COMMUNITY
ENERGY PLANNING
GETTING TO IMPLEMENTATION
IN CANADA

Community Energy Planning: The Value Proposition

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Overview of the Getting to Implementation Initiative

Stages

1 Commencement

2 Research

3 National Engagement & Framework

4 Pilot & Promotion

Deliverables

2
- National Report on CEP Implementation
- National Report on Policies Supporting CEP Implementation
- **Community Energy Planning: The Value Proposition**
- Efficacy of Policies Supporting Implementation
- International scan of policies supporting CEP implementation

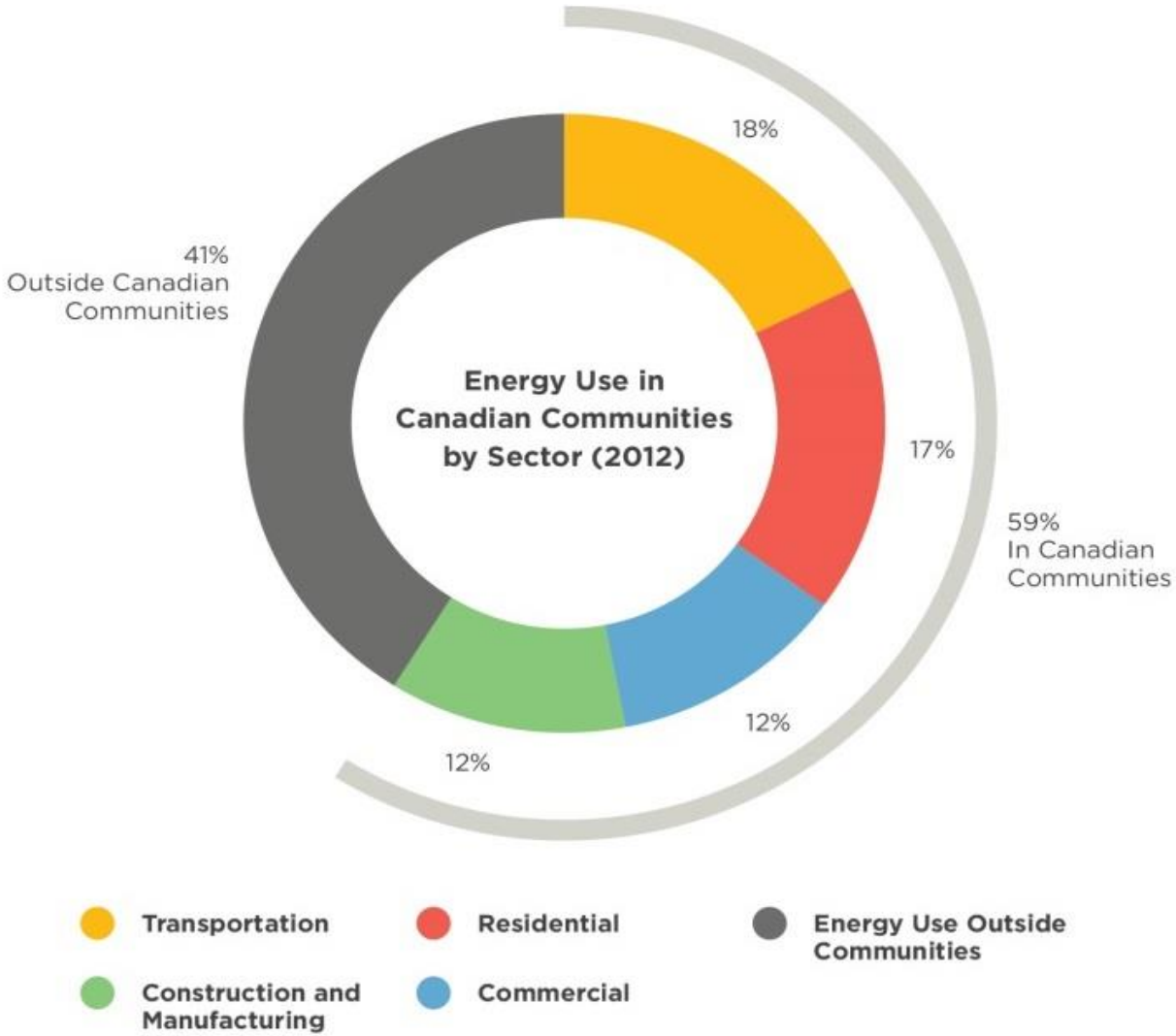
3
- National workshop series
- Smart Energy Atlas
- Community Energy Implementation Framework

4
- Apply Framework to three test communities
- Practical case studies developed for test communities
- Training modules developed to aid with delivering the Framework
- Framework made publicly available with training support

Agenda

- About community energy planning
- Findings from *Community Energy Planning: The Value Proposition* research (Stephanie Cairns, Sustainable Prosperity)
- Edmonton's Community Energy Transition Strategy (Jim Andrais, City of Edmonton)
- Smart Communities in Community Energy Plans (Derek Satnik, S2E)

Energy Use in Canadian Communities

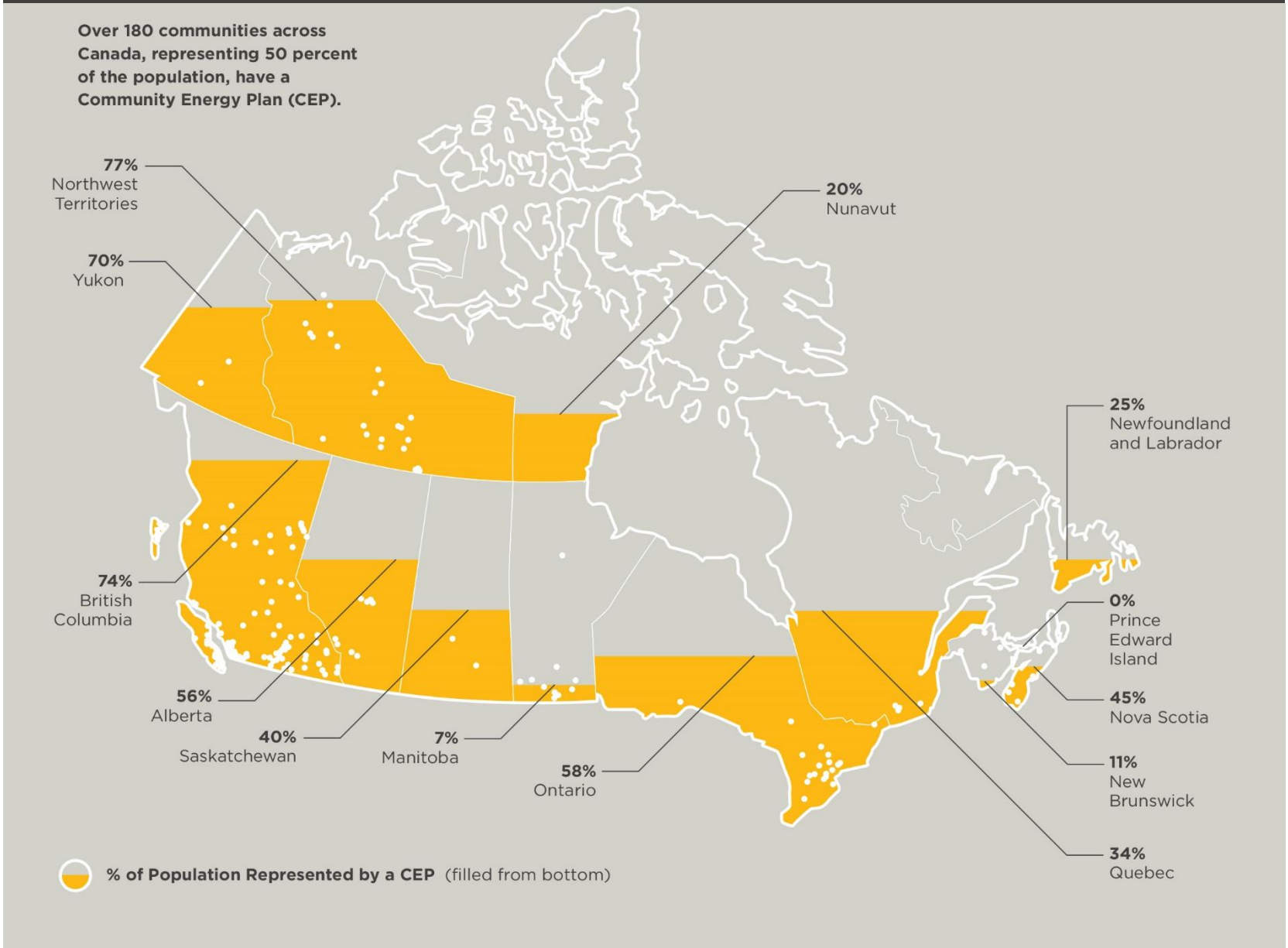


Source: (Natural Resources Canada, 2012)

Why Develop a Community Energy Plan?

1. Competing in a global economy
2. Changing demographics
3. Mounting infrastructure costs
4. Budgetary constraints

Who has a Community Energy Plan?



What is a Community Energy Plan?

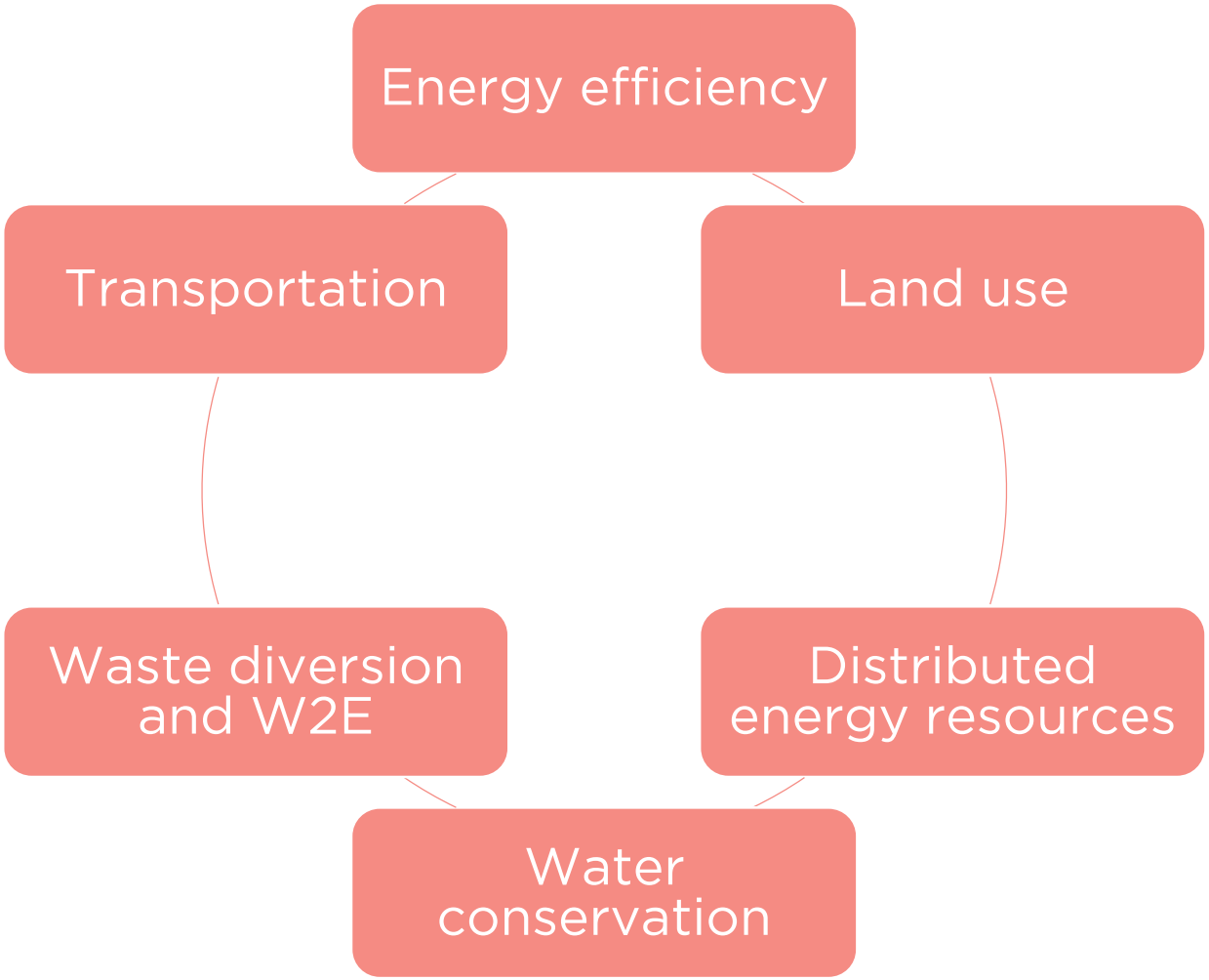
A CEP is a tool that helps define community priorities around energy with a view to:

- Driving economic development
- Managing future risks and enhancing resilience
- Improving energy efficiency
- Cutting GHG emissions

What is in a Community Energy Plan?

- A baseline inventory of energy and GHG emissions
- Energy conservation and GHG reduction targets
- Energy models
- Actions to achieve targets

Actions in a Community Energy Plan



The Value Proposition – Research Approach

Summarize the broad value proposition for CEP, drawing on:

i) Review of findings from 6 comprehensive economic analyses conducted of CEPs actions and programs; &

ii) Experience from specific communities.

Provisos:

Available economic analyses are forecasts only; best used to compare alternative scenarios

Examples draw from studies with widely different base lines, assumptions, and methodologies: not comparable

Findings are project and community specific and are not inherently transferable to other communities

Summary:

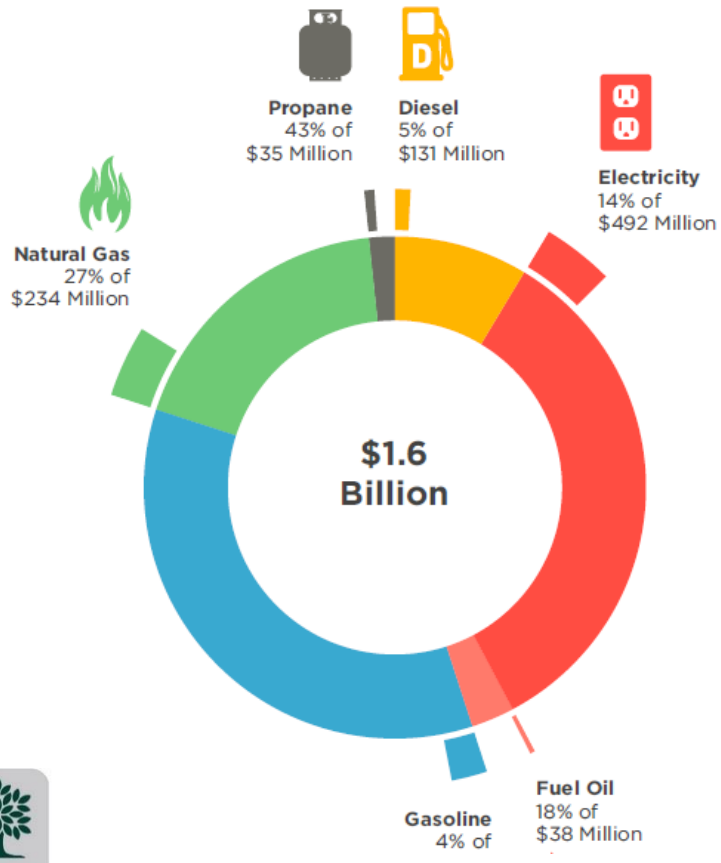
Communities have untapped opportunities to strengthen local economies, reduce current and future energy costs and emissions, and create jobs by investing in smarter and more integrated approaches to energy use at the local level.

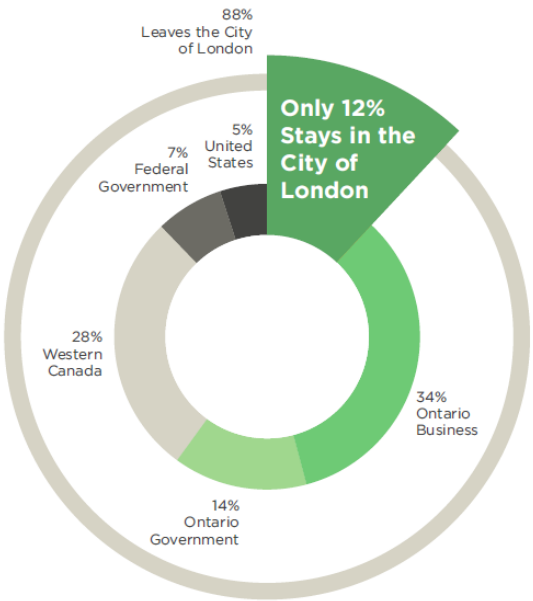
These approaches can also support environmental and community health goals.

Key Finding: Energy spending in communities is high

Community Size	Average Spending on Energy
Small Communities (less than 20,000 people)	Up to $80 million
Mid-sized Communities (20,000 – 100,000 people)	$60 million to $400 million
Large Communities (100,000 people to 2.5 million people)	$300 million to $10 billion

Key Finding: Much of this money leaves the community

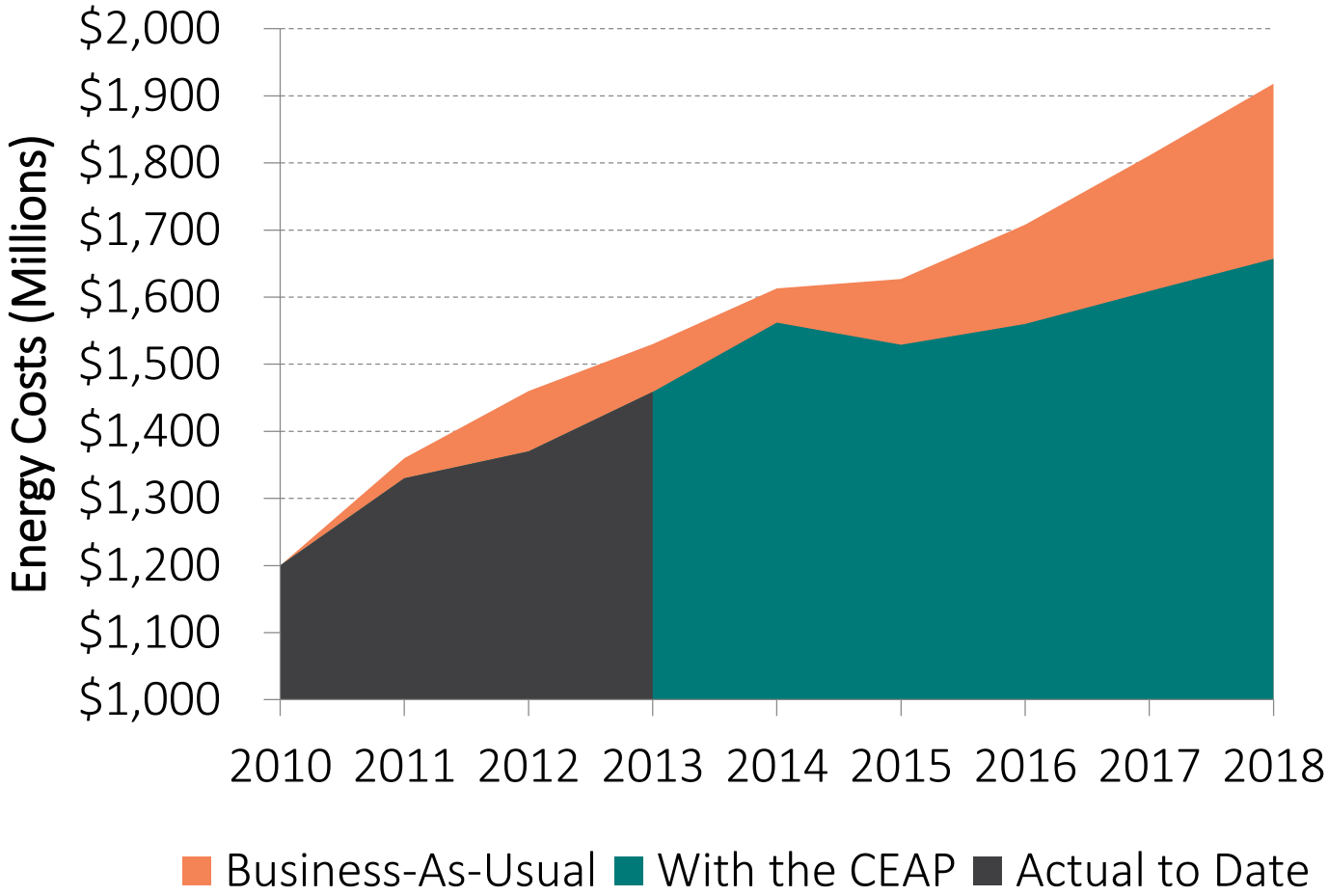




London
CANADA

Example: City of London, Ontario

Key Finding: CEPs can reduce energy costs and keep dollars in communities



Example: City of London, Ontario

- *Energy Cost Avoidance of ~$250 Million per year by 2018.*
- *Every 1% reduction in energy use keeps ~ $14 million in the local economy*

Key Finding: CEPs support strong and resilient local economies, in many ways

CEPs can also:

- Encourage energy affordability
- Induce local economic development
- Support vibrant and resilient communities
- Result in community health benefits

CEPs Encourage Energy Affordability

- Energy efficiency
- Distributed energy resources
- Integrated land use and transportation

CEPs Induce Local Economic Development

- Job creation
- Attracting new investment and retaining local business
- Market differentiation
- Increased employee productivity and reduced absenteeism

CEPs Support Vibrant and Resilient Communities

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CEPs Help Achieve Health Goals

CEPs Mitigate Financial Risks

- Potential carbon pricing
- Energy cost volatility

Conclusion

- The value proposition for CEPs includes energy savings, but much more:
  - Energy affordability
  - Economic development
  - Vibrant neighbourhoods
  - Resilience
  - Health and environmental goals
- Economic analysis of CEPs can reveal some of these benefits, and strengthen the case for implementation

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