



Natural Resources
Canada

Ressources naturelles
Canada

Canada



CARROT REWARDS

The Opportunity

To align with Natural Resources Canada's goal of increasing Canadian's energy-efficient behaviours, Carrot Rewards identified an opportunity to educate and drive energy-efficient practices among users within the context of driving or in their home.

Users had the opportunity to identify where they would like to learn more about energy-efficient behaviours: while driving or in the home.



CARROT REWARDS

Objectives

By aligning with Natural Resources Canada's **strategic goals**, Carrot Rewards sought to accomplish the following shared objectives:

1. Build and improve **knowledge** and understanding around energy-efficient practices while driving or in the home
2. **Identify** users' current perceptions and practices relating to energy-efficiency while driving or in the home
3. **Promote** a Canadian platform that allows individuals to understand and access specific resources related to eco-friendly driving techniques or home upgrades

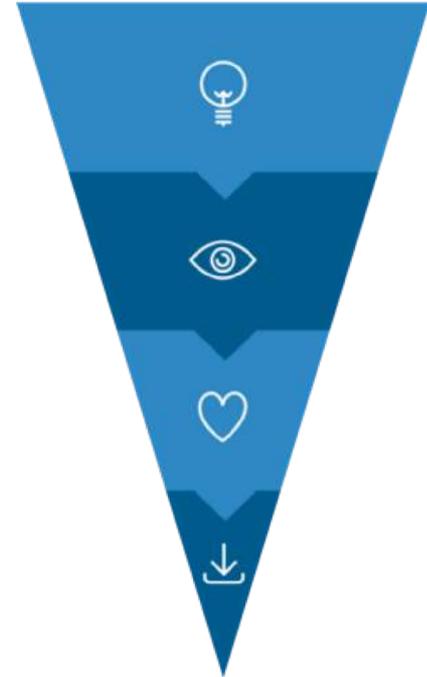


CARROT REWARDS
The Framework

Awareness:
1.3 million quizzes delivered

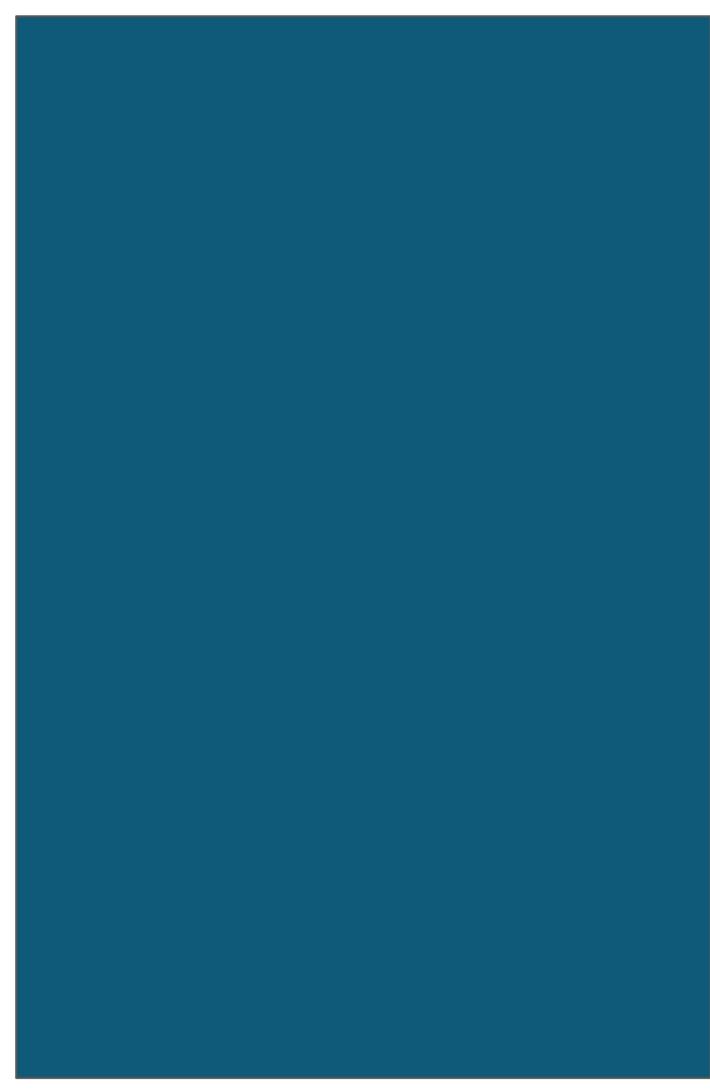
Interest:
840,000+ quizzes completed

Action:
57,847 'clicks' to Natural Resources Canada's resources



8,647 ecoDriving courses completed

18,083 postal codes entered for service organizations



Awareness



Overview
Awareness

208,666 started the program

66%

Female

53%

Aged 25 to 54 Years

74%

Ontario

Users who started the program **reflect** the entire Carrot Rewards users base



Overview

Awareness

80%

Aware that Natural Resources Canada has **programs and resources** that help individuals **become more energy-efficient** at home (162,546 users)



Overview

Awareness

Energy Saving Programs

34%

(71,272 users)

Driving Program

66%

(137,394 users)

Housing Program

Users had the opportunity to **select** where they would like to **save the most** and **become more energy-efficient**: while driving or at home



Overview
Awareness

	Female	Aged 25 to 54 Years	Ontario
Driving Program	64%	52%	75%
Housing Program	67%	54%	74%

Users who selected the **driving program** were **more likely to be male and older** compared to users who selected the housing program



Driving Program Awareness

167,599
Offers Completed

Think Green, Save Green

71,272

Shift Into Eco-Drive!

50,185

Drive Steady And Save

38,384

Keep It In Eco-Drive

29,342

Choose A Greener Ride!

26,195

High-Tech Fuel Savings

23,493

23,493
Completed entire program

Note. The introductory offer to begin the program was completed by 208,669 users, of which 71,272 users (34%) wanted to save energy through learning more about the driving program



Driving Program
Awareness

45%

Could not correctly identify why it's important to be a fuel-efficient driver

74%

Did not know how many seconds it takes to accelerate a vehicle to 20km/hr

70%

Could not correctly identify strategies that will help maintain a steady speed

Users were **exposed to the correct response**, driving increased awareness of **fuel-efficient driving**



Driving Program
Awareness

73%

Think Plug-In Hybrid Vehicles
produce carbon dioxide emissions in
electric-only mode

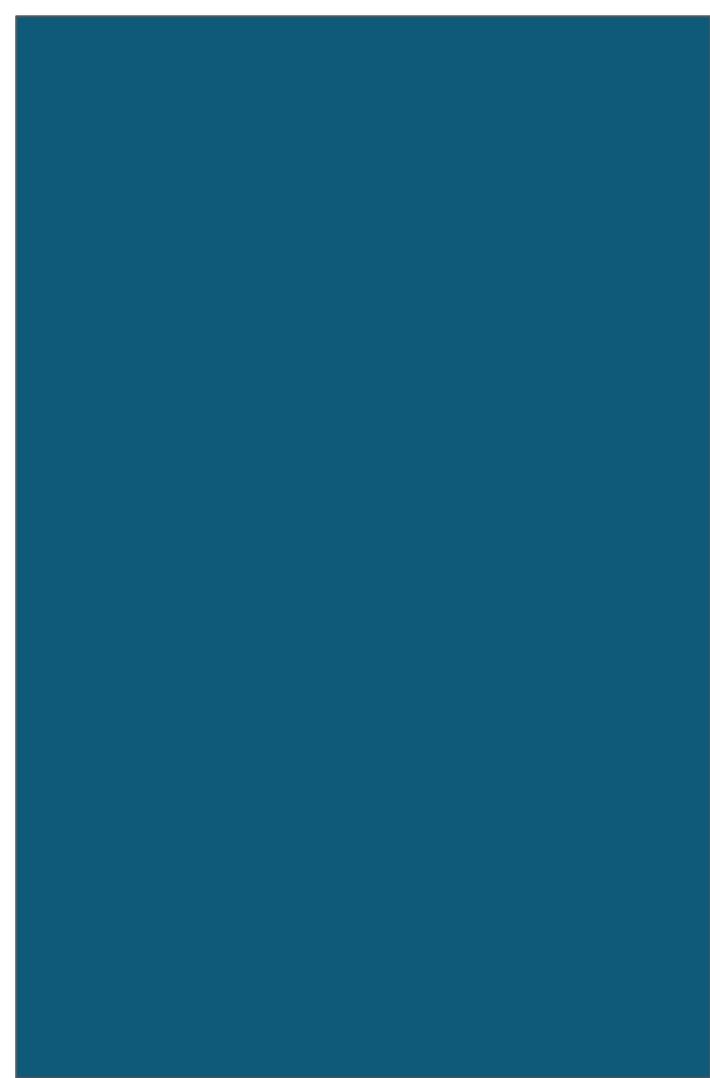
70%

Did not know the benefits associated
with turbochargers

36%

Did not know when an engine restarts
with stop-start technology

Users were **exposed to the correct response**, driving increased
awareness of **new vehicle and engine technologies**



Interest



Driving Program

Interest

Beginning of Program

Maintaining a steady speed (89%)

Accelerating gently (79%)

Anticipating traffic (70%)

96% of users (48,067) report having used the above driving techniques



Driving Program

Interest

Importance

Purchase price (86%)

Fuel consumption/fuel efficiency (84%)

Operating costs (74%)

Motivations

Lower fuel costs (87%)

Better for the environment (69%)

Lower emissions (63%)

Top three responses for what is **important** and what **motivates** users when **purchasing a vehicle**



Driving Program

Interest

85%

Would **consider** a vehicle with **new engine features**

A total of **20,001** users would **consider** a vehicle with **new engine features** like a turbocharger, cylinder deactivation system or stop-start technology



Action



Driving Program

Action

94%

Adopted driving techniques since **starting the Carrot Rewards program**
to reduce their fuel consumption

At the end of the driving program, a total of **27,702** users **adopted** any of the **5 driving techniques**



Driving Program

Action

22,287

Clicks to Natural Resources Canada's online resources



Driving Program

Action

8,647

ecoDriving courses completed



Driving Program

Action

Users Completed Course

58%

Female

70%

Aged 25 to 54 Years

74%

Ontario

Users who **completed** the ecoDriving course were **more likely to be male**,
between the ages of **25 and 54 years**



Overview

Awareness

Energy Saving Programs

34%

(71,272 users)

Driving Program

66%

(137,394 users)

Housing Program

Users had the opportunity to **select** where they would like to **save the most** and **become more energy-efficient**: while driving or at home



Housing Program Awareness

464,385
Offers Completed

Think Green, Save Green

137,394

Smart Ways To Save Energy At Home

98,157

Improve Your Home's Energy Efficiency

75,715

Get In Stride, Know Your Guide

65,780

Home, Sweet, Energy-Efficient Home!

57,565

Get Energy-Smart, Get EnerGuide

52,529

EnerGuide: How Does Your Home Rate?

45,117

More EE's, Please!

35,498

Happily Energy-Efficient, After

34,024

34,024
Completed entire program

Note. The introductory offer to begin the program was completed by 208,669 users, of which 137,394 users (66%) wanted to save energy through learning more about the housing program



Housing Program
Awareness

92%

Aware of the ENERGY STAR® label (90,277 users)



Housing Program
Awareness

51%

Did not know windows were
ENERGY STAR certified

45%

Think that new homes are always
hardwired with ENERGY STAR
certified products

81%

Think that power bars are energy
efficient improvements that can help
keep the heat in and cold out

Users were **exposed to the correct response**, driving increased
awareness of **energy-efficient home improvements**



Housing Program **Awareness**

80%

Think that an EnerGuide Home Evaluation examines a neighbourhood to determine the energy efficiency

62%

Did not know the EnerGuide ratings and labels are found on existing homes

45%

Did not know the EnerGuide label for homes contains rated greenhouse gas emissions

Users were **exposed to the correct response**, driving increased awareness of **EnerGuide label for homes**



Housing Program
Awareness

64%

Think the EnerGuide Energy
Audit is conducted online

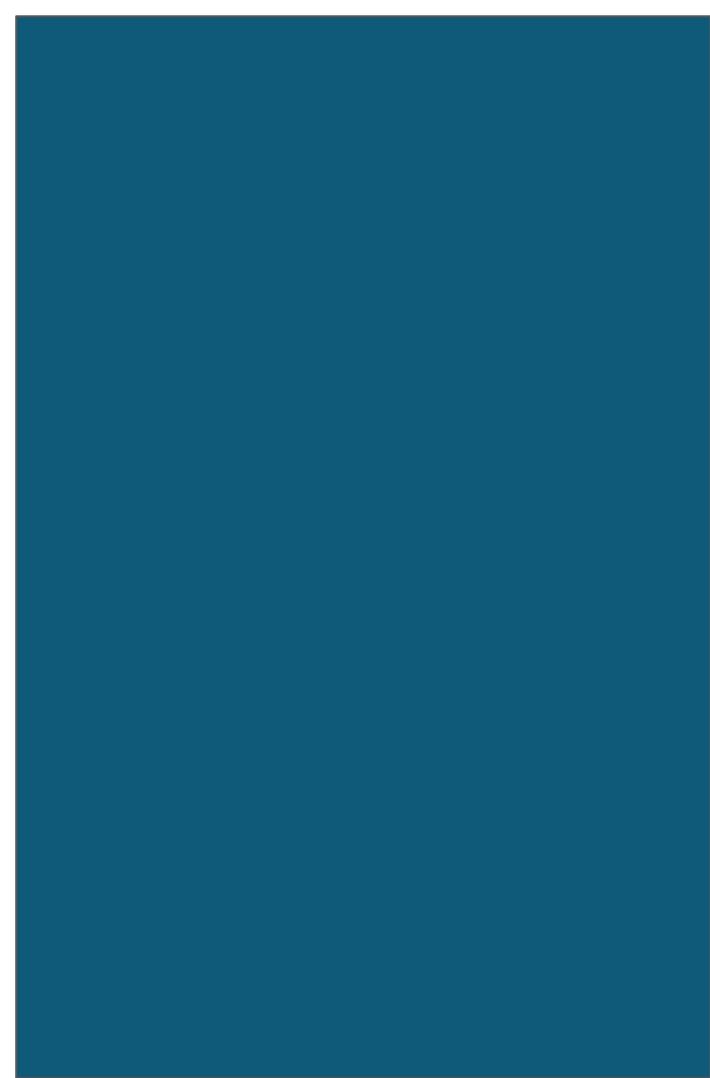
55%

Think they should book an energy
audit after speaking to an expert
energy advisor

43%

Did not know an air barrier is an
upgrade that can help keep the
home warmer

Users were **exposed to the correct response**, driving increased
awareness of **EnerGuide Energy Audits**



Interest



Housing Program

Interest

Perceptions: Viewing Product

Energy-efficient (93%)

Environmental friendly (75%)

Cost-effective (73%)

Perceptions: Viewing Label

Helpful (57%)

Informative (56%)

Easy to understand (37%)

54%

(35,630 users)

Used label to compare different models of the same product

Top three **perceptions** towards the **EnerGuide label**. There is opportunity to **educate and increase uptake** of EnerGuide label



Housing Program

Interest

47%

(30,709 users)

Plan to shop in-store for their next household appliance purchase

Online Filter Options

Cost (70%)

Energy efficiency (57%)

User rating (52%)

Shopping behaviours of Carrot Rewards users



Housing Program

Interest

Advice Obtained By:

Online and/or paper resources (60%)

Professional opinion (55%)

Social media (21%)

Type of Online Resources:

ENERGY STAR® label (65%)

Expert advice and/or reviews (44%)

EnerGuide label (39%)

Shopping influences of Carrot Rewards users



Action



Housing Program

Action

Environmental Knowledge Metrics

7%

Increase

New homes not having ENERGY
STAR® products hardwired

28%

Increase

EnerGuide Home Evaluation
examinations

Among users who completed the entire program, a pre-post analysis was conducted by examining **proportion of correct answers** at baseline and follow-up



Housing Program

Action

Environmental Knowledge Metrics

4%

Increase

Household energy sources

14%

Increase

Energy advisors examination of a home's energy performance

Among users who completed the entire program, a pre-post analysis was conducted by examining **proportion of correct answers** at baseline and follow-up



Housing Program

Action

Environmental Knowledge Metrics

2%

Decrease

Gigajoule usage among typical
Canadians

Among two topics, there were slight decreases in environmental knowledge metrics

3%

Decrease

EnerGuide label information

This may be attributed to: (1) minimal exposure to educational topics, (2) time between follow up quiz, (3) structure of questions used in pre-post analysis

There is opportunity to deliver additional environmental programs to increase knowledge of these topics



Housing Program
Action

51%

Took steps to improve the **energy efficiency of their home**

At the end of the housing program, a total of **17,298** users took steps
to **improve their home's energy efficiency**



Housing Program
Action

52%

(17,845)

Lowered thermostat

24%

(8,275)

Installed programmable thermostat

17%

(5,931)

Installed ENERGY STAR® certified
CFL or LED bulbs

Users took steps to improve their home's energy performance



Housing Program

Action

35,550

Clicks to Natural Resources Canada's online resources



Housing Program

Action

18,083

Postal codes entered to service organizations for existing homes



Housing Program

Action

Users Entered Postal Code

61%

Female

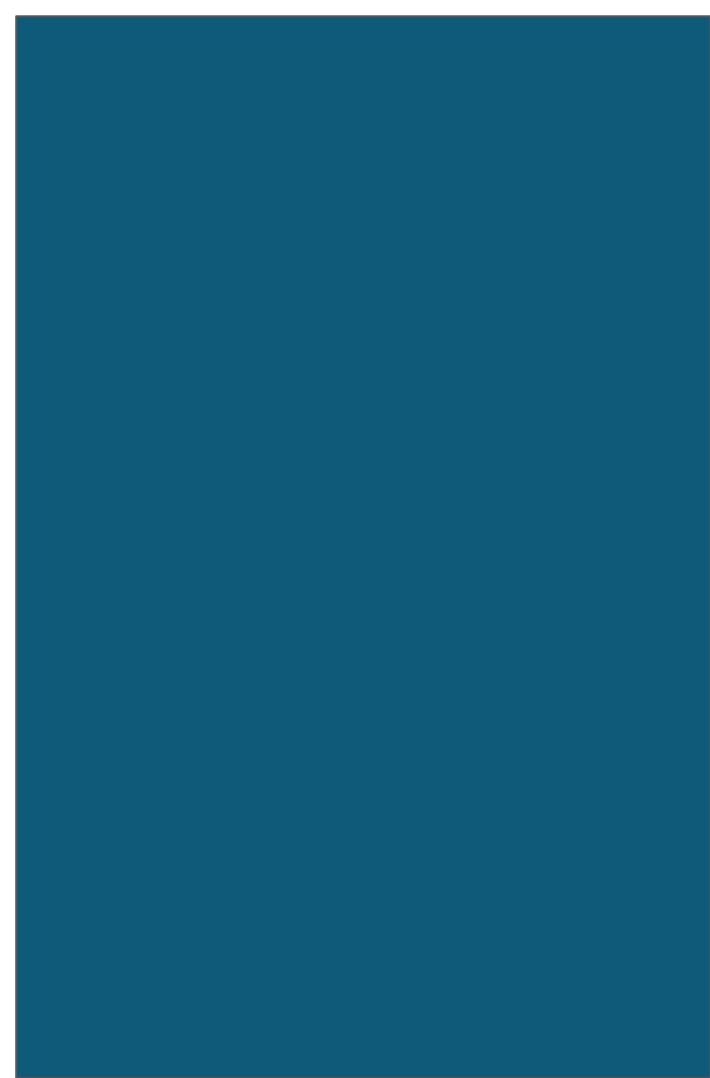
70%

Aged 25 to 54 Years

73%

Ontario

Users who entered their postal code were **more likely to be male**, between the ages of **25 and 54 years**



Future Opportunities



CARROT REWARDS

Future Opportunities

Following Natural Resources Canada's program, there is opportunity to follow-up with existing users, as well as to engage new users, driving further knowledge of energy-efficient practices on key objectives and mandates:

Repeat Program: deliver a yearly program to reach new Carrot Reward users and compare results to previous years

Impact Program: objectively measured environmental behaviour change (smart thermostats, API integration, retail activations and responsible purchases, etc.)

Dissemination of Program: develop knowledge translation plan to disseminate program features and results to stakeholders

