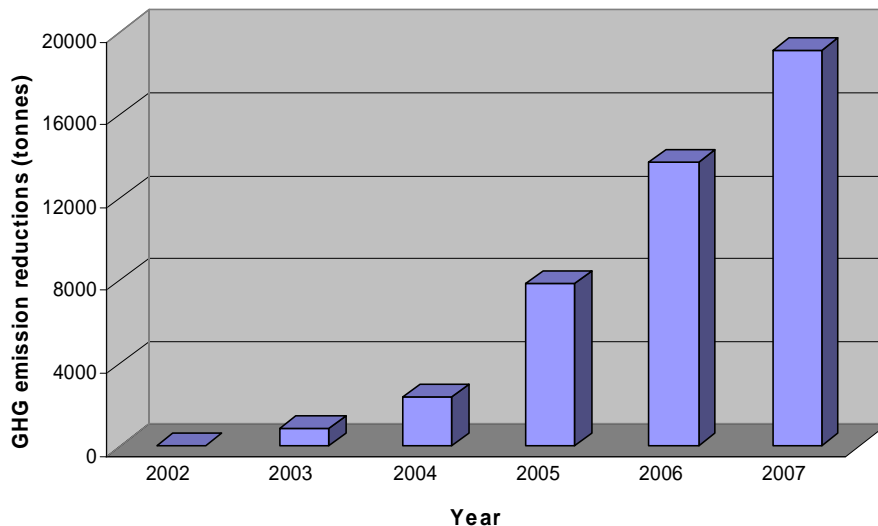
- Stand-by generation
  - Pilot replacement of stand-by generators with small turbines for demand management
- Wind turbine prototype
  - Feasibility of roof top turbines for power generation
- Feasibility of community energy systems



# Major Environmental Activities

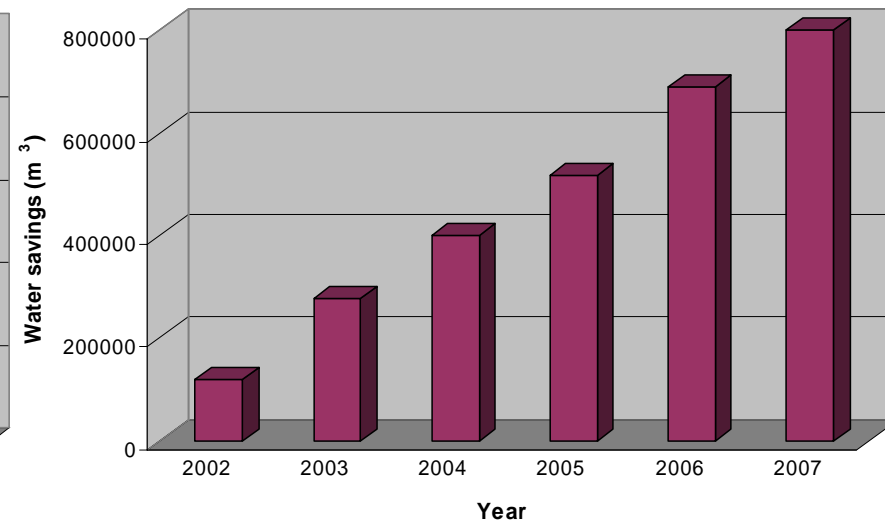
- Energy & water savings at TCHC:

Greenhouse gas (GHG) emission reductions  
(cumulative), 2002 - 2007



Savings: Over 19,000 tonnes of GHG emissions per year, equal to removing 10,000 cars from the road.

Water savings (cumulative), 2002 - 2007



Savings: Over 1 million cubic metres of water, equivalent to the water that would fit into the Rogers Centre with its roof closed.



# Major Environmental Activities

- Recycling
  - Implementation over a three year period with a goal of 26% diversion by 2008 at a cost of \$5,682,996 over 3 years.
  - 127 new garbage enclosures have been constructed, others have had extensive repairs.
  - Strategies to decrease illegal dumping in TCHC sites.
  - Participation in pilot programs on organics collection in multi-residential buildings and conversion of townhouse communities.
  - Blue Bag program for all apartment units



# Major Environmental Activities

- Education & outreach
  - Brahms
    - Won a Toronto Green Award in 2006; the Brahms model is now used in a number of ongoing engagement programs.
  - Community gardens
    - There are over 110 community gardens providing benefits to the community and the environment.
  - Training
    - The Green Works Primer: 200 front line staff have been trained to date.
    - Weatherization: 120 front line staff have been trained to date.
    - All programs now include education pieces.



# Other Environmental Activities

- Light Bulb Program
  - 400,000 in-unit CFL bulbs being installed
- Preventive maintenance program
  - Efficient running condition of all mechanical equipment
- Education, ongoing awareness & tenant engagement
  - Raising awareness of staff & tenants on the impacts of energy consumption, waste management, water conservation and other aspects of the green plan.
  - Education & awareness can generate savings from 2% to 16%.



# Other Environmental Activities

- The Green Office Program
  - Program is based on low and no cost solutions for changing behaviour at work.
  - Includes an audit to establish baseline data and a challenge to track that data.
  - Positive results: recycling bins, recycled office products and reusable mugs.



# Future Environmental Activities

- Long term activities
  - The Green ‘Screen’
  - A new Green Plan
  - Procurement