



# **Efficiency Manitoba**

## **Comments, Concerns and Recommendations about Proposed 2020-23 Efficiency Plan**

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# Overview

1. My background and experience
2. Concerns about Efficiency Manitoba's development, mandate and goals
3. Recommended improvements for 2020-23 plan
4. Summary and conclusions



# My Background and Experience

- Almost four decades of experience at local and national levels
  - Focus on improving the energy and environmental performance of new and existing buildings and communities
  - 18 years with Manitoba Energy and Mines; 3 years with CANMET Energy Technology Centre; 16 years as consultant



# My Background and Experience

- Areas of energy expertise:
  - Strategic planning, policy development and legislation
  - Energy codes and product efficiency standards
  - Research and demonstration
  - DSM program design, delivery and evaluation
  - Consumer education and awareness
  - Post-secondary and industry training



# My Background and Experience

- Perspective is also shaped by international experience
  - North and South America (U.S., Mexico, Chile, Costa Rico & Peru)
  - Europe (UK, Ireland)
  - Middle East (UAE, Jordan)
  - Asia (China, South Korea, Japan)



















# **Efficiency Manitoba's Development, Mandate and Goals**


# EM's Development, Mandate and Goals

- Repeated delays and uncertainty launching EM has caused damage and significant loss of momentum
  - **16** – Number of years since previous provincial government announced intent to create a new, more effective independent agency for energy efficiency
  - **5½** – Number of years since PUB recommended same thing
  - **2** – Number of years of delay in date that 'Made-in-Manitoba Climate and Green Plan' claimed that EM would become operational

# EM's Development, Mandate and Goals

- Manitoba has slipped from an energy efficiency leader...

Jurisdiction	2009	2007	2005	2004	2002
 Manitoba	A+	A+	A	A	B-
 Ontario	A+	A	B+	C-	C
 Quebec	A+	A	B	B+	A
 British Columbia	A	A+	B	B	B
 Alberta	B+	D+	D+	D+	C+
 Federal Government	B+	B	A	A-	A-
 New Brunswick	B+	B-	C+	B+	B
 Nova Scotia	B+	B+	B-	B	B
 Nunavut	B	C	D	D-	N/A
 Prince Edward Island	B	D	C+	B-	B
 Yukon	B	B-	B+	A-	A
 Saskatchewan	B-	B+	B-	C	D
 Northwest Territories	C	B+	C	N/A	A-
 Newfoundland and Labrador	C-	D+	D	F	D

 **2009 Ranking**

Source: Canadian Energy Efficiency Alliance.  
*National Energy Efficiency Report Card. 2009.*



# EM's Development, Mandate and Goals

■ ...to the middle of the pack

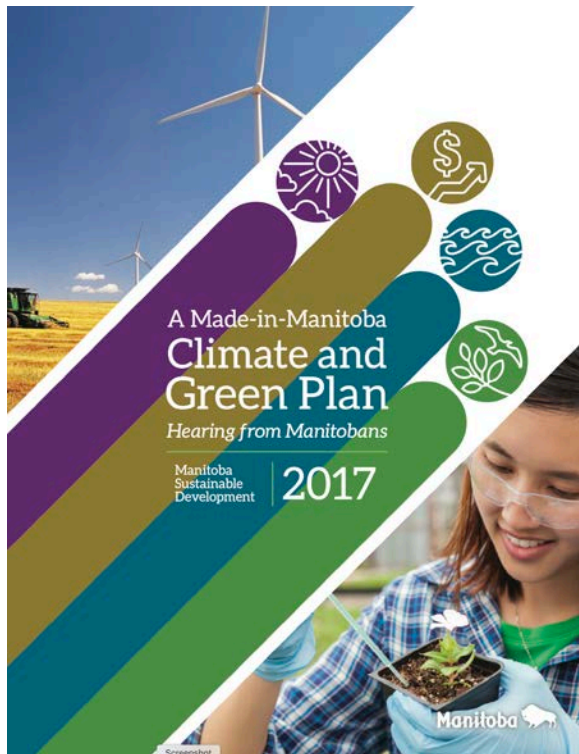
Rank	Province	Energy Efficiency Programs (35 pts.)	Enabling Policies (22 pts.)	Buildings (18 pts.)	Transportation (17 pts.)	Industry (8 pts.)	Total (100 pts.)
1	British Columbia	9	14	14	13	6	56
2	Québec	11	12	5	14	6	48
3	Ontario	15	12	9	7	5	47
4	Nova Scotia	18	11	6	5	6	45
5	Manitoba	13	6	6	2	5	32
6	Alberta	9	8	5	3	6	30
7	Prince Edward Island <sup>6</sup>	13	6	3	3	1	26
8	New Brunswick	6	7	1	7	4	24
9	Saskatchewan	2	6	4	1	5	18
10	Newfoundland and Labrador	4	6	2	2	1	15

◀ **2019 Ranking**

Source: Efficiency Canada. *Canadian Provincial Energy Efficiency Scorecard*. 2019.

# EM's Development, Mandate and Goals

- Latest ranking indicates that vision expressed by Manitoba's Climate and Green Plan is will not be achieved despite EM's 2020-23 Plan



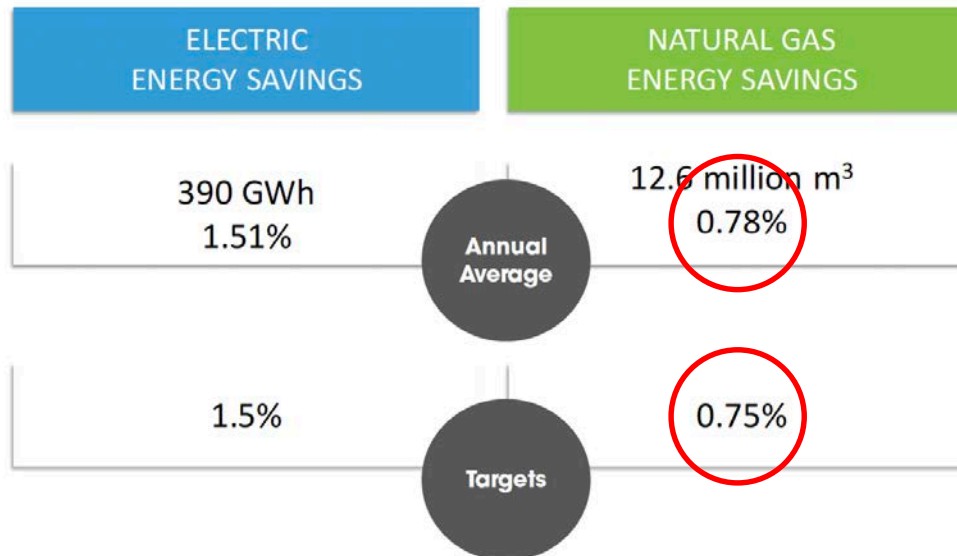
**VISION**  
Manitoba will be Canada's cleanest,  
greenest and most climate resilient province.

# EM's Development, Mandate and Goals

- Recommendation #1 - EM's mandate and target for natural gas savings should be adjusted upwards

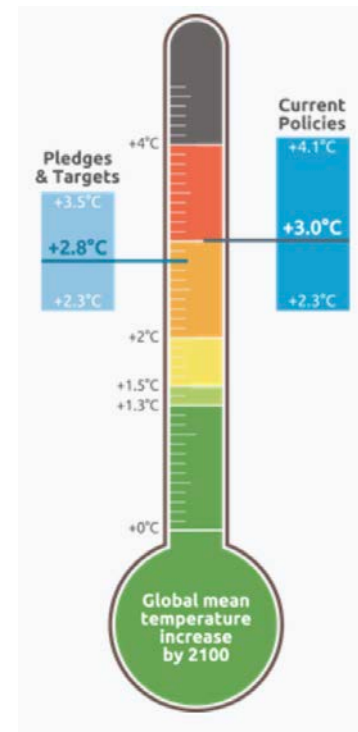
# EM's Development, Mandate and Goals

- EM's mandate and target for natural gas savings is far too low
  - Lack of meaningful public consultation by provincial government about savings target



# EM's Development, Mandate and Goals

- EM's target does not reflect climate crisis and urgency to achieve much deeper emission reductions



Source: Climate Action Tracker. December 2019.

# EM's Development, Mandate and Goals

- Target should ramp up from 0.75% to about 3%
- IEA Efficient World Strategy recommends average 3% improvement in energy intensity\*

**"Efficiency can enable economic growth, reduce emissions and improve energy security. The right efficiency policies could enable the world to achieve more than 40% of the emissions cuts needed to reach its climate goals without new technology."**

Fatih Birol, Executive Director, IEA

# EM's Development, Mandate and Goals

- Generation Energy Council Report commissioned by NRCan recommends:
  - 2% improvement by 2025; and
  - 3% improvement by 2030





# **Recommended Improvements: Building Energy Codes**



# Building Energy Codes

- Recommendation #2 – EM's participation in national code development should not be limited to its own staff\*

# Building Energy Codes

- Previous experience has demonstrated benefit of sponsoring participation of external experts (especially in technical committees)
  - Addresses gaps in expertise of EM's reduced staffing
  - Consistent with EM's mandate to minimize its own costs and increase reliance on private sector delivery





# **Recommended Improvements: Community Energy Planning**

# Community Energy Planning

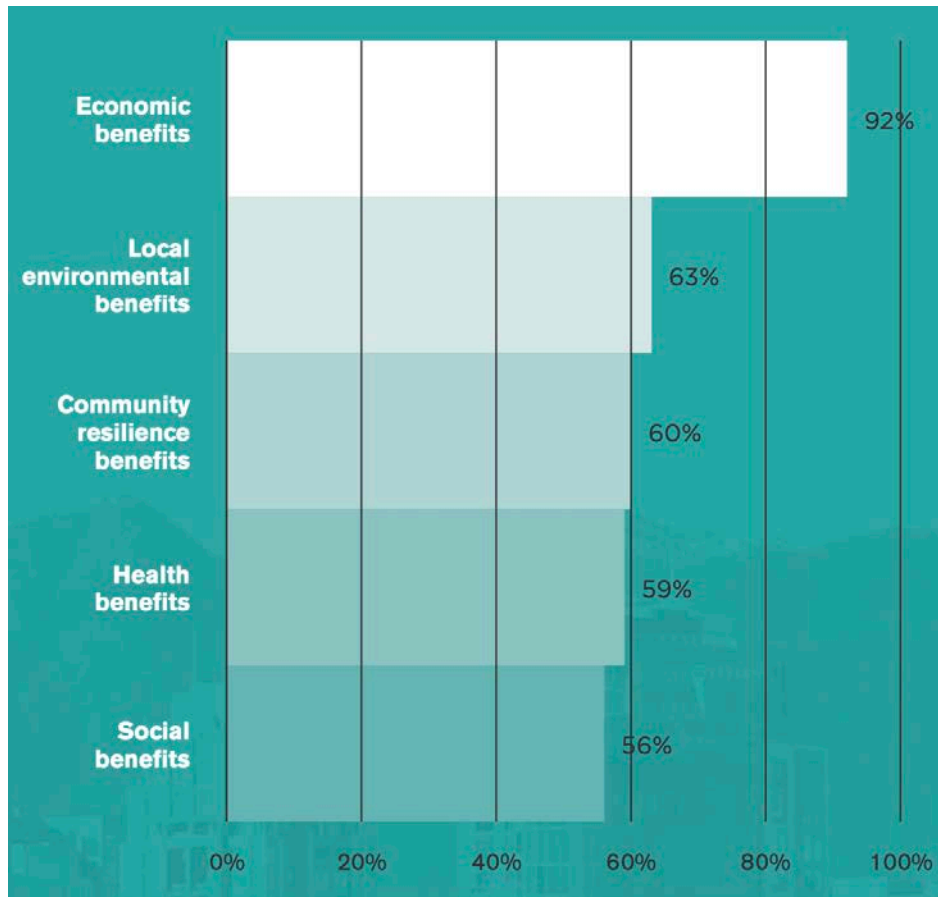
- Recommendation #3: Strengthen EM's commitment to support community energy planning

# Community Energy Planning

- What is a 'community energy plan'?
  - Defines community energy-related priorities
  - Presents view of how energy is generated, delivered and used, both now and in future
  - Improving energy efficiency is a key component

# Community Energy Planning

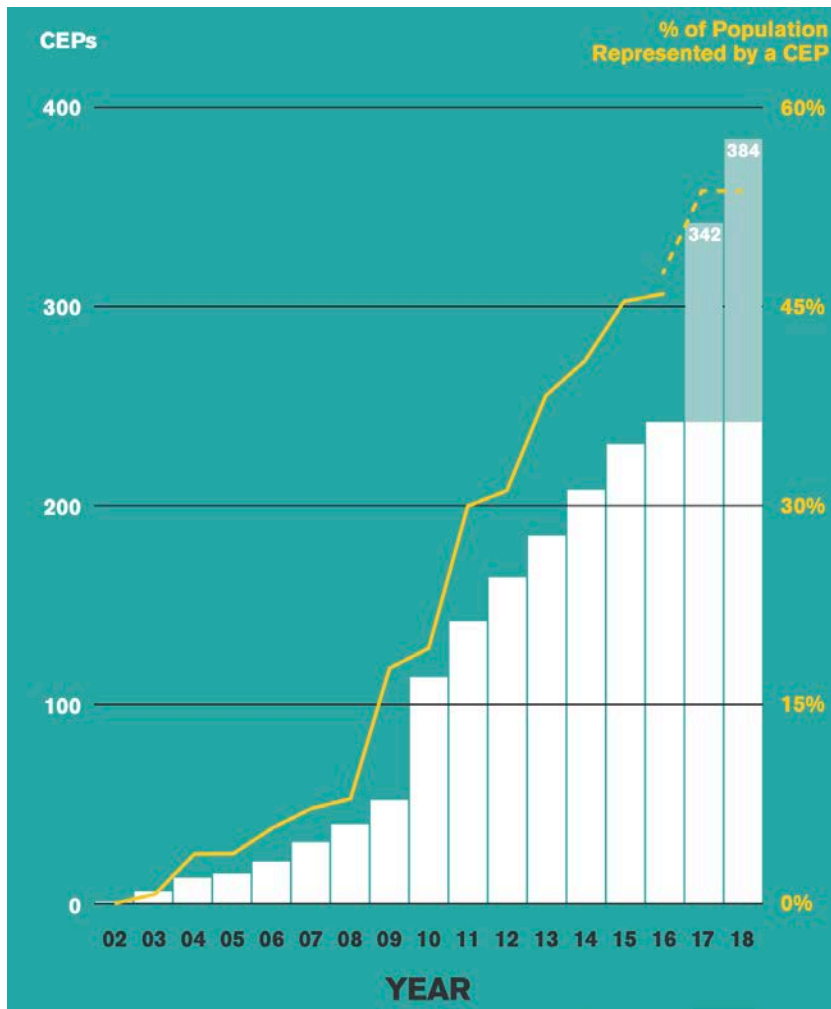
- Primary reasons to develop a community energy plan



Source: QUEST. National Report on Community Energy Plan Implementation. February 2015.

# Community Energy Planning

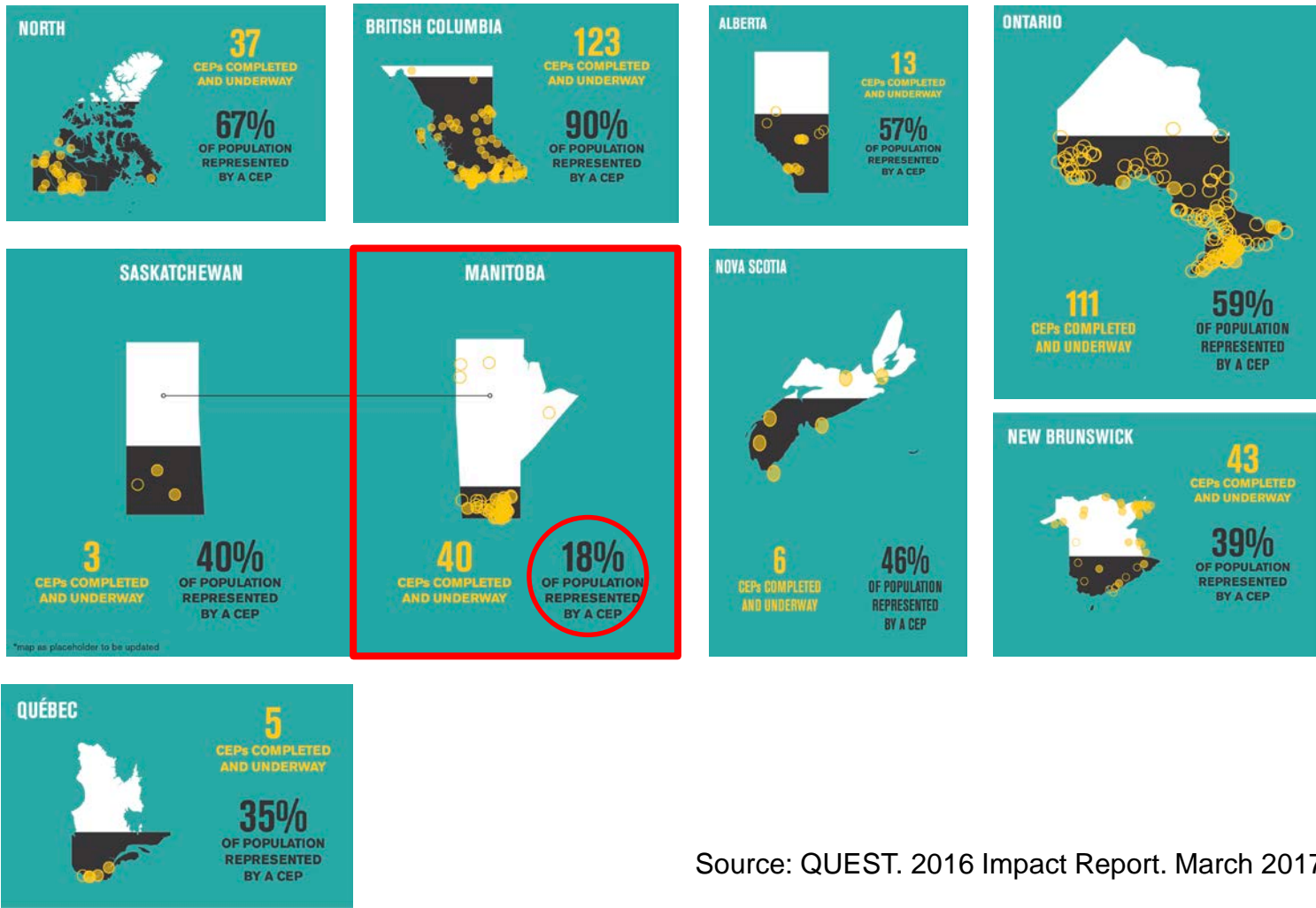
- Strong growth in community energy planning



Source: QUEST. 2016 Impact Report. March 2017.

# Community Energy Planning

- Manitoba is clearly a laggard



Source: QUEST. 2016 Impact Report. March 2017.



# Community Energy Planning

- EM's 2020-23 Plan commitment to community energy planning is too modest and vague
  - Only brief description under Indigenous Programs\* and Enabling Strategies\*\*
  - No specific budget or level of support
  - Although associated savings impossible to measure there should be other targets (e.g., increase in number of communities or percentage of population covered by community energy plans)

\*See Appendix A – Section A6, page 5.

\*\*See Appendix A – Section A9, page 5.

QUEST VISION

# EVERY COMMUNITY IN CANADA IS A SMART ENERGY COMMUNITY BY 2030

Source: QUEST. 2016 Impact Report.



**75%**  
REPRESENTED  
BY CEPS IN 2018



**100%**  
REPRESENTED  
BY CEPS IN 2025



**100%**  
FOCUS ON  
IMPLEMENTATION  
BY 2030

Getting to this end-state will require that 75% of Canadians are represented by a Community Energy Plan by 2018, reaching 100% by 2025, and that 100% of communities are focusing on implementation by 2030.



# **Recommended Improvements: Innovation, Research and Development**

# Innovation, Research and Development

- Recommendation #4 - EM's 2020-23 Plan should hold an 'energy innovation summit' to identify and refine its priorities and strategies for supporting research and development

# Innovation, Research and Development

- EM needs to more fully engage Manitoba's and Canada's energy research and community
  - Budget amount should be reversed (lower in 2021/21 and increasing in following two fiscal years)
  - EM should engage and leverage support from a broader range of Federal agencies (NRCan, CMHC, NRC, MITACS, NSERC)

**TABLE 7.4 ANNUAL INNOVATION BUDGET WITHIN ENABLING STRATEGIES**

	2020/21	2021/22	2022/23
Innovation budget	\$950,000	\$968,000	\$727,000

*Note.* Currency is expressed in nominal dollars.



# **Recommended Improvements: Provincial Government Measures**

# Provincial Government Measures

- Recommendation #5: Plan should identify additional measures Manitoba Government can take to enhance EM's effectiveness

# Provincial Government Measures

- Effectiveness of EM's 2020-23 plan would be strengthened by actions that only the Manitoba Government can take
  - Example #1 – Eliminate PST exemption for home heating with non-renewable fossil fuels and provide offsetting tax credit for low-to-moderate income households
  - Example #2 – Phase-in mandatory disclosure and labelling of energy performance for new and existing housing and buildings offered for sale or lease
  - Example #3 – Lead-by-example by adopting a net zero/near net zero energy policy for public building projects and major renovations funded by provincial government





# **Summary and Conclusions**

# Summary and Conclusions

1. Reconsider target for natural gas savings to reflect climate crisis
2. Use external experts to address gaps in EM's expertise in national code development process
3. Strengthen EM's commitment to support development of community energy plans
4. Hold an 'Energy Innovation Summit' to establish priorities for EM's research and development strategy
5. Identify provincial government measures that will strengthen EM's effectiveness

