

# Centre for Community Energy Transformation

Mississauga Environmental Advisory  
Committee

2021.12.07



# Purpose of Presentation

1. Introduce you to CCET?
2. Why do we need CCET?
3. What are the benefits of a Regional CCET?
4. How will CCET operate?



# Energy Transition: Centre for Community Energy Transformation (CCET)

- Non-profit Community Organization
- Focus on becoming a Regional Centre of Excellence in Energy
- Accelerate the achievement of municipal climate and energy goals
- Catalyst for significant, rapid transformation of our community energy systems
- Collaborate with businesses, developers, utilities, governments, institutions, non-profits, and homeowners
- Develop and deliver energy transformation projects

## WHAT IS CCET ? A COMMUNITY ENERGY HUB

CCET will be a non-profit community organization envisioned as a regional centre of excellence that will accelerate Brampton's energy transformation by:

- ✓ Delivering priority projects from Brampton's Community Energy and Emissions Reduction Plan (CEERP)
- ✓ Collaborating with businesses, developers, utilities, governments, institutions, non-profits, and homeowners
- ✓ Pursuing federal and provincial energy investment opportunities



# CCET Framework: 2020 Council Endorsed

- Vision** A sustainable energy future
- Mission** To lead an inclusive suburban energy transformation
- Mandate** The CCET will be an action-oriented organization focused on convening partners to implement catalytic priorities from Brampton's Community Energy and Emissions Reductions Plan (CEERP)
- Values** The work we do will:
- Be informed by science
  - Be replicable by other communities
  - Have quantifiable, documented results
  - Be collaborative with community partners to amplify our collective impact
  - Ensure social justice and inclusivity
  - Generate direct, local economic benefits
  - Demonstrate the concepts of circular economy and one planet living
  - Provide educational benefits and engagement opportunities to our community

## CCET PRIORITY PROJECTS



### Home Retrofit Program

Target energy efficiency retrofits in 80% of homes



### Improve energy efficiencies in the ICI sector

Promote increase of best practise in ICI section



### Establish District Energy nodes

Serve 70% of existing and 80% of new high growth areas

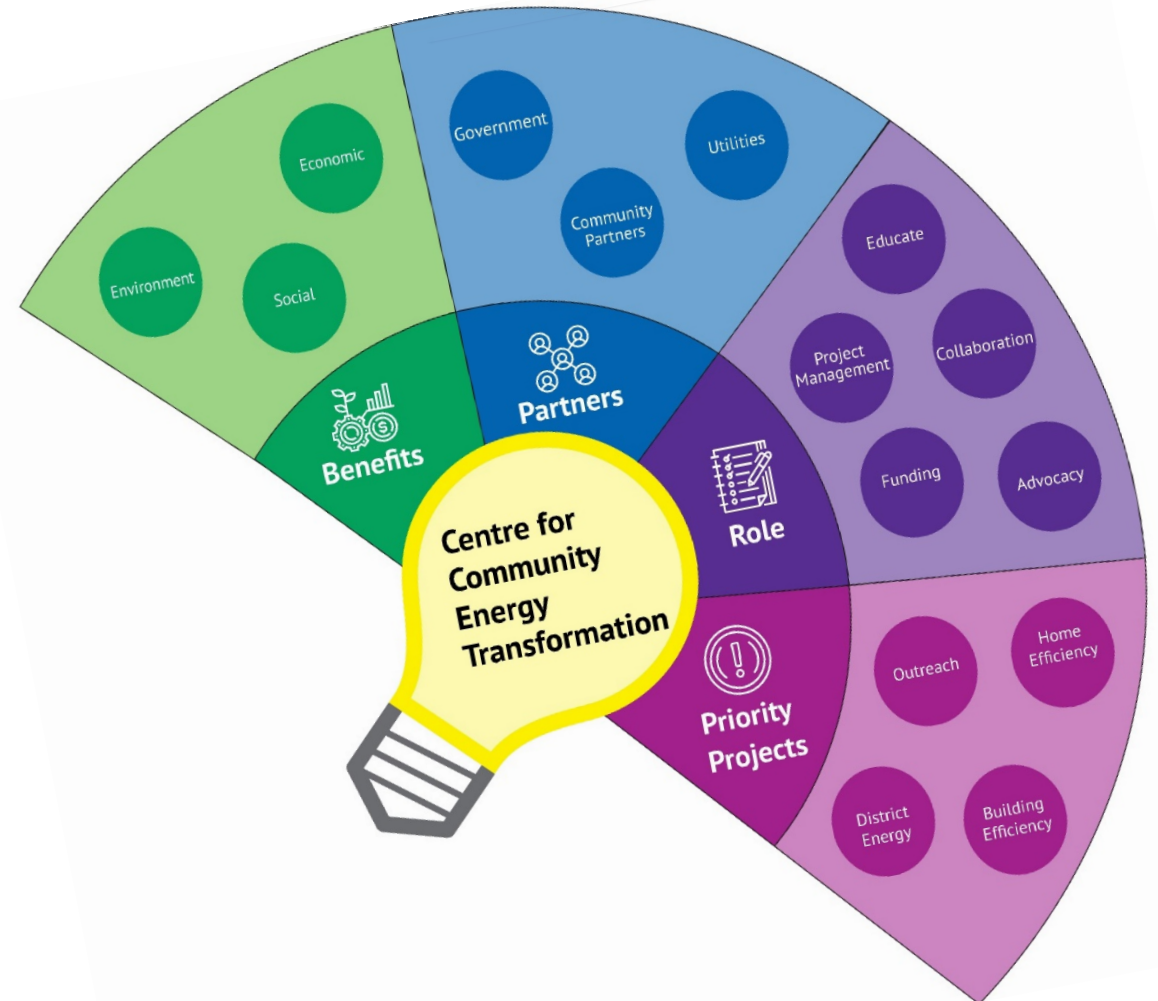


### Outreach and engagement

Targeted program to increase awareness of the importance of energy planning among residents and ICI sector

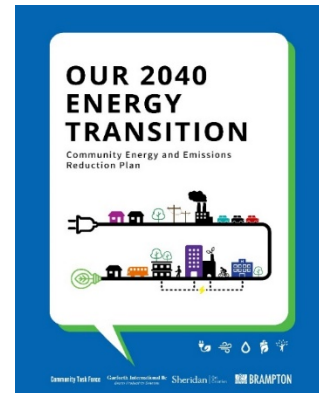
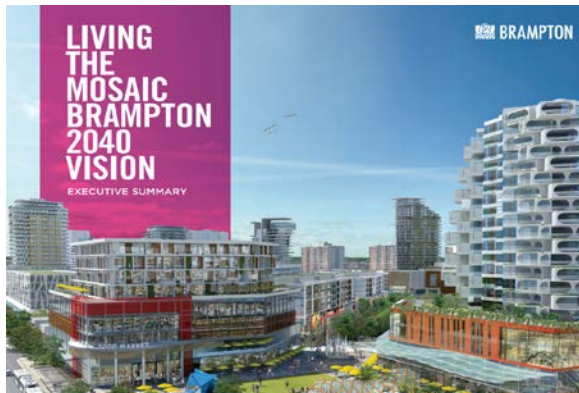
# Why CCET?

- Taking catalytic, transformative action
- Bringing the energy transition to life
- Spending for success and making smart, proactive investments
- Maximizing collaborations and partnerships
- Bridging the skills and resources gap



# Addressing the Climate Emergency

- Brampton, Caledon, Mississauga and Region Councils declared Climate Emergencies
- Addressing the Climate Emergency requires:
  1. Urban transition
  2. Energy transition
  3. Community commitment and collaboration



**Move**  
developing a  
transit-oriented City



**Belong**  
ensuring youth, older adults  
and new immigrants thrive



**Connect**  
completing our  
neighbourhoods



**Prosper**  
cultivating creative and  
innovative businesses



**Green**  
living green



# Municipal Climate Change Targets

## City of Brampton

- 2030: ↓ GHG emissions 30% below 2016 levels
- 2040: ↓ GHG emissions 50% below 2016 levels

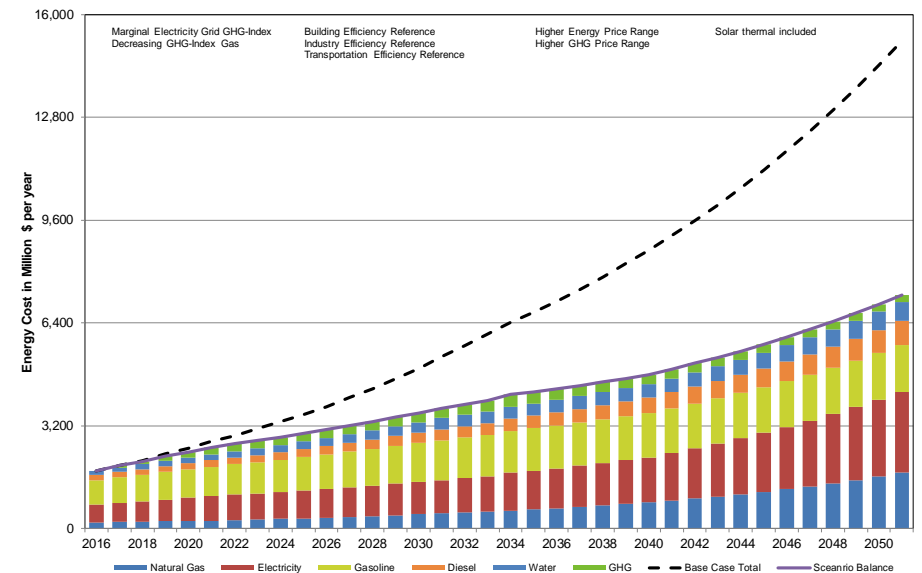
## Town of Caledon

- 2030: ↓ GHG emissions 36% below 2016 levels
- 2050: Reach net zero GHG emissions

## City of Mississauga

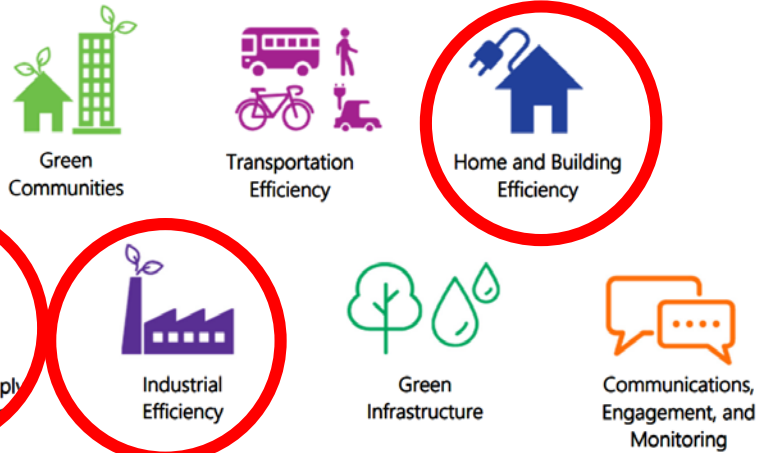
- 2030: ↓ GHG emissions 40% below 1990 levels
- 2050: ↓ GHG emissions 80% below 1990 levels

## Potential Energy Dollars



# Community Energy Plan: Strategic Directions

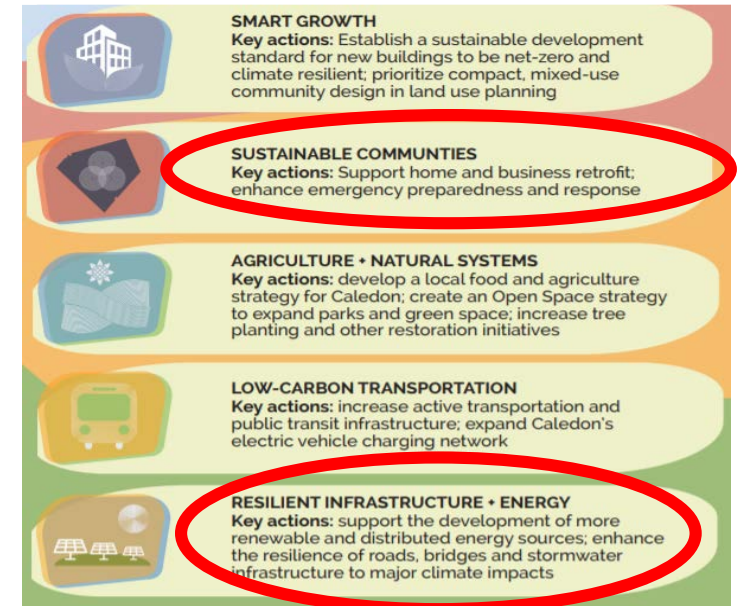
## City of Brampton



## City of Mississauga



## Town of Caledon



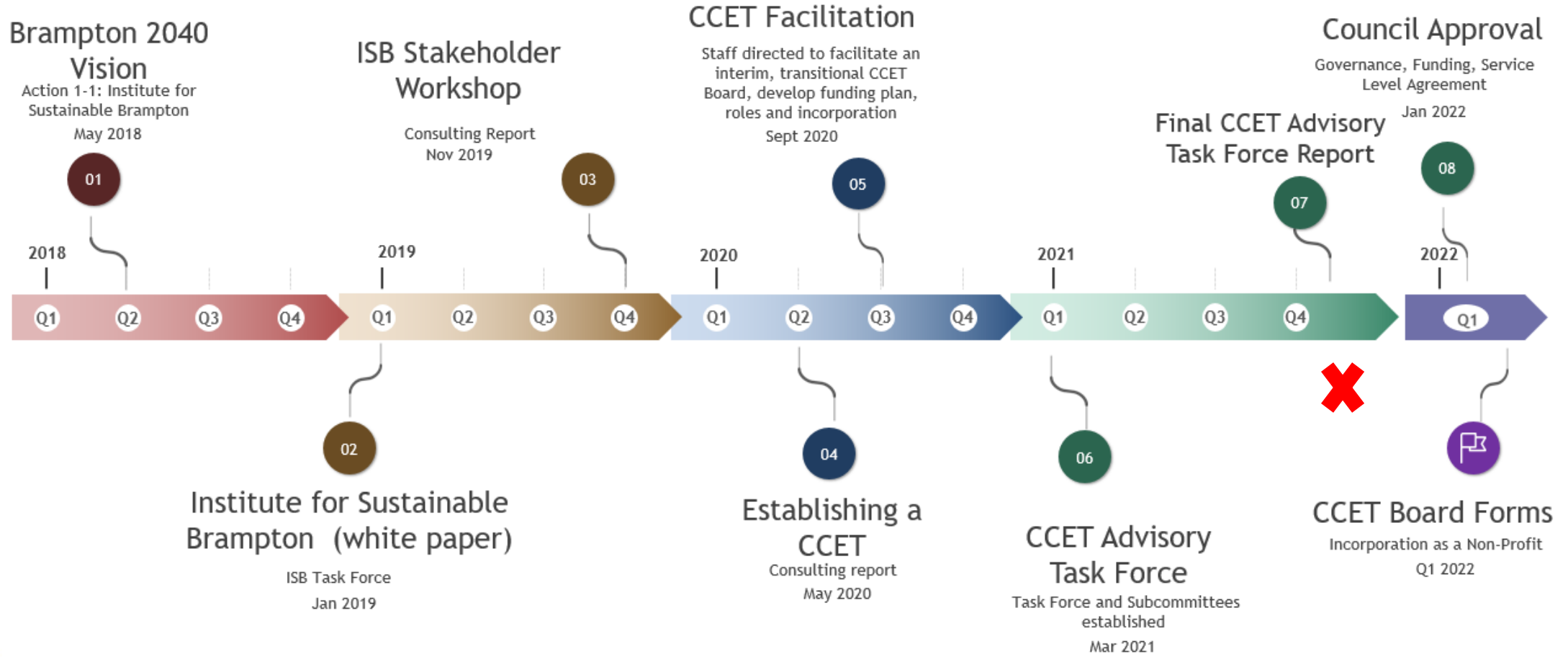
## Peel Climate Change Partnership

1. Low Carbon Communities
2. Flood Resiliency
3. Green Infrastructure





# Moving from an Institute for Sustainable Brampton to the Centre for Community Energy Transformation



# Examples of other GTA Non-Profit Energy Organizations

- **Our Energy Guelph**

- Established in 2019
- 12 member Permanent Board (stakeholder based)
- Building a clean, resilient, and prosperous city for everyone
- \$600,000 over 5 years (\$150,000 in year 1 to \$80,000 in year 5)
- Only 1 employee – Executive Director

- **Future Energy Oakville**

- Established in 2020
- 3 member Transition Board
- Mandate is to champion community-driven energy solutions through the implementation of the Community Energy Strategy
- \$200,000 over 2 years
- No Executive Hired

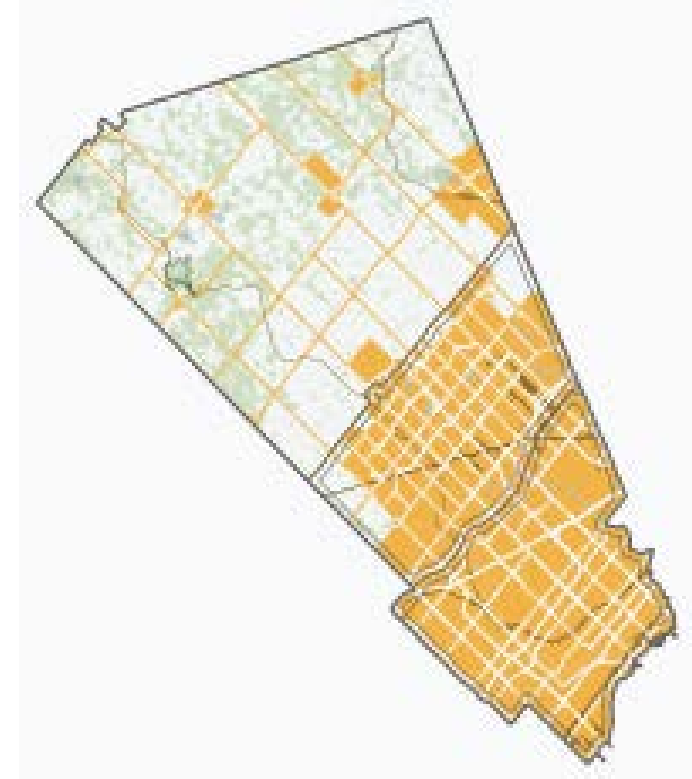
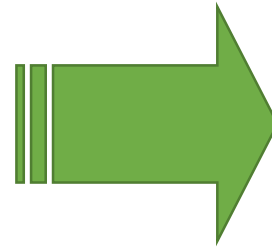


# Expanding the Scope of CCET

- Brampton Focused organization to a Regional Focused Organization



Brampton – 650,000 residents



Peel – 1.5 million residents

# CCET: 2021 Stakeholder Engagement

## Project Team

- City of Brampton
- Region of Peel
- Sheridan College
- City of Mississauga
- Town of Caledon

## Community Advisory Task Force

- 15 members
- Industry
- NGO's
- Residents
- Youth
- Utilities

[www.brampton.ca/ccet](http://www.brampton.ca/ccet)

**BRAMPTON** Residents Business Arts, Culture, Tourism City Hall Online Services (311) Q

Grow Green

## ADVISORY TASK FORCE

Brampton City Council unanimously approved the Community Energy and Emissions Reduction Plan (CEERP) in September 2020. One of the CEERP's key recommendations is the establishment of a Centre for Community Energy Transformation (CCET). The City requires a community-based Advisory Task Force to provide strategic guidance to help transition the CCET from a conceptual framework to an established not-for-profit with an active governance body (Board) and strategic oversight (Executive Director). We are pleased that this team of community champions have come together to be principal advisors for the establishment of the CCET.

**David Laing (Chair)**  
David is a retired project manager, management consultant, and LEED® accredited professional. A long-time Brampton resident, David has been involved in many local environmental advocacy initiatives over the past decade aimed at mitigating the effects of climate change and improving Brampton's environmental resiliency. He is an executive member of Sierra Club Ontario's Peel Chapter, a David Suzuki Foundation Elder, a participant in the Brampton Environmental Alliance, and a member of Toronto and Region Conservation Authority's Joint Watershed Coalition. He is also the Chair of BikeBrampton, a local group advocating for safe and sustainable transportation choices in Brampton and Peel Region. In 2017, David led a BikeBrampton initiative, creating the Brampton Bike Hub to encourage Brampton residents to leave their cars at home and use bicycles for short distance journeys instead.

**Karly-Anna O'Brien (Vice Chair)**  
Karly-Anna is a proud Brampton resident with a passion for climate change and sustainability. She offers strong guidance in the non-profit sector, establishing governance, recruitment and retention strategies, and communication and marketing plans while serving on the Board of Directors for REST Centres. Her professional background has been rooted in procurement, supply and demand planning, and project management, focusing on process efficiency and transformation. She will link her experience in the non-profit sector with her industry expertise to help establish CCET as a sustainable, independent, and operational non-profit. Karly-Anna recently joined KPMG Canada as a Consultant within the Supply Chain practice. Passionate about driving effective and collaborative energy solutions, she is delighted to contribute to CCET's vision for building a sustainable Brampton!

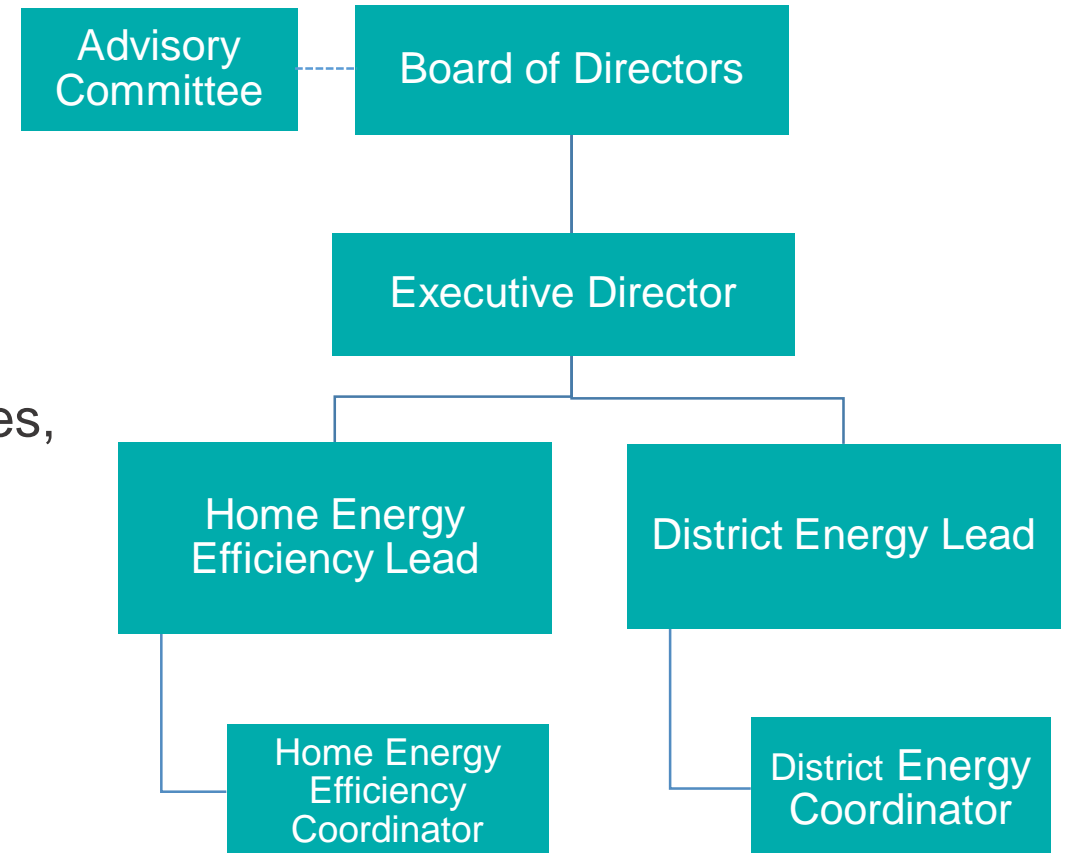
**Joan Berger**  
Joan works at A Berger Precision Ltd, focusing her efforts on exploring future strategic markets for the company. A Berger, a manufacturing company, is a family business, with a long history of investing in innovation to drive growth and technological advancements, spanning over six decades. Joan has always been passionate about challenging herself, and her role at A Berger presents an opportunity to do just that. With an environmental lens, Joan is also proud to support the efforts behind working and living in a manner that respects the world we live in. Joan holds an MBA from McMaster University, and Hon. Bachelor of Science from the University of Toronto. Perhaps her greatest recent achievement has been getting her two young daughters to still love school, despite the turmoil they face whilst online learning during the multiple pandemic waves in Toronto.

**Hassan Khan**  
Hassan, P.Eng., MBA, is the Area General Manager for the Performance Infrastructure business for Johnson Controls in Canada, which is primarily responsible for energy performance contracting endeavours. His 22-year career spans from business development through to General Management, with a focus on advocacy, promotion, and delivery of financial infrastructure solutions for achieving energy efficiency and carbon reduction in an economically sustainable manner. Hassan's recent activities include: active board member of ESAC (Energy Services Association of Canada), advisory committee member for the CIB's (Canada Infrastructure Bank) Commercial Buildings Retrofits Initiative in the winter of 2020-20, and co-chair of the City of Brampton's CEERP (Community Energy and Emissions Reduction Plan) steering committee. A resident of Brampton, Hassan holds a Masters in Business Administration in Finance from the Schulich School of Business, York University and a Bachelors of Applied Science in Civil (Environmental) Engineering from the University of Toronto.



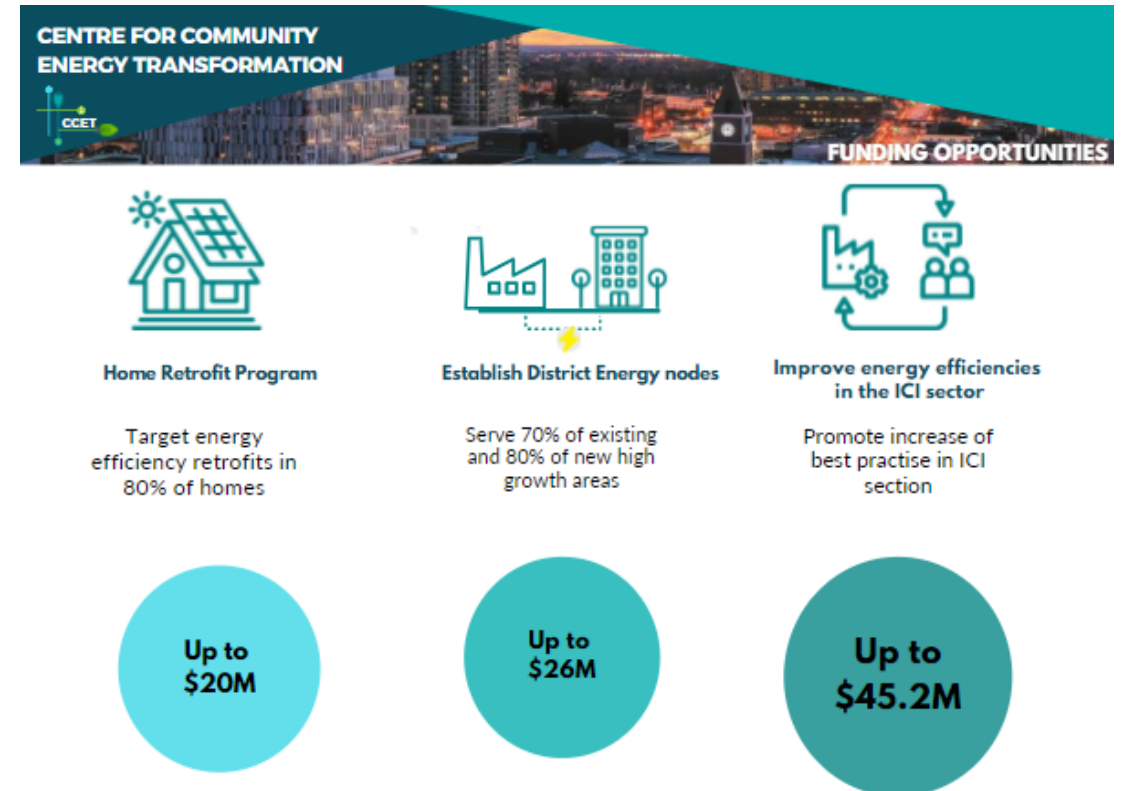
# CCET: Governance

- Drafted organization framework including:
  - By-laws
  - Organizational Framework
  - ED job description
- Skills-Based Board of Directors
- Advisory Committee of Stakeholders (municipalities, utilities, developers, businesses, etc.)
- Executive Director and two Sector Leads and two Sector Coordinators
  - Home Energy Efficiency
  - District Energy



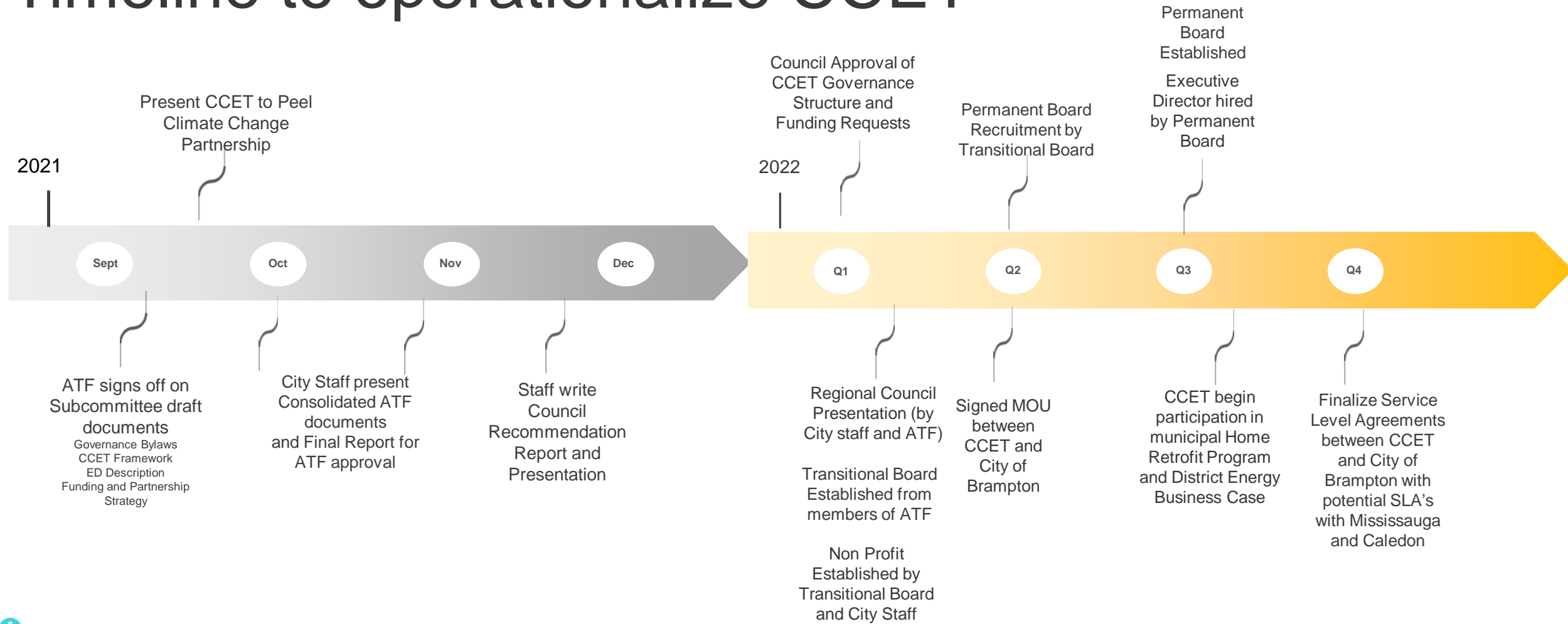
# CCET: Funding and Partnership

- Capital and Operational Funding to be funded through Federal and Provincial grants and municipal Service Level Agreements (SLA)
- 5 year Operation Funding Needs:
  - 5 positions
  - \$600,000/yr. over 5 years = \$3 million
- Seeking \$1.5 million City of Brampton commitment over 5 years through one-time grant and SLA
- Initial funding gap of \$300,000/yr. or \$1.5 million over 5 years
- Potential additional Operation Funding through municipal SLA, energy service fees, sponsorship, federal funding





# Timeline to operationalize CCET



# CCET: Outcomes

- Essential to meet our municipal climate change targets and PCCP's Low Carbon Community Goals
- Reap Economic and Social Equity benefits
- Lower municipal costs through economies of scale
- Catalyst and accelerator of municipal climate actions and energy investments
- Regional "Energy Hub" with local expertise
- Mobilization of all community sectors in addressing the Climate Emergency

Accelerating towards a sustainable energy future

## INVESTING IN CCET WILL UNLOCK ECONOMIC GROWTH



Every \$1  
spent on energy  
efficiency programs

Generates \$7  
of GDP in Canada<sup>1</sup>

### Households savings



↓ \$114+  
yearly with energy  
efficiency programs<sup>2</sup>

=  
**\$10.2 MILLION**  
saved annually by retrofitting  
90,000 Brampton homes



Energy efficiency  
program  
investments will  
create

↑ 800+  
green jobs in Brampton by  
2030<sup>3</sup>

## INVESTING IN CCET WILL STRENGTHEN SOCIAL EQUITY

Energy  
advocacy  
supports  
social equity



20%  
of Brampton homes  
experience energy  
poverty annually<sup>4</sup>

↑ Community engagement  
and education

↑ Public and private  
partnerships

## INVESTING IN CCET WILL PROMOTE ENVIRONMENTAL GOALS



Reduce green house gas  
emissions by

↓ 50%  
from 2016 levels by 2041

Meeting our CEERP  
targets supports  
climate resilience

# CCET Value Proposition

## What do municipalities get in return?

- Dedicated team of experts working on “wicked” problem of establishing low carbon communities
- Address municipal skill and resources gaps related to energy planning and implementation
- Empowered community taking climate actions

## What does this investment achieve?

- Accelerate achieving municipal climate and energy goals
- Energy savings for homeowners and businesses
- Energy investment and local jobs
- Quick adoption of innovative energy solutions

## How is risk of this new organization managed?

- Service Level Agreement
- Board of Directors and Advisory Committee



# Thank you

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