



# ENERGY TRANSITIONS

## Brampton's Urban & Energy Evolution

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- Climate change is one of many reasons to develop a Community Energy and Emissions Reduction Plan. Another reason is ensuring Brampton is in a position to take advantage of the opportunities associated with the modern energy transition already underway.
- Energy transitions are not new - Ontario has already experienced two energy transition since European settlement: 1) the wide use of coal and steam power, and 2) the move to centralized energy systems and use of fossil fuels. Both brought on significant economic growth and quality of life improvements.
- Brampton's reliance on a centralized energy system and fossil fuels results in the loss of significant local economic opportunities.
- Today, as a community, Brampton spends over \$1.8 billion on energy, 80% of which leaves Brampton with no direct benefits to local economic development.
- The growing reliance on fossil fuels in these centralized systems is also contributing to the current global climate emergency. Today, Ontario relies on fossil fuels to meet 75% of its energy needs associated with electricity, natural gas, and gasoline and diesel.
- Two main factors are driving the latest global energy transition: decarbonization (moving away from carbon emitting fuels that lead to climate change) and the localized distribution of energy (creating, storing and distributing energy locally e.g. solar panels, heat waste capture, energy storage systems).
- Fossil fuels and cheap energy facilitated Brampton's current urban form. As the next energy transition evolves, Brampton has to be ready to lead the way.
- Brampton's Community Energy and Emissions Reduction Plan furthers Brampton 2040 Vision by providing a road map for implementing the next energy transition.

**Seen through an energy and climate lens, the Brampton 2040 Vision represents a giant step forward in facilitating Brampton's energy transition. Mixed use, transit oriented communities, with city and town centres, local economic development and community engagement are key ingredients to a climate resilient city.**

**Our Energy Transition is Our Climate Solution**

# WHY DO WE NEED A COMMUNITY ENERGY AND EMISSIONS REDUCTION PLAN?

**BRAMPTON SPENDS \$1.8 BILLION ON ENERGY EACH YEAR**



\$1.4 billion (78%) of those energy dollars leave the community



27% of the energy that the community pays for does not reach our homes, buildings, or vehicles



On average, Brampton homes and buildings are half as efficient as global benchmarks



Brampton's per capita greenhouse gas emissions are 2x global best practice

**THE COMMUNITY ENERGY AND EMISSIONS REDUCTION PLAN (CEERP) IS A ROAD MAP THAT WILL:**



Improve energy efficiency



Increase resilience to climate change



Create economic advantage



Reduce greenhouse gas emissions



Ensure energy security