

# A Vision for Efficiency in Canada



**Efficiency  
Canada**





**Efficiency  
Canada**



# Definition:

**vi·sion**

*/'viZHən/*

*noun*

the ability to think about or plan the future with imagination or wisdom.



**Efficiency  
Canada**

We are the only animals that  
tell stories to understand the  
world we live in.

**Salman Rushdie**





*"Tackles the biggest questions of history and of the modern world!"*  
JARED DIAMOND

Yuval Noah  
Harari

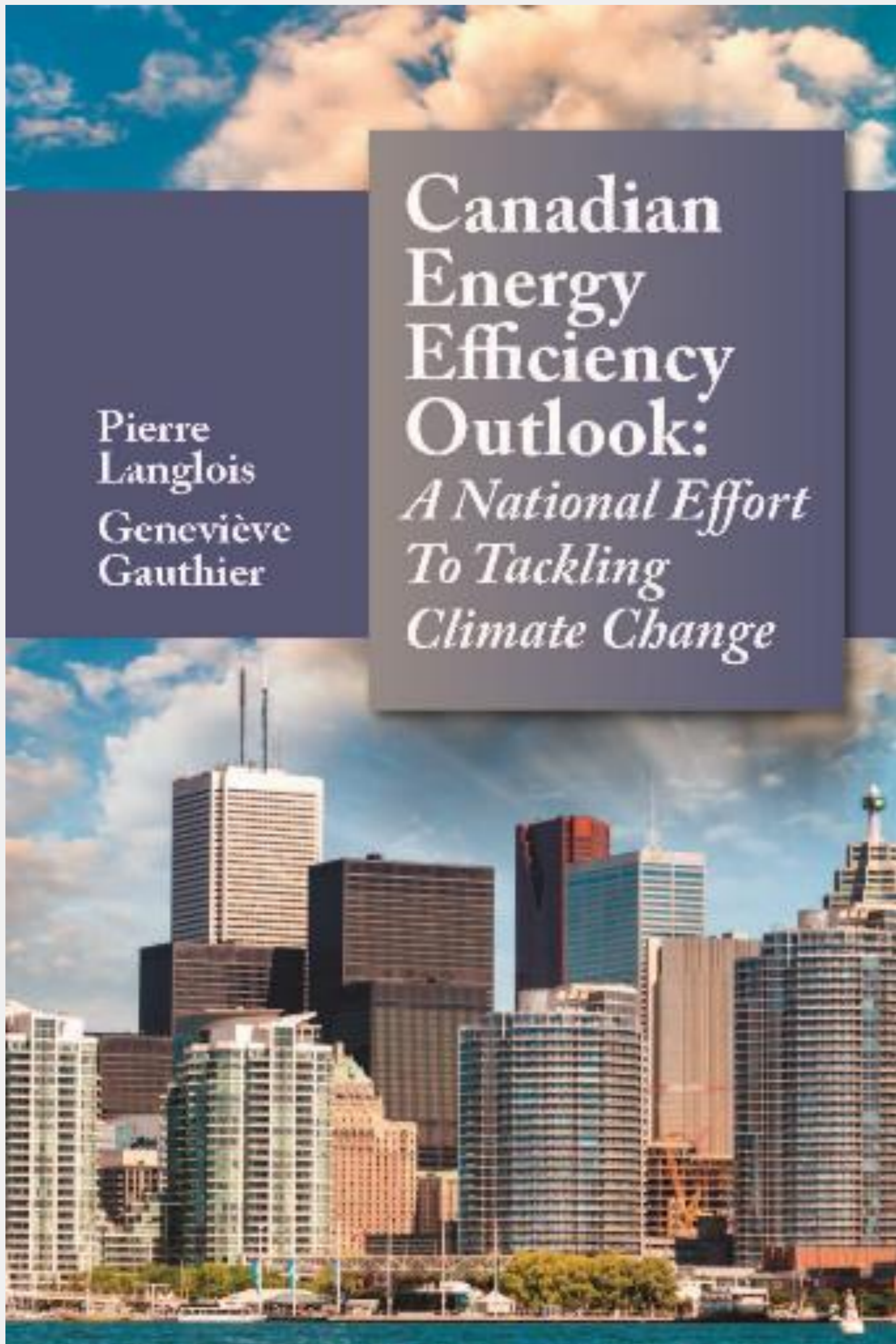
**Sapiens**

A Brief  
History of  
Humankind



An aerial photograph of a city at sunset. The foreground is filled with numerous high-rise apartment buildings. In the middle ground, a large body of water is visible, with many ships of various sizes, including cargo ships and smaller vessels. The background shows a range of mountains under a sky with scattered clouds, illuminated by the low sun. The overall color palette is dominated by the warm tones of sunset, with oranges, yellows, and reds in the sky and water, contrasting with the dark silhouettes of the city and mountains.

**Where did our industry  
come from?**



**Canadian  
Energy  
Efficiency  
Outlook:**  
*A National Effort  
To Tackling  
Climate Change*

Pierre  
Langlois  
Geneviève  
Gauthier



An aerial photograph of a city at sunset. The foreground is filled with numerous high-rise apartment buildings. In the middle ground, a large body of water is visible, with many ships of various sizes scattered across it. The background shows a range of mountains under a sky with soft, colorful clouds. The overall lighting is dim, with the warm colors of the sunset providing the main light source.

**Where are we today?**



# Energy efficiency is Canada's most plentiful energy resource ...

# 40%

of Canada's energy  
needs by 2050

- The International Energy Agency estimates that energy efficiency can account for **more than 40% of Canada's energy needs by 2050\***
- Energy efficiency is the fastest growing part of the global energy sector\*\*



[\\*International Energy Agency, Energy Efficiency Potential in Canada, May 2018](#)

[\\*\\*International Energy Agency, World Energy Investment 2018](#)



\*ACEEE - The 2018 International Energy Efficiency Scorecard, p. 53.

## ... making Canada more productive and competitive ...

- Investing in energy efficiency can bring our industrial energy productivity in line with US, Europe and Japan\*\*
- This will allow all of Canada's major economic sectors – manufacturing, forestry, mining, oil and gas, transportation – **to be more competitive.**



\*\*International Energy Agency, Energy Efficiency Potential in Canada, May 2018



## ... creating jobs from coast to coast.

- In every community across Canada, **the energy efficient economy is emerging.**
- The people doing this work help small businesses and households reduce costs, freeing them up to spend on important things.

# Energy efficiency will create economic growth and jobs across Canada. Here's an annual snapshot.

▲ \$3.8 billion  
18,300 jobs

▲ \$2.3 billion  
5,900 jobs

▲ \$0.8 billion  
3,400 jobs

▲ \$0.9 billion  
4,200 jobs

▲ \$12.5 billion  
52,900 jobs

▲ \$3.9 billion  
25,200 jobs

▲ 1 billion

7,500 jobs

▲ \$0.2 billion

800 jobs





Every **\$1 spent** on energy efficiency programs generates **\$7 of GDP.**

# 39%

of our Paris  
commitments



## Energy Efficiency supports Canada's Clean Growth Agenda.

- Energy efficiency can contribute to **39% of the reductions needed to reach our Paris climate commitments\***
- It is also the first pathway of the **Generation Energy Council** and the **Expert Panel on Sustainable Finance**

[\\*Dunsky Energy Consulting, The Economic Impact of Improved Energy Efficiency in Canada, April 2018.](#)

On average, **118,000 annual jobs** will be created from economic activity enabled by energy efficiency measures.

**13  
Million**

Energy-efficient  
products installed



More than  
**\$330  
Million**

In energy savings

**100%**

Participation by  
Alberta communities



**\$3** returned  
for every  
**\$1** invested

**3.4  
Million  
Tonnes**

of greenhouse  
gas emissions  
avoided

**2,300**  
Jobs being  
created

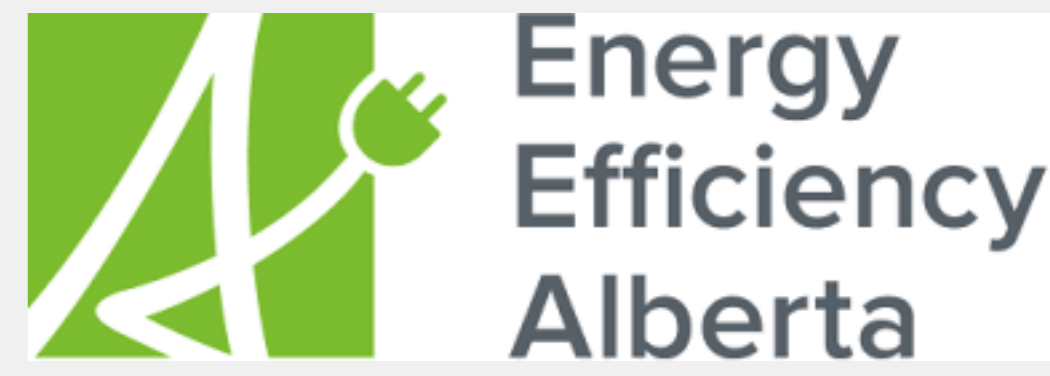


**12 Million**  
cubic  
metres  
of water  
savings

**\$475  
Million**

In economic growth













*“Energy efficiency is the ultimate win – win. It leaves consumers with more money in their pockets, creates jobs in our economy and boosts GDP across the country, all while reducing greenhouse gas emissions.”*

**Bill Morneau  
Minister of Finance**





GREEN  
JOBS  
FOR ALL

GREEN  
JOBS  
FOR ALL

HAVE TWELVE YEAR  
S YOUR PLA  
STEP UP  
STEP AS



**BE HUMAN**



An aerial photograph of a city at sunset. The foreground is filled with numerous high-rise apartment buildings. In the middle ground, a large body of water is filled with many ships, including cargo ships and smaller vessels. The background shows a range of mountains under a sky with scattered clouds, illuminated by the low sun. The overall color palette is dominated by the warm tones of sunset, with oranges, yellows, and reds in the sky and water, contrasting with the dark silhouettes of the city and mountains.

**Where are we going?**



*"Tackles the biggest questions of history and of the modern world!"*  
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# Definition:

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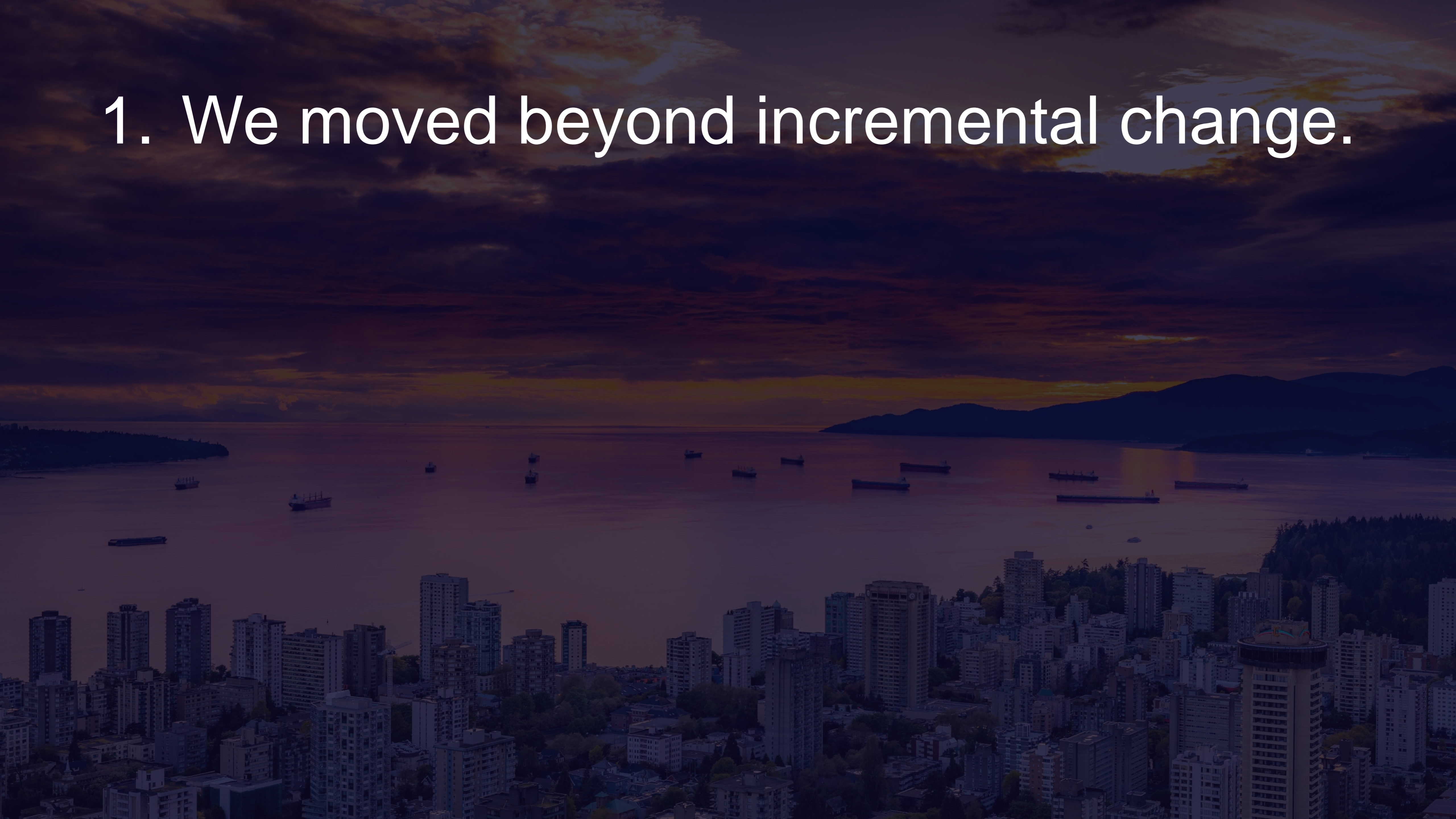
*noun*

the ability to think about or plan the future with imagination or wisdom.



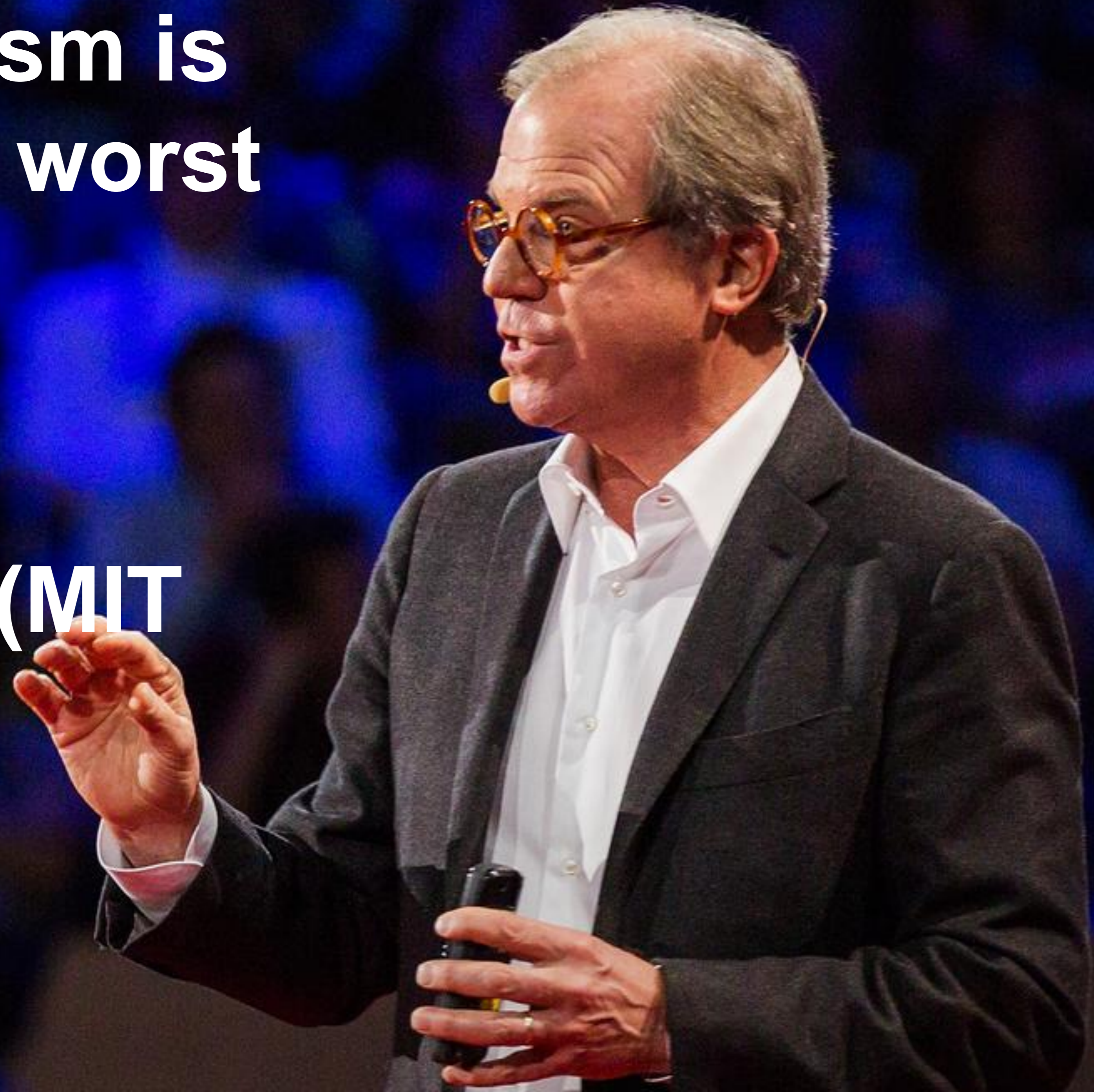
**Efficiency  
Canada**

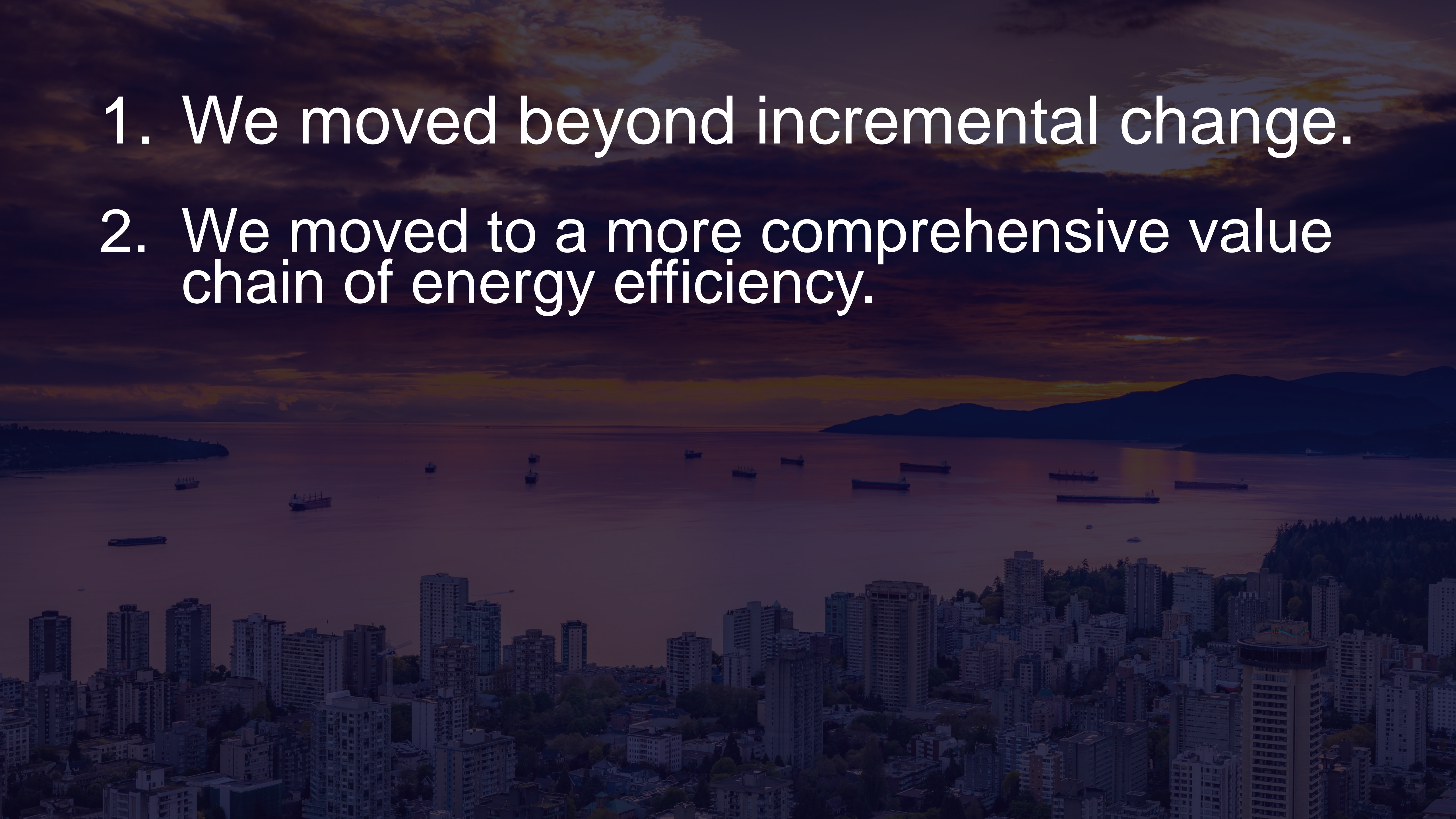
1. We moved beyond incremental change.



**Incrementalism is  
innovation's worst  
enemy.**

**Nicholas  
Negroponte (MIT  
Media  
Lab)**



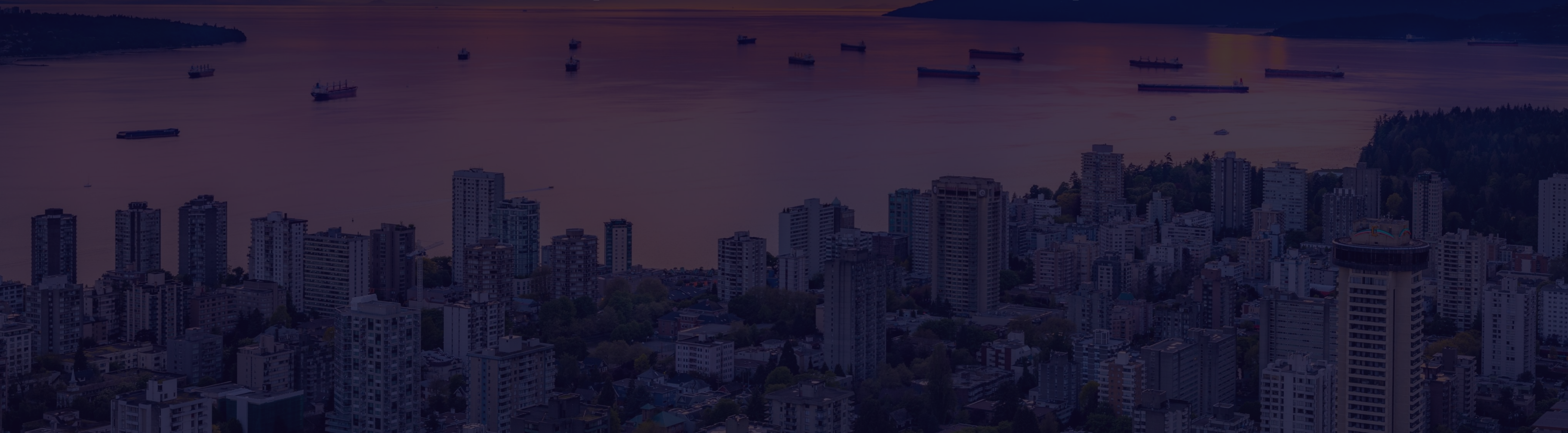
- 
- An aerial photograph of a city at sunset. The foreground is filled with numerous high-rise apartment buildings. In the middle ground, a large body of water is visible, with many large cargo ships and smaller boats scattered across it. The background shows a range of mountains under a sky with soft, orange and purple hues from the setting sun. The text is overlaid on the top half of the image in a white, sans-serif font.
1. We moved beyond incremental change.
  2. We moved to a more comprehensive value chain of energy efficiency.



**Efficiency  
Canada**

- Energy savings
- Capacity market
- Reduced transmission and distribution costs
- Emissions reduction
- Economic development
- Poverty alleviation

1. We moved beyond incremental change.
2. We moved to a more comprehensive value chain of energy efficiency.
3. We unlocked private sector capital.





# THE **NEW** CLIMATE **ECONOMY**

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The Global Commission on the Economy and Climate

\$26 trillion opportunity



**Efficiency**  
Canada



Building a  
Competitive  
Economy













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Through Energy Efficiency

**INTERIM REPORT OF THE EXPERT PANEL**  
ON SUSTAINABLE FINANCE

# Connecticut Green Bank


## OVER \$500 million in private capital raised (5 Years)

<p><b>\$65 MM</b> CLOSED 10:1</p>  <p>Grid-Tied</p>	<p><b>\$6 MM</b> CLOSED 6:1</p>  <p>Residential Solar</p>	<p><b>\$90 MM</b> CLOSED 7.5:1</p>  <p>Residential Solar Commercial Solar</p>	<p><b>\$30 MM</b> CLOSED 4:1</p>  <p>C-PACE</p>	<p><b>\$30 MM</b> OPEN 10:1<sup>1</sup></p>  <p>Residential Energy</p>	<p><b>\$20 MM</b> OPEN 4:1</p>  <p>Residential Solar &amp; Energy Efficiency</p>
<p><b>\$50-100 MM</b> OPEN 9:1</p>  <p>C-PACE</p>	<p><b>\$5 MM</b> OPEN 100%<sup>2</sup></p>  <p>Multifamily Energy</p>	<p><b>\$60+ MM</b> OPEN 6:1<sup>3</sup></p>  <p>Commercial Solar</p>	<p><b>\$3 MM</b> PRI 100%</p>  <p>Residential Storage Commercial Storage</p>	<p><b>\$75 MM</b> IN Process 100%<sup>4</sup></p>  <p>CT Green Bank REC Securitization</p>	<p><b>\$56 MM</b> Open 10:1</p>  <p>Small Business Energy Advantage</p>

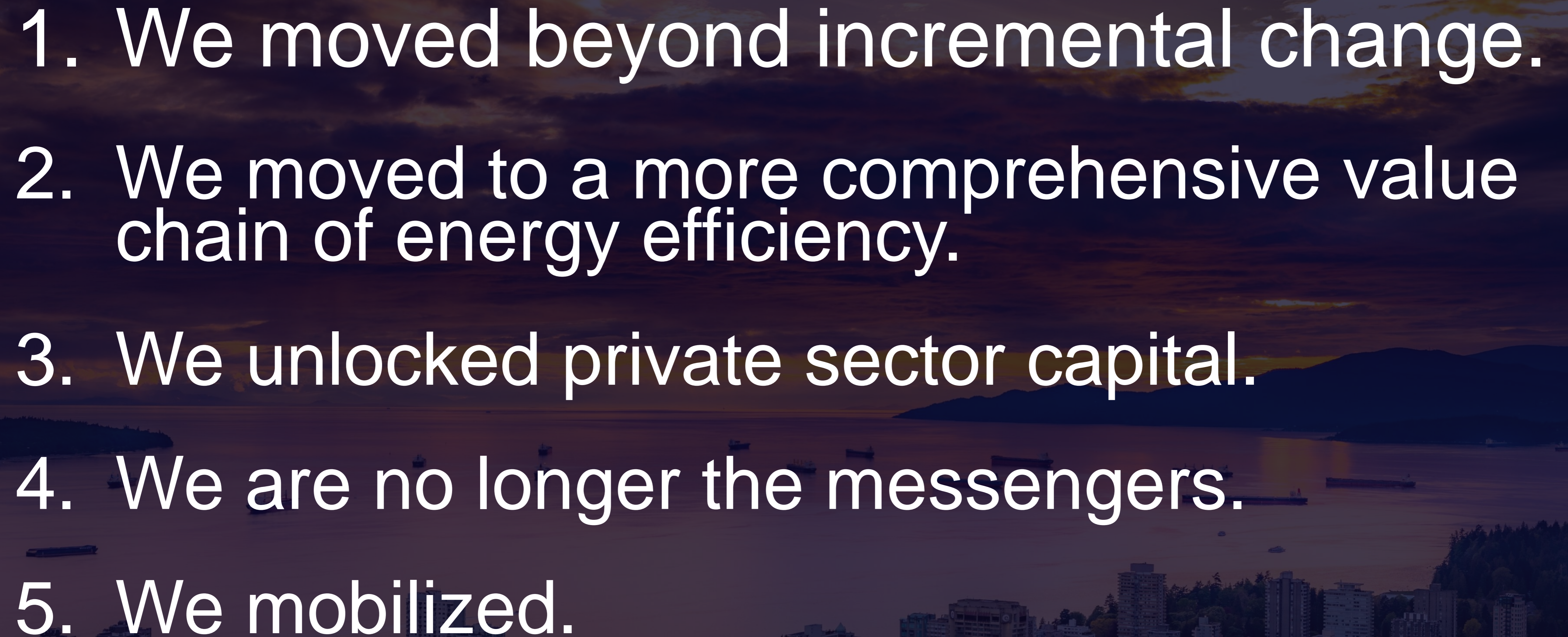
	Connecticut	Alberta
Population	3.6 MM	4.3 MM
GDP	\$284B CAD	\$331B CAD



**Efficiency**  
Canada

1. We moved beyond incremental change.
  2. We moved to a more comprehensive value chain of energy efficiency.
  3. We unlocked private sector capital.
  4. We are no longer the messengers.
- 
- An aerial photograph of a city, likely Vancouver, taken at dusk. The foreground is filled with a dense cluster of high-rise apartment buildings. In the middle ground, a large body of water, possibly a bay or harbor, is visible with several ships. The background shows a range of mountains under a sky with soft, orange and purple hues from the setting sun. The overall scene is dimly lit, with the city lights beginning to glow.



- 
- An aerial photograph of a city, likely Vancouver, taken at sunset. The sky is a mix of orange, yellow, and dark blue. The city's buildings are silhouetted against the light. In the background, a large body of water is visible with several ships. The foreground is dominated by a dense cluster of high-rise apartment buildings.
1. We moved beyond incremental change.
  2. We moved to a more comprehensive value chain of energy efficiency.
  3. We unlocked private sector capital.
  4. We are no longer the messengers.
  5. We mobilized.

"Over 70% of global energy investments will be government-driven and as such the message is clear – the world's energy destiny lies with decisions and policies made by governments."

International Energy Agency





**David Roberts**

@drvox

Follow



Climate change is not an "environmental problem." It's far deeper than that. Solutions require basic changes in technology, law, and infrastructure, none of which is affected by individual behavior. I can't build a subway or pass a carbon tax or string transmission lines.

5:29 PM - 21 Feb 2019

**221** Retweets **697** Likes



SKOLSTREJK  
FÖR  
KLIMATET





**Most workers in this sector don't self-identify as being part of an energy efficiency sector.**



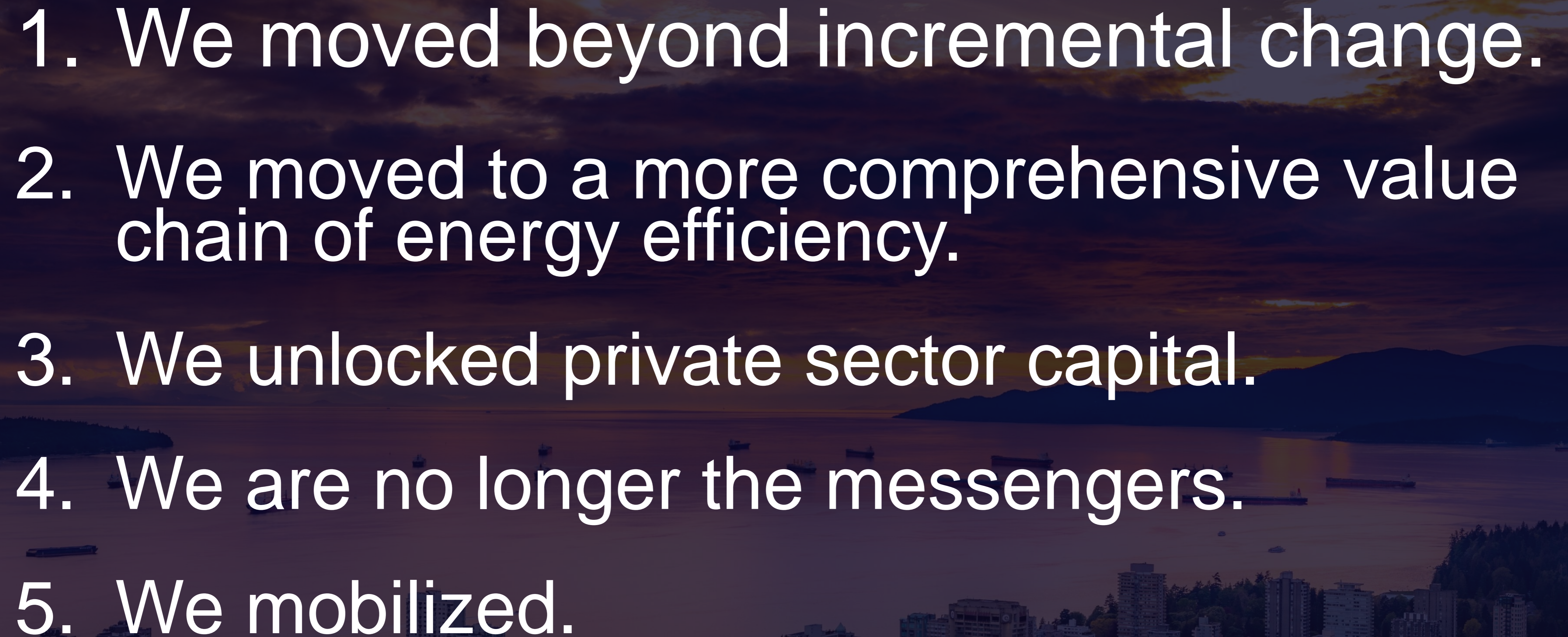
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**BE HUMAN**

An aerial photograph of a city at sunset. The foreground is filled with numerous high-rise apartment buildings. In the middle ground, a large harbor is filled with many cargo ships. The background shows a range of mountains under a sky with scattered, illuminated clouds. The overall lighting is dim, with a warm orange glow from the setting sun.

#OurHumanEnergy

Demonstrate the **human impact** of energy efficiency work, enabling all of us to take pride in what we do, see ourselves as part of something bigger, and recognize shared opportunities and challenges.

- 
- An aerial photograph of a city at sunset, with a list of five points overlaid in white text. The city features numerous high-rise buildings and a large body of water in the background. The sky is a mix of orange, yellow, and blue, with some clouds. The text is centered and reads:
1. We moved beyond incremental change.
  2. We moved to a more comprehensive value chain of energy efficiency.
  3. We unlocked private sector capital.
  4. We are no longer the messengers.
  5. We mobilized.

An aerial photograph of a city at sunset. The foreground is filled with numerous high-rise apartment buildings. In the middle ground, a large body of water is visible, with several large cargo ships and smaller boats scattered across it. The background shows a range of mountains under a sky with dark, dramatic clouds and a low sun. The text "Are you in?" is overlaid in the center in a large, white, sans-serif font.

**Are you in?**