

# Sustainable Neighbourhood Action Program

SNAP PROFILE



Toronto and Region  
**Conservation**  
Authority

**Extending the Reach of Home Retrofit Programs**

# HOME RETROFIT

## *Challenges*

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Climate action plans at all levels of government identify residential building energy retrofits as a key action towards greenhouse gas emission reduction goals. Climate change adaptation strategies recognize the role of other home retrofits, such as flood risk reduction measures and green infrastructure, in increasing community resilience. Many of these same actions have also been identified as solutions in watershed plans and municipal strategies. However, homeowner uptake is lagging far behind levels required for sustainability.

Securing homeowner engagement is challenging, and even when homeowners become engaged, a variety of barriers limits their uptake. Typical programs apply a one-size-fits-all approach which assumes homeowners make rational decisions influenced by price (rebates, incentives) and information. Less attention has been devoted to interventions that focus on socio-cultural and behavioural factors that overcome barriers and influence participation.

### HOMEOWNER BARRIERS:

- Lack of awareness
- Misperceptions of urgency/need
- Competing priorities, lack of time
- Hassle of navigating the process



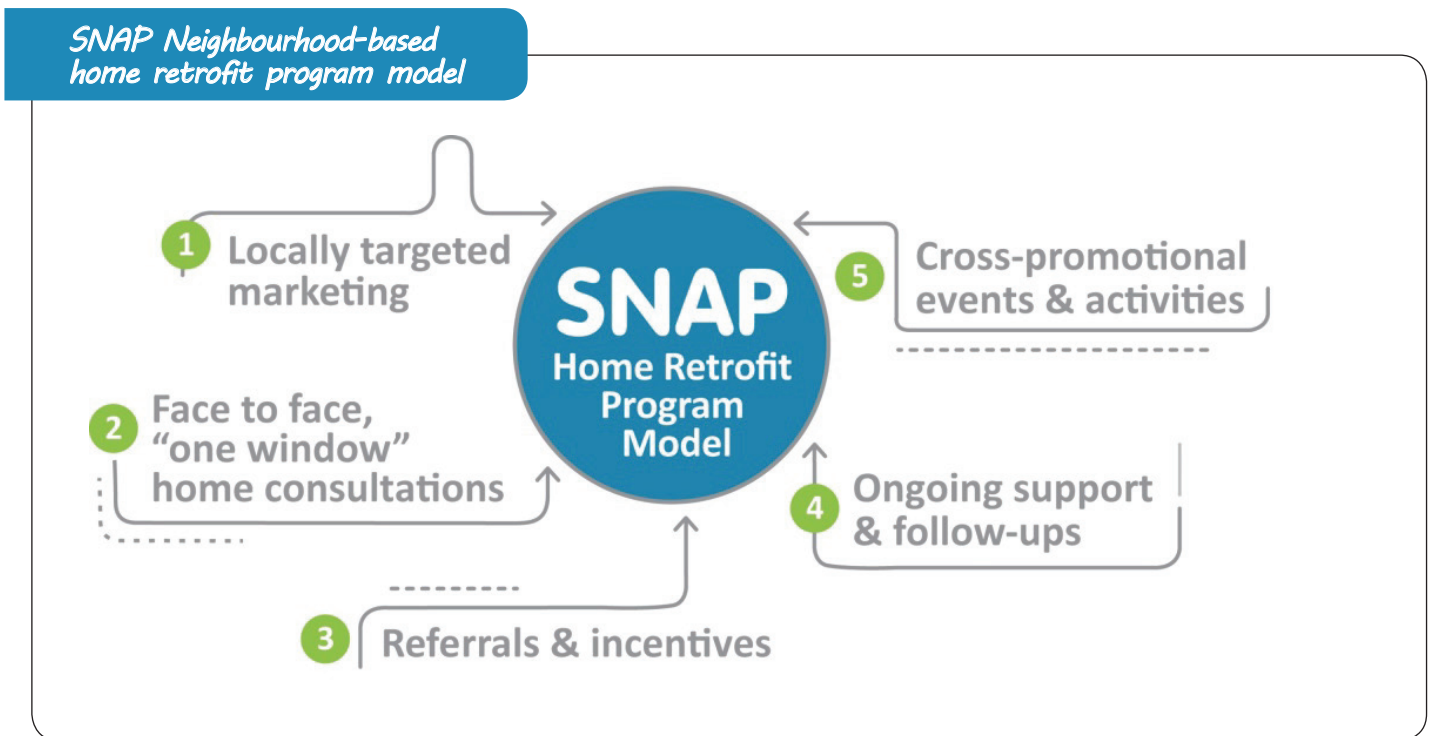
## SNAP'S STRATEGIC SOLUTION

*Neighbourhood-based, citizen-centred,  
and multi-objective*

SNAP's neighbourhood-based home retrofit program model is focused on responding to local interest (thus getting homeowner attention to begin deeper engagement). It uses the strengths inherent in face-to-face interactions with a local delivery agent and empowers residents through direct coaching. Leveraging existing provincial, municipal & utility retrofit incentives, and neighbourhood-scale benchmarking data, the neighbourhood-based program designs are customized to priority retrofit needs of the local building stock and demographics and draw on an understanding of homeowner interests, motivators and behaviours.



Figure 1



## CASE EXAMPLES

Three SNAP neighbourhood home retrofit programs, each with a distinctive, locally-tailored engagement strategy, all promote a common suite of home retrofit actions.



### HARVEST THE RAIN

Black Creek SNAP, Toronto

#### PRIORITY RETROFIT ISSUES

Basement flooding, downspout connections, limited urban forest, and higher than average energy use

#### ENGAGING ON LOCAL INTERESTS

A passion for growing food; conservation is a way of life.

#### PROGRAM STRATEGY

“Harvest the Rain” program offers discounted rain barrels as an incentive for securing participation in a home consultation, during which customized advice is provided on up to five separate home retrofit actions, including:

- water/SWM
- basement flood risk reduction
- energy efficiency
- tree planting and
- waste diversion/harvest donation.

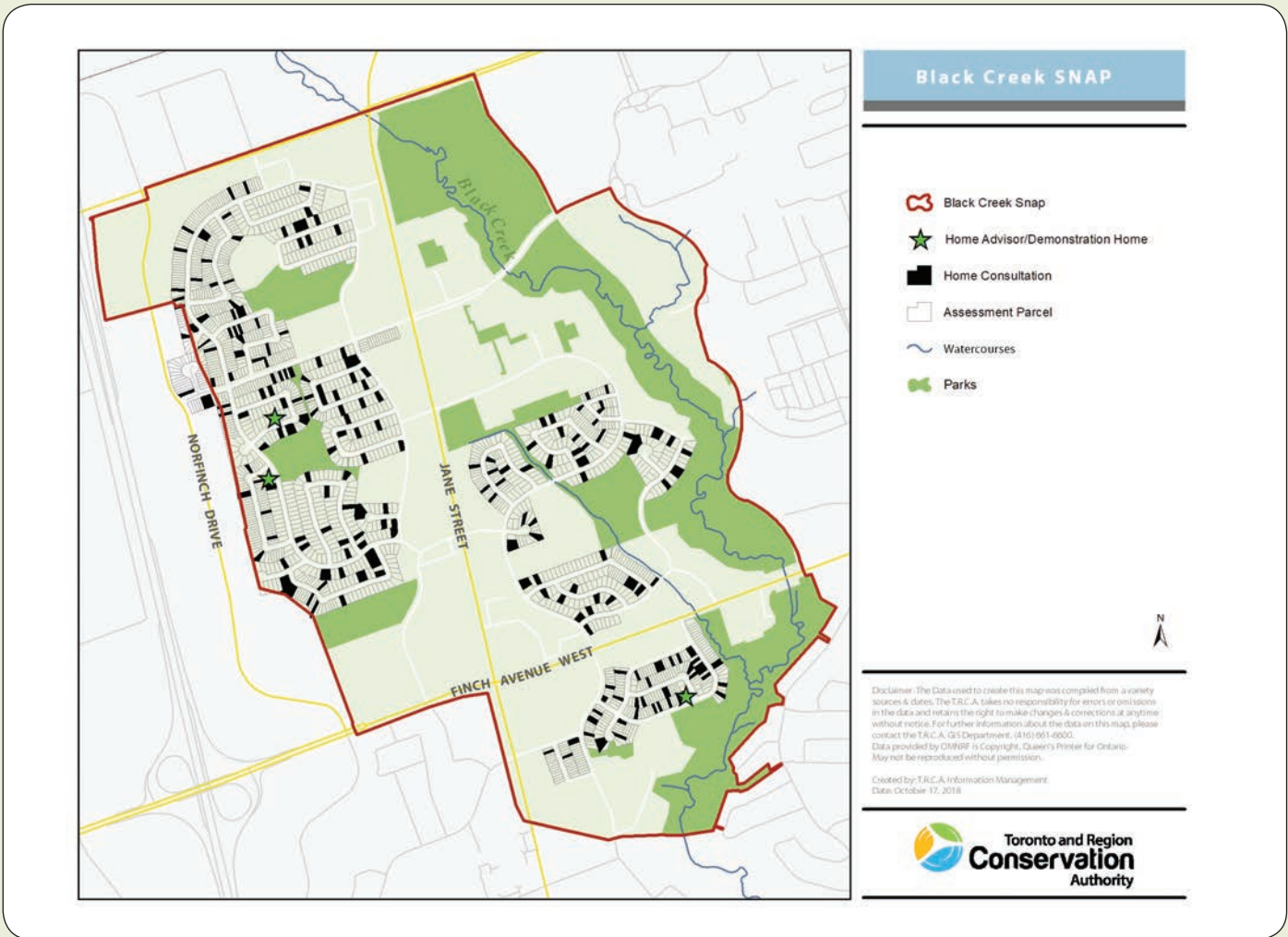
Commitments and follow up calls encourage action.

#### RESULTS

Out of the 184 homes reached through follow up calls:

- 38% implemented 69 significant energy retrofits
- 49% planted 115 trees
- 56% implemented 103 basement flooding prevention measures
- among many other actions.

**Figure 2: Driving uptake – 14% of the 1750 neighbourhood homes have engaged in home consultations, conducted seasonally (May-Dec) 2013-2016 delivered by two half time staff.**



“The Program Advisors’ visit to our home and surrounding garden was informative and friendly. The generous energy saving package of light bulbs, shower heads and programmable thermostat was certainly welcome, as well!”

– **Jessie Kear, Harvest the Rain participant**

“I think it’s a great program...it really got me thinking about what I can do to prevent flooding and save energy, while still helping the environment. Without the program, I wouldn’t really be thinking that way.”

– **Dainna Fletcher, Harvest the Rain participant**

**Program Delivery Partners:**

*City of Toronto, Enbridge Gas, Toronto Hydro, Tree Mobile, Rainbarrel.ca, Black Creek Community Farm, Second Harvest, Local Enhancement and Appreciation of Forests (LEAF), FoodShare.*

**Program funding provided by:**

*City of Toronto, Enbridge Gas, Ontario's Great Lakes Community Guardian Fund and Local Food Fund, Environment Canada's Eco-Action Program, Environmental Defence's Community Climate Action grant, Toronto Parks and Trees Foundation's Every Tree Counts Community Grant.*

## TECHNOLOGY DRIVEN HOME RETROFIT PROGRAM

Bayview Glen SNAP, Markham

<b>PRIORITY RETROFIT ISSUES</b>	Higher than average energy and water use, local flooding, infiltration and inflow to sanitary systems, aging urban forest
<b>ENGAGING ON LOCAL INTERESTS</b>	Despite having higher than Regional average energy and water use rates, these homeowners believe they are efficient and therefore do not place priority on seeking common home retrofits. However, they take pride in having the latest technology, provided they see the return on investment.
<b>PROGRAM STRATEGY</b>	SNAP attracts homeowners by hosting technology themed events (e.g. EV vehicles, renewable power) and uses local benchmarking to encourage their participation in customized home consultations, where commitments and the promise of follow up calls help to incent action.
<b>RESULTS</b>	Although challenging to engage, these homeowners are quick to act on sound customized advice. All residents visited during home consultations said their next car would be an EV and already 50% of them had implemented significant energy retrofits within one year of the consultation.



### **Program Delivery Partners:**

City of Markham, Enbridge, Powerstream/Alectra, Solar Ontario

### **Program funding provided by:**

Region of York, Environment Canada's Eco-Action Program and Environmental Defence's Community Climate Action grant.

## DIY HOME ENERGY PARTIES

County Court SNAP, Brampton



### PRIORITY RETROFIT ISSUES

Higher than average energy and water use, declining urban forest

### ENGAGING ON LOCAL INTERESTS

Tapping into a Do-It-Yourself (DIY) culture and a desire to meet culture and a desire to meet neighbours, SNAP facilitates DIY Home Energy Parties.

### PROGRAM STRATEGY

Hosted by resident leaders, SNAP arranges a trainer, who demonstrates home energy retrofits and informs residents about other strategic retrofits and available programs. SNAP leads follow ups and reporting.

### RESULTS

Since 2016, residents have hosted nine parties with 63 participants, and been trained in weatherproofing through window and door air sealing. They see a home energy assessment with blower door test and air leakage report, and examine insulation, vapor barrier and outlet condition through hands-on demonstration. Participants engage in interactive discussions on home heat and energy loss, with concentration on the furnace, hot water heater and appliances. The one-window programming has supported referrals to other programs including GreenON, Enbridge Home Energy Conservation Program, Affordability Fund, Save ON, and the Region of Peel WaterSmart.

“In 2016, with the assistance from the TRCA’s SNAP team, I hosted a County Court DIY Energy party at my home. At the party, my family members, neighbours and I learned hands-on about simple upgrades that help improve home energy efficiency using tools and materials that can be easily and inexpensively purchased at any hardware store. This is just one example of ways in which the SNAP program helps to make the neighbourhood more sustainable by increasing local knowledge, local skills and helping residents take actions at home.” – **Harpreet Singh, County Court resident, Brampton**

“I attended a demonstration workshop of winterproofing and learned about weather sealing doors and windows ...the SNAP project provided the inspiration and support for me to install solar panels on my roof as well as landscaping that requires less watering and uses native plants.” – **Balu Mistry, County Court resident**

#### **Program Delivery Partners:**

*Region of Peel, City of Brampton, Enbridge, Hydro One Brampton/Alectra*

#### **Program funding provided by:**

*Environment Canada’s Eco-Action Program and Environmental Defence’s Community Climate Action grant.*

## GREENHOME MAKEOVER

County Court SNAP, Brampton



*Raingarden*



*Energy Actions*

A Green Home Makeover transformed one neighbourhood home to showcase a range of indoor and outdoor retrofits and serve as a catalyst for community engagement. SNAP launched a video series, held tours of the home to help other homeowners make sustainable changes in their own home. After 2 years, monitoring results showed significant results - annual energy savings of 44% and water savings of 41%, permeable pavers capture runoff from 21 mm storms and the raingarden captures runoff from 27 mm storms.

***Further details, reports and videos can be found on our website.***



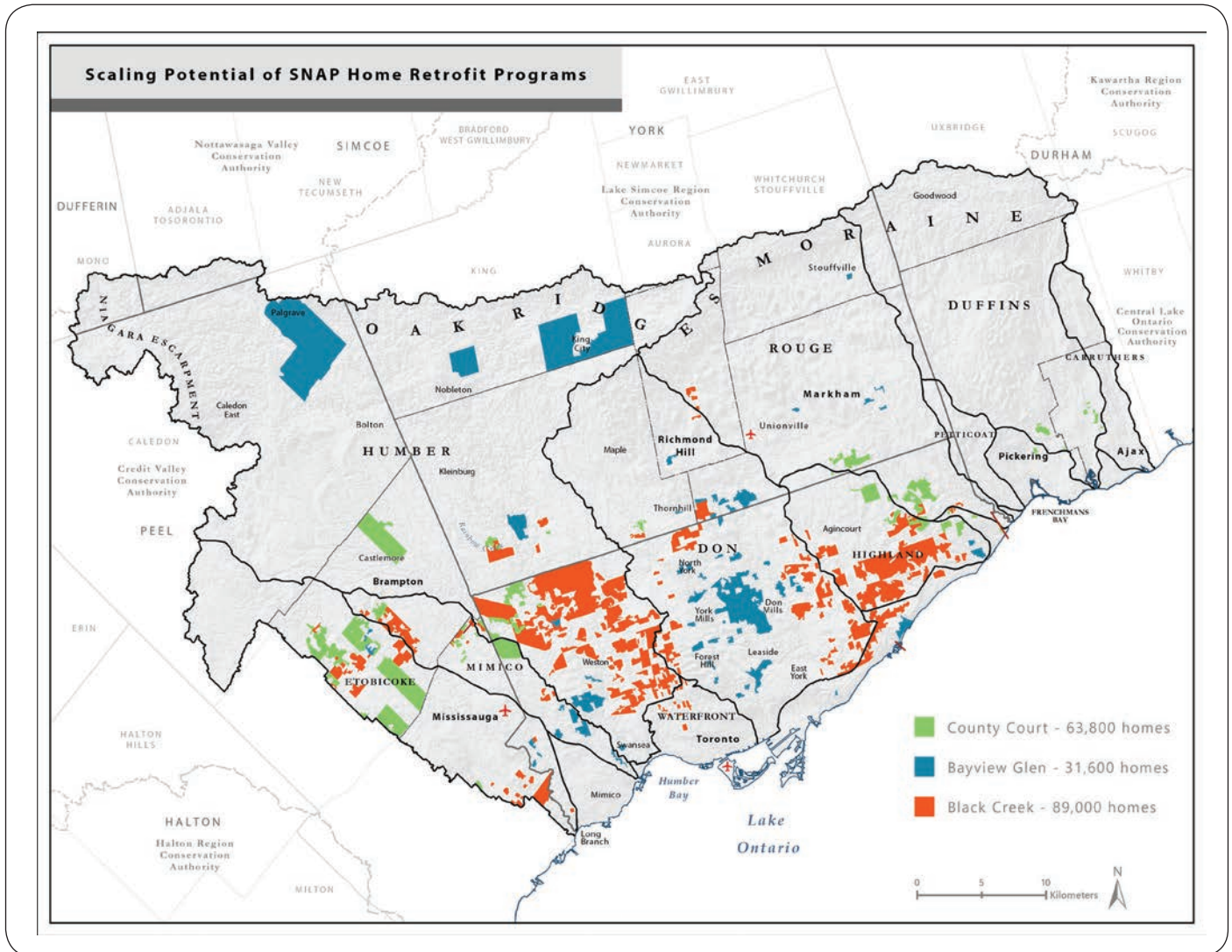
*Permeable Paving*



## Scaling - SNAP's larger market potential

SNAP's Home Retrofit Program engagement and delivery tactics can be applied to 1000s of other homes in the Greater Toronto Region.

Figure 3: Scaling Potential of SNAP Home Retrofit Programs



### Testing scalability: Rexdale

In 2017, TRCA pilot-tested the scalability of Black Creek SNAP's Harvest the Rain program by delivering it in University Heights and Rexdale, neighbourhoods possessing similar social characteristics. Initial results indicated excellent replicability, based on strong resident participation and evidence that residents implemented retrofit actions within the first year.

## Observations/Take-aways

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Several factors associated with SNAP's home retrofit program design and TRCA's circumstances as an organization have contributed to our success. Key factors for the successful application of this neighbourhood home retrofit model include:

- Ability to engage homeowners on multiple interests through one-window program delivery of complementary partner programs.
- Ability to engage through locally hired staff and locally trusted networks
- Position as a local backbone organization – maintain vision, track, coordinate with other delivery organizations and groups and provide consistent, ongoing support as a trusted face in the community.
- Ability to make a long-term commitment – homeowner action takes time and requires progressive steps with regular nudges and support.

## What's Next?

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The SNAP Program welcomes interested partners in its ongoing and new initiatives:

1. **New residential retrofit program** is beginning in West Bolton SNAP (Caledon).
2. **SNAP Residential Retrofit Program Evaluation and Neighbourhood Typologies** – TRCA and the Ontario Climate Consortium are undertaking a research evaluation of SNAP's neighbourhood-based residential retrofit model and aim to recommend customized delivery tactics for different neighbourhood typologies, thus enabling scale-up to other similar Ontario communities.



## SNAP – A Progressive Approach to Implementation

SNAP is a proven solution for sustainable urban renewal and climate action that places neighbourhoods at the centre of the implementation framework. SNAP helps municipalities and community partners improve efficiencies, draw strong local support and build innovative partnerships for implementation of a broad range of initiatives in the public and private realms.

### See other SNAP Profiles in this series:

- Extending the reach of home renovation programs
- Advancing integrated infrastructure projects
- Forging new partnerships for MUR and ICI renewal
- Strengthening community health, wellbeing and resilience

*In collaboration with:*



### Contact Us

To learn more about SNAP, associated activities and ways to get involved contact:  
Sonya Meek, Senior Manager, Sustainable Neighbourhoods  
smeek@trca.on.ca, 416.661.6600 x5253



*A program of:*

