



Climate action for a  
healthy, **equitable**,  
prosperous **Toronto.**

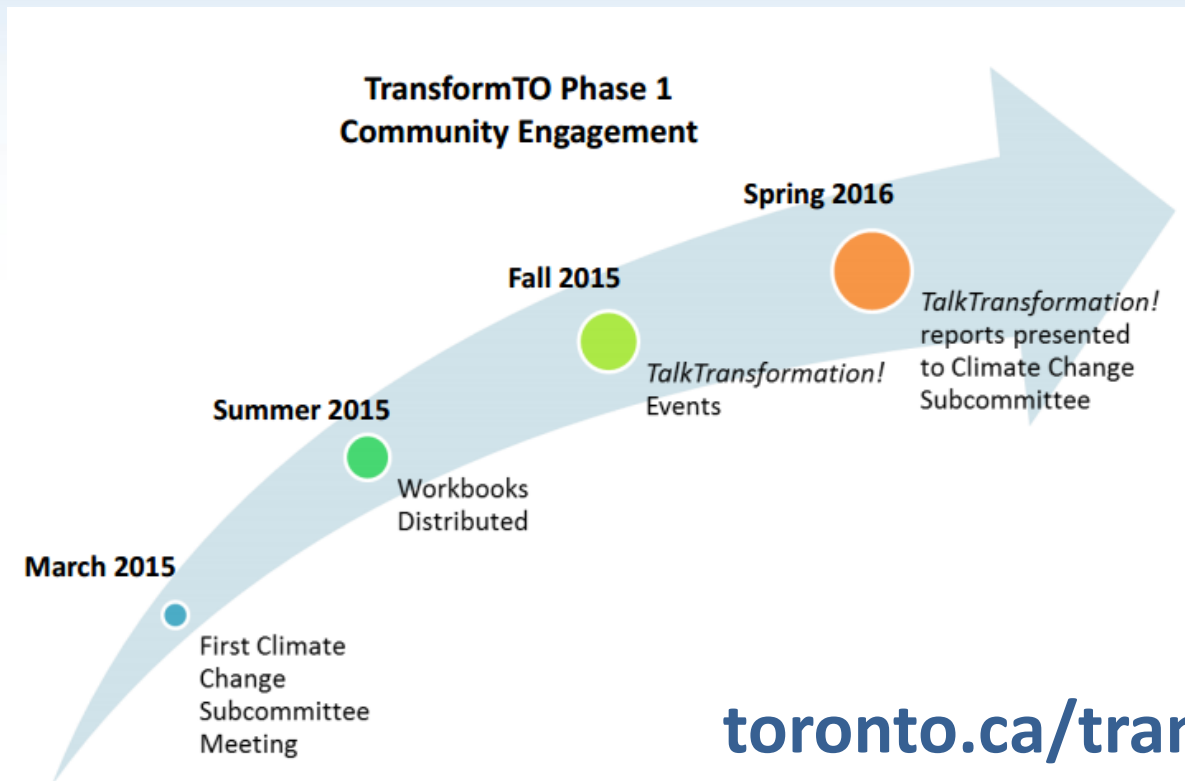
# TALK

# transformation!

**BUILDINGS AND ENERGY SYSTEMS  
IN A LOW-CARBON TORONTO**



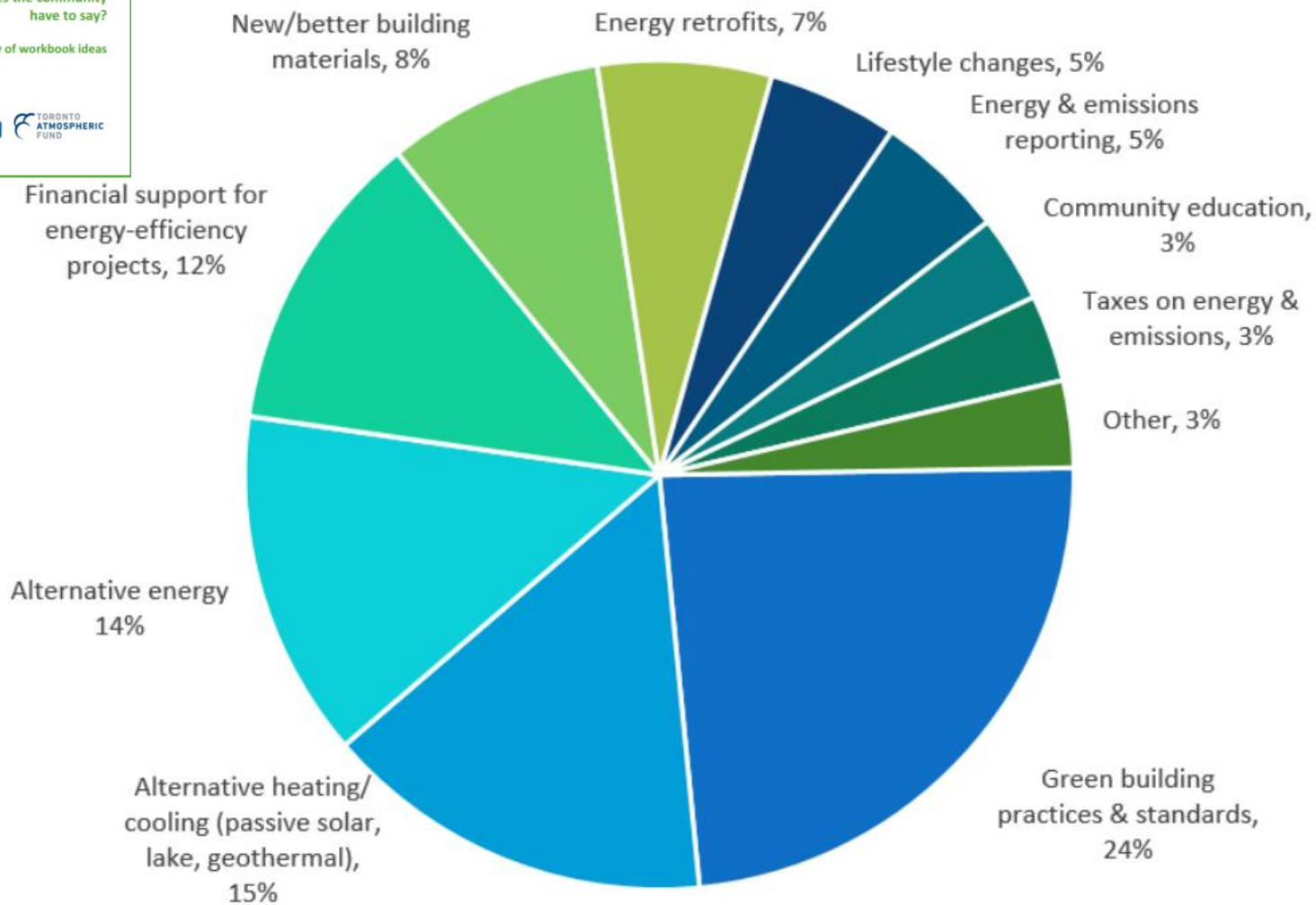
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[toronto.ca/transformTO](http://toronto.ca/transformTO)



## Key Ideas



# #TransformTO



# @LiveGreenTO



# Where do Toronto's **greenhouse gas emissions** come from?\*



**Transportation**  
(road vehicles)

41%

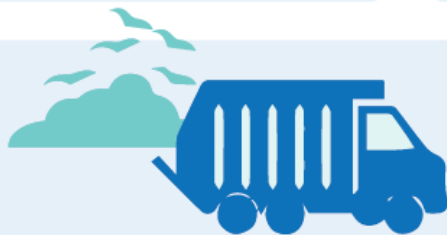


**Residential**

21%

**Commercial  
& Industry** (small)

21%



**Waste Management**  
(transportation, landfill)

11%



**Commercial  
& Industry**  
(large)

6%

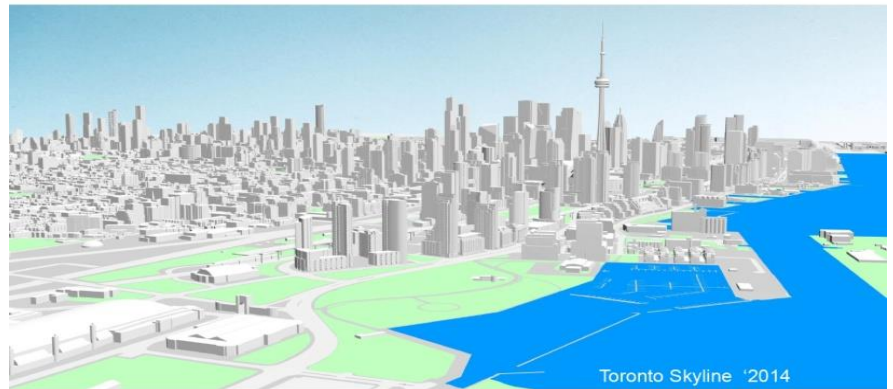
\* Based on 2012 emissions of 21 million tonnes

# Green Development

- Rapid development with more cranes in the air than any other North American city in 2012.
- Buildings are a long-term investment with 50+ year life span.
- Toronto Green Standard ensures a low-carbon built form.



2000



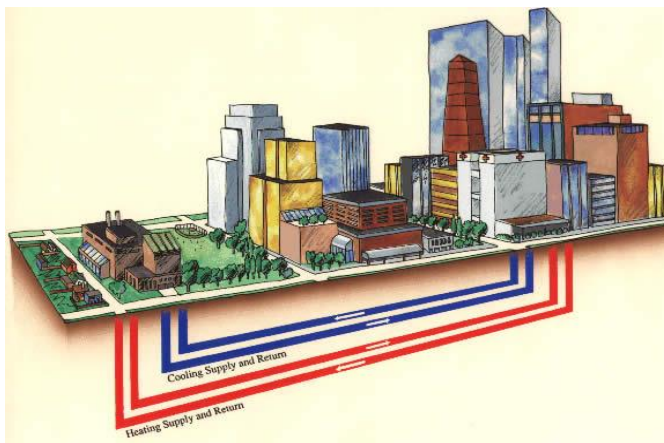
2014





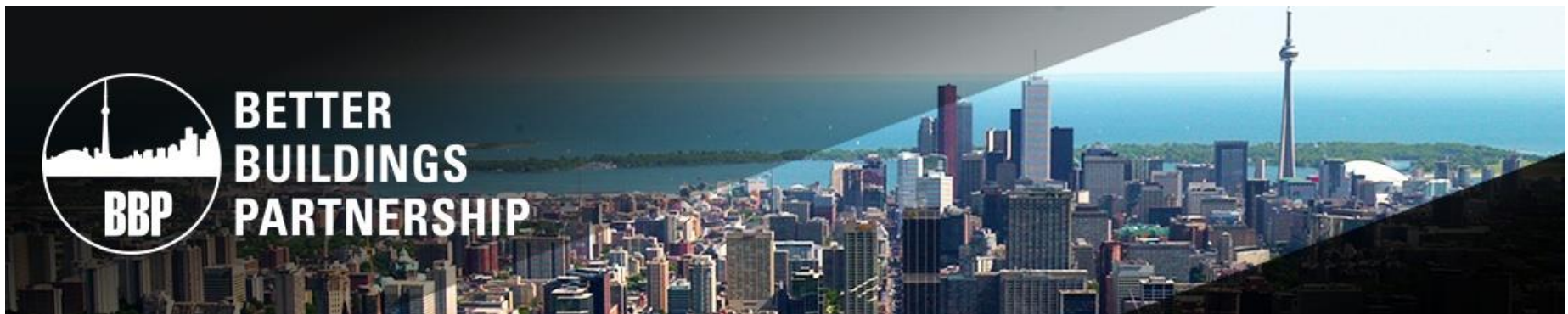
# Community Energy Planning

- Not “building-by-building” but at the neighbourhood scale
  - Conservation / efficiency
  - Renewable Energy Resources
  - District Energy



# Better Building Partnership

- Provides expertise, resources and financial assistance to building owners, managers and developers to aid in successfully implementing energy efficiency measures in existing and new construction buildings.
- Eliminated equivalent of 600,000 tonnes of CO<sub>2</sub> emissions





# HELP/Hi-RIS

- Cost-neutral programs that support energy and water efficiency retrofits.
- Hi-RIS
  - 3 year, \$10 million program offering low interest financing to multi-unit residential buildings.
- Home Energy Loan Program (HELP)
  - City-wide program available to all qualifying residents
  - 1<sup>st</sup> of its kind in Ontario.



# Energy Reporting & Benchmarking

- You can't manage what you don't measure.
- ERB potential benefits by 2035 in Toronto:
  - 21 Million eMWh cumulative energy savings
  - 3.3 Million tonnes eCO<sub>2</sub> avoided emissions
  - \$1.9 Billion in cumulative utility cost savings



Energy Reporting  
& Benchmarking



**We need to chart  
the right course,  
today's decisions  
determine  
tomorrow's climate.**

# Tonight's Speakers

- **Michael Brooks**, REALpac
- **Katie Harper**, Project Neutral
- **Leslie Malone**, Acadia Centre







**S. Michael Brooks, CEO**  
Real Property Association of Canada

**REALpac**

# PROJECT neutral







# Acadia Center

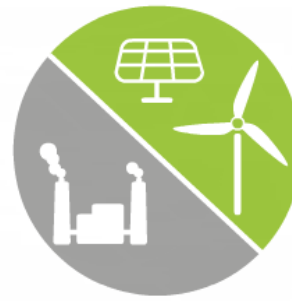
**Advancing the Clean Energy Future**



Electrify Buildings  
and Transportation



Modernize the Grid

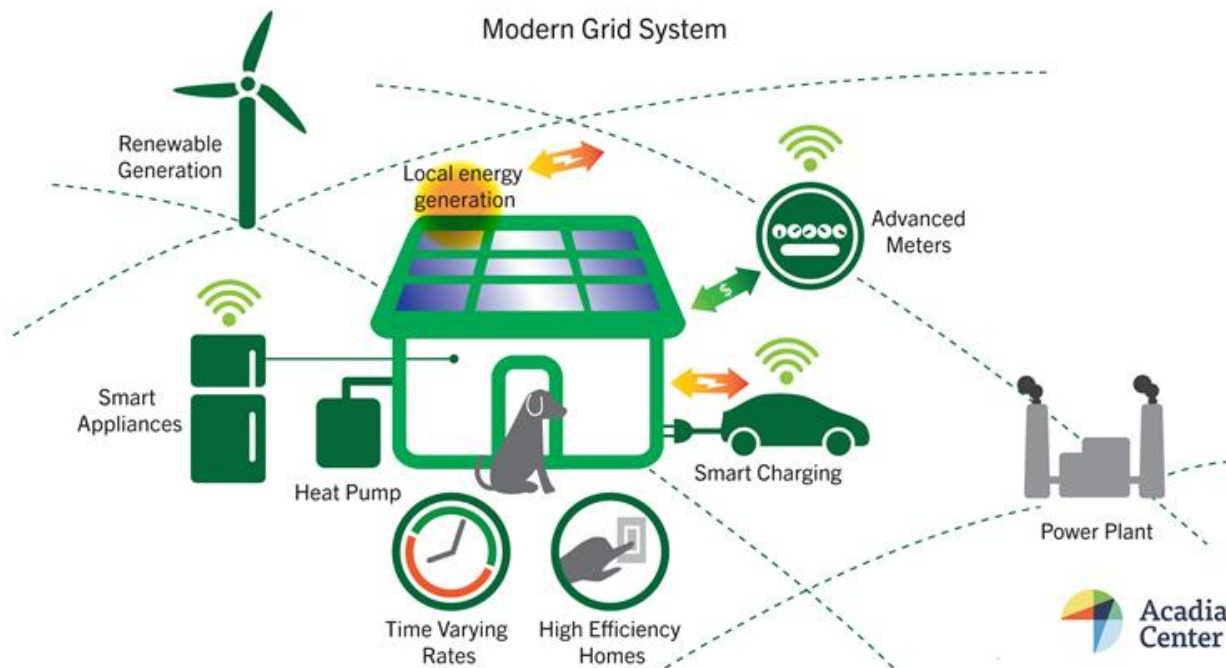


Clean Electric Supply



Maximize  
Energy Efficiency

## Low Carbon Power + New Electric Technologies = Pathway to Deep GHG Reductions



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# Thank you!

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