

A Washing Machine Replacement Pilot in multi-unit residential buildings



The Business

The Toronto Community Housing Corporation (TCHC) is the largest social housing provider in Canada. TCHC has more than 350 high-rise and low-rise apartment buildings in its portfolio, as well as about 800 houses and duplexes throughout Toronto.

Project Scope

The City of Toronto conducted a four-month pilot in 945 TCHC suites (1626 tenants) to measure water and energy savings of water-efficient washing machines, and to observe related operational, maintenance and tenant issues.

The pilot consisted of six diverse multi-unit residential buildings, owned and managed by the Toronto Community Housing Corporation. TCHC replaced 39 conventional top-loading washing machines with 39 water-efficient models.

Economic benefits

The pilot confirmed that water-efficient washing machines significantly reduce water and energy (hot water) use and costs. Water-efficient washing machines decreased water use by 45 per cent per cycle. Hot water consumption decreased by 62 per cent and number of wash cycles decreased by five per cent.

Actual water & energy savings:

- Annual savings: \$11.75 per suite (based on 2004 water rates)??
- Project cost: xx
- Annual water and energy cost savings: \$6,600 (\$8.80 per suite)
- Payback period: 2.9 years (includes installation, energy, and water and sewer costs)

Description:

- Six diverse multi-unit residential apartment building with 945 suites and 1626 residents.
- Installed 39 water-efficient washing machines
- Multi-unit residential buildings owned by the Toronto Community Housing Corporation
- Each participating building had the following equipment in centrally located coin-operated facility:
 - one pair of washer and dryer per
 - 40 suites in adult buildings
 - one pair of washer and dryer per 20
 - suites in family buildings

