



# Manitoba Climate and Green Plan

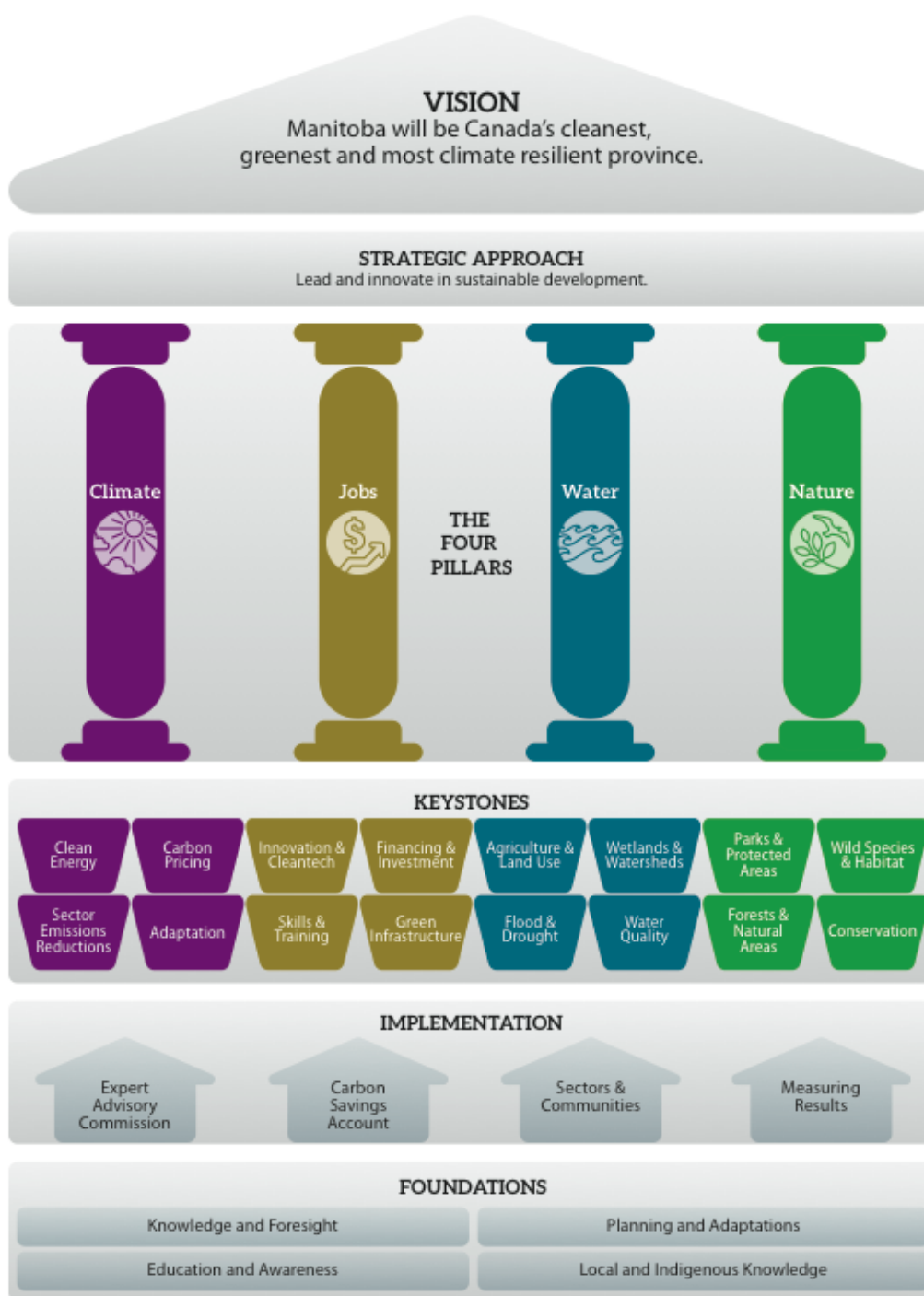
A Made-in-Manitoba solution

Presentation to the  
Association of Manitoba Municipalities

April 16, 2021



Manitoba 



# Framework of the Climate and Green Plan



# Implementing the Plan

## Measuring Progress

Each keystone proposes an expected result to help focus our efforts.



### Climate

- more clean energy use in Manitoba
- emissions reductions due to carbon pricing
- overall emissions reductions for Manitoba and in identified sectors
- increased climate resiliency in Manitoba



### Water

- maintenance and enhancement of our healthy agro-ecosystem
- healthy, sustainable wetlands and watersheds
- effective forecasting, mitigation and response to flooding and drought
- clean water throughout Manitoba for drinking, habitat, recreation, and economic development



### Jobs

- growth in the clean technology sector
- increased private sector investment in the green economy
- increase in green economy jobs
- more green infrastructure projects



### Nature

- Manitoba families enjoy a greater connection with nature, natural tourism
- healthy wildlife populations and biodiverse ecosystems
- healthy and productive forests and natural areas
- Manitoba support for active conservation efforts



# Expert Advisory Council (EAC)

Independent group of experts with a mandate to provide advice and recommendations to the Minister on the Government of Manitoba's Climate and Green Plan.

- Report on the Carbon Savings Account -June 2019
- Recommendations for a Provincial Water Management Strategy for Manitoba – March 2021
- Oversight on Manitoba Watershed Plans



# Carbon Savings Account

Over a 5 year period 1MT reduction in carbon through government supported action.

- Report on the Carbon Savings Account – 2023
- What is not accomplished is carried over to address in the next carbon savings cycle
- Next targets to be set in 2 years.



# Highlights - Achievements under the Climate and Green Plan

- Establishing Efficiency Manitoba
- Launching North America's First Carbon Savings Account
- Renewable Fuels
- The Efficient Trucking Program
- Lake Manitoba and Lake St Martin Outlet Channel
- The Schools Capital Support Program
- Further developing MB's clean, green hydroelectricity





# Climate

---

- Manitoba's Emissions Profile



# Clean Energy

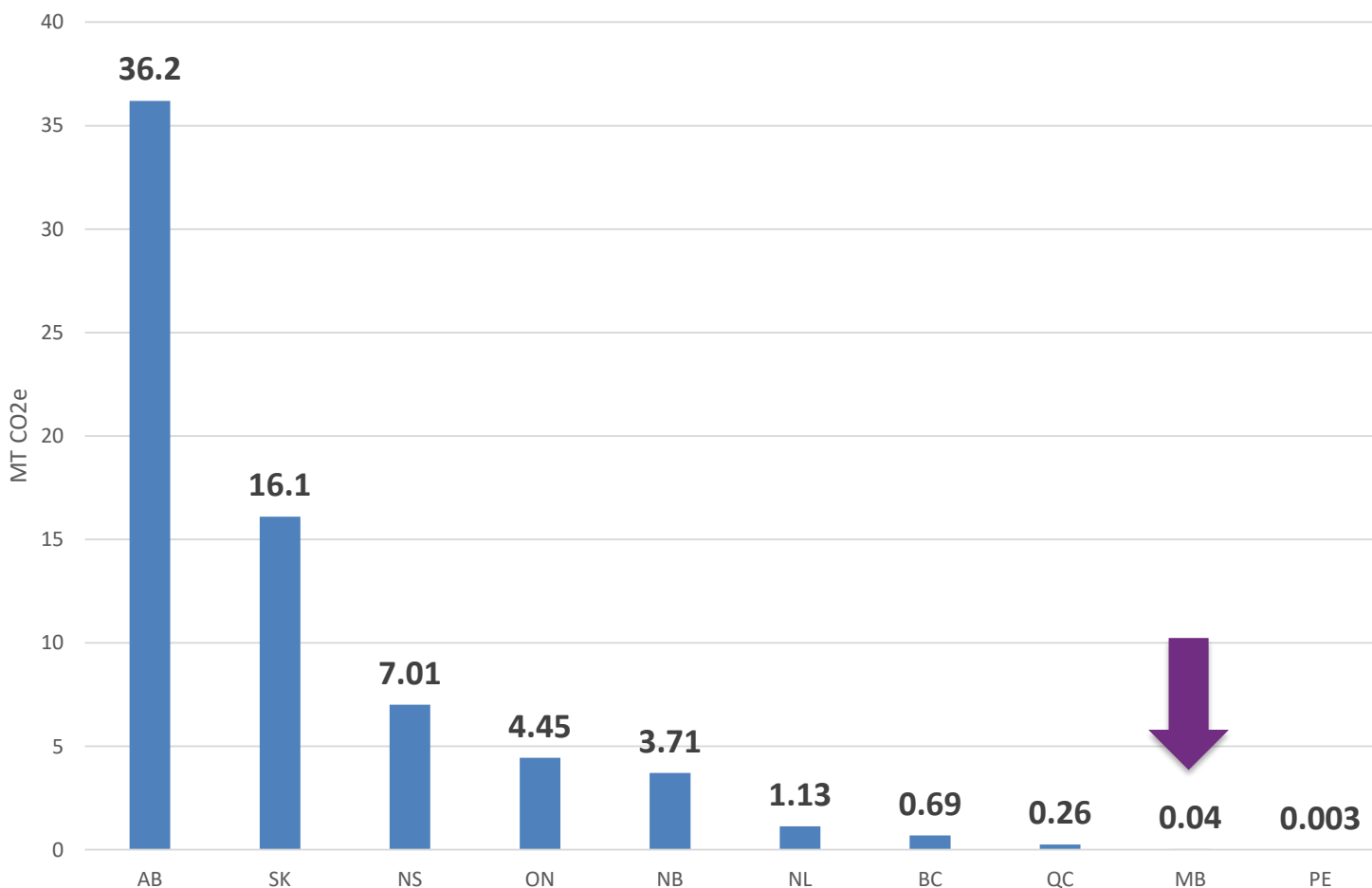
## Actions

Manitoba's Clean Energy Advantage	Exporting clean Manitoba hydroelectricity to neighbouring jurisdictions to reduce their fossil fuel use and greenhouse gas emissions.
Efficiency Manitoba	New stand-alone agency to help households and businesses reduce energy consumption and save money.
Green Heating	Support to households and businesses to purchase green heating options such as geothermal heat pumps.
Electrification of Winnipeg Transit	Increasing the number of fully electric city buses in Winnipeg.
Community Energy Planning	Helping municipalities better understand local energy needs and identify opportunities to conserve energy.
Off-grid Communities	Exploring options to replace diesel generators with clean renewable energy in off-grid communities.





# GHG Emissions from Electricity Generated by Province

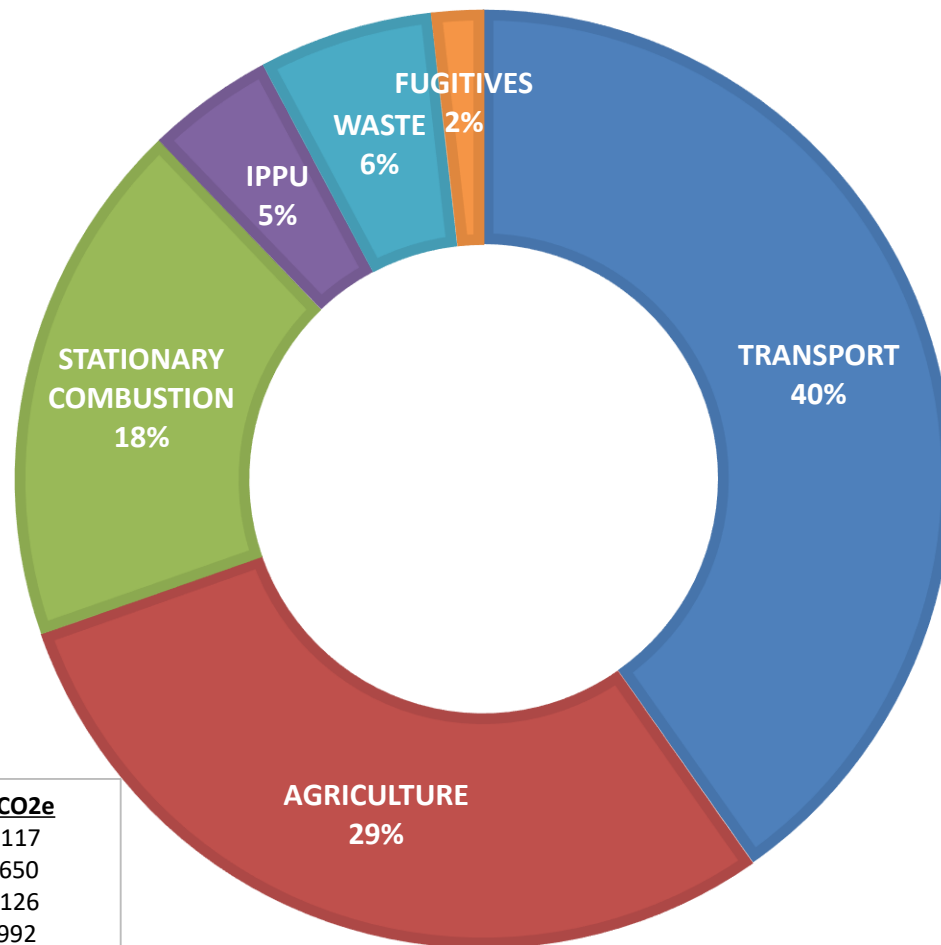


National Inventory Report 2020



# 2019 MANITOBA GHG EMISSIONS PROFILE

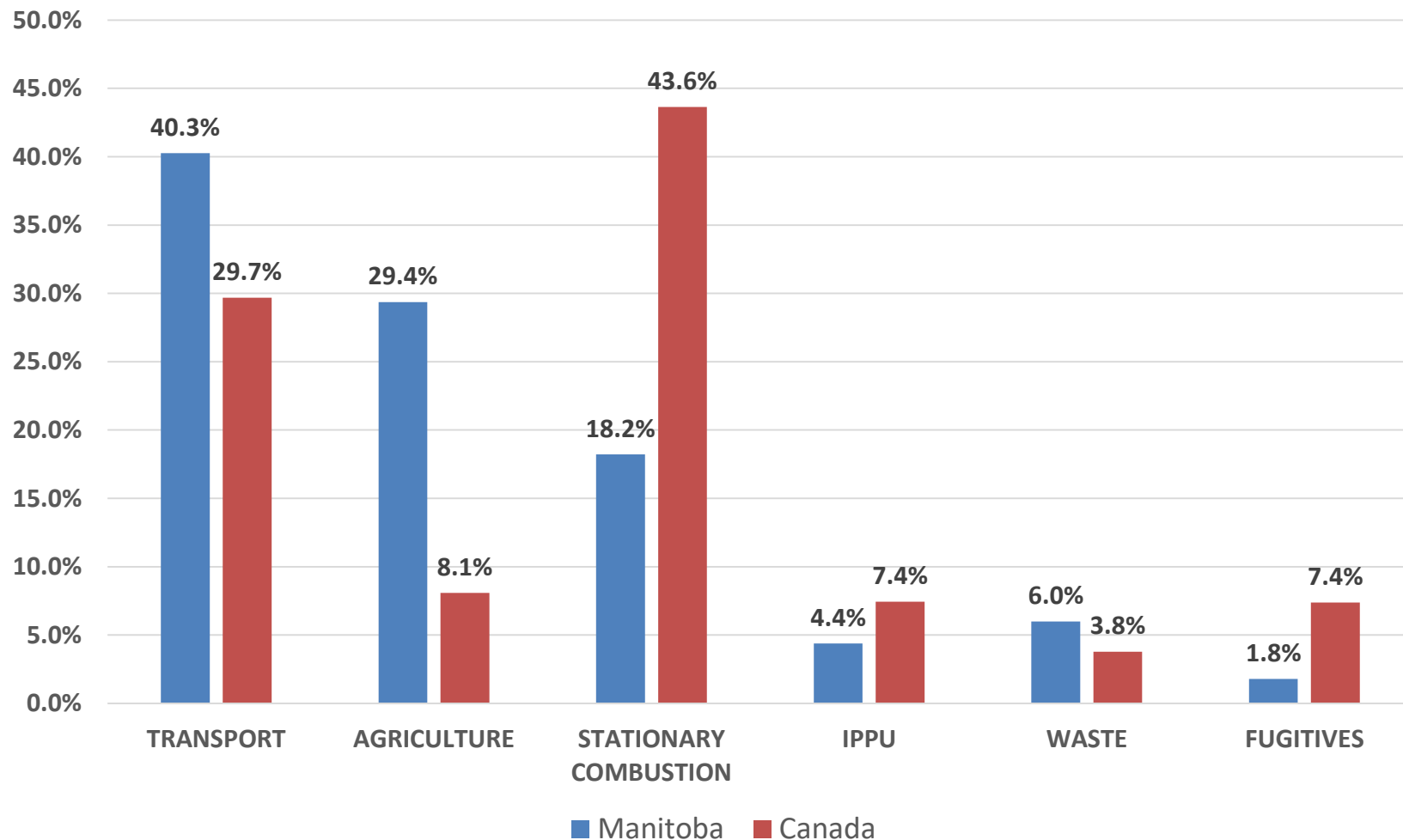
■ TRANSPORT ■ AGRICULTURE ■ STATIONARY COMBUSTION ■ IPPU ■ WASTE ■ FUGITIVES

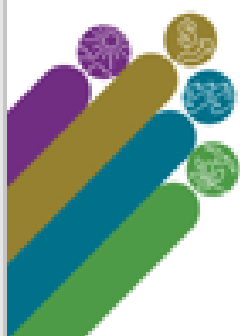


Sector	ktCO <sub>2</sub> e
TRANSPORT	9,117
AGRICULTURE	6,650
STATIONARY COMBUSTION	4,126
IPPU	992
WASTE	1,358
FUGITIVES	404
TOTAL	22,647



# 2019 GHG Emissions Profile (%) Manitoba versus Canada





# Measuring results

## Manitoba's Target: 1,000,000 tonnes



Data Source: 2018 Additional Measures Reference Case & Navius Research Inc. Forecast & Navius Research Inc. Modelling and Analysis 2019.



# CLIMATE ACTION

---

Emissions Reductions  
Adaptation



# Emissions Reductions:

- Key Provincial Actions
  - Manitoba Hydro – Coal and Natural Gas Thermal Generation Phase-Out
  - Transportation - Renewable Fuels
    - Increased ethanol content
    - Increased biodiesel content
  - Agriculture – Management Plans
  - Supporting the City of Winnipeg investigation into alternatives for the Brady Road Resource Management Facility for methane use.





# Carbon Pricing – Market Signals

- Manitoba's carbon price currently set by the Federal Government under the backstop carbon price
  - Current Federal Price
    - \$40 per tonne of carbon (up from \$30 last year)
  - New Federal Proposal
    - Increase the carbon price by \$15 per year starting in 2023 (\$65)
    - Rises to \$170 per tonne of carbon pollution in 2030.
- Manitoba's previous carbon pricing proposal:
  - Flat fixed rate per tonne that accounts for MB investment in clean hydro
  - An output-based pricing system for large industrial emitters
  - The MB plan projected to reduce emissions by 80,000 tonnes more than the federal imposed plan by 2022.
  - Manitoba is awaiting a decision from the Federal Court – was our pricing system unfairly assessed by the federal government?



# Carbon Reduction Incentives

- Funding Programs for Investments
  - le) Conservation and Climate Fund, Building Sustainable Communities
- Efficient Trucking Program
- Efficiency Manitoba – Building Energy Improvements
  - Expanded program options for building owners
  - Extensive opportunities to support home improvements for low income and indigenous
- Rebate Programs for energy improvements
- Supports for industry to reduce emissions and energy



# Energy Efficiency Programs for Buildings

Manitoba established **Efficiency Manitoba** (EM) under The Efficiency Manitoba Act, to implement and support energy efficiency initiatives in the province:

- EM officially commenced operations on April 1, 2020
- EM offers electric and natural gas efficiency programs for residential, commercial, industrial and agricultural customers to make their homes and businesses more energy efficient.
  - Retrofit Programs
  - New Construction
    - including energy modeling and incentives for new homes



# Energy Efficiency Programs for Buildings

- Canada's Low Carbon Economy Leadership Fund
  - Cost share up to 50% of EM's natural gas efficiency programming over the three-year plan period up to 2022/23
  - Major focus on energy improvements for schools
- Manitoba tax credits - **Green Energy Equipment Tax Credit** to help Manitobans choose proven technology
  - Refundable 15% tax credit for geothermal capital installation plus a tax credit for made in Manitoba equipment.
  - Refundable 10% tax credit for solar thermal energy systems



# Building Codes

- Manitoba's Expert Advisory Council recommended modernizing the provincial building codes to support the Climate and Green Plan objectives.
- Modernizing codes provides long term benefits:
  - energy performance improvements
  - increase resiliency
- Manitoba ratified Regulatory Reconciliation and Cooperation Table (RCT) Agreement committing to:
  - adopt the most current national building codes; and
  - harmonize code requirements across provincial and territorial jurisdictions and federally



# Changing Climate in Manitoba



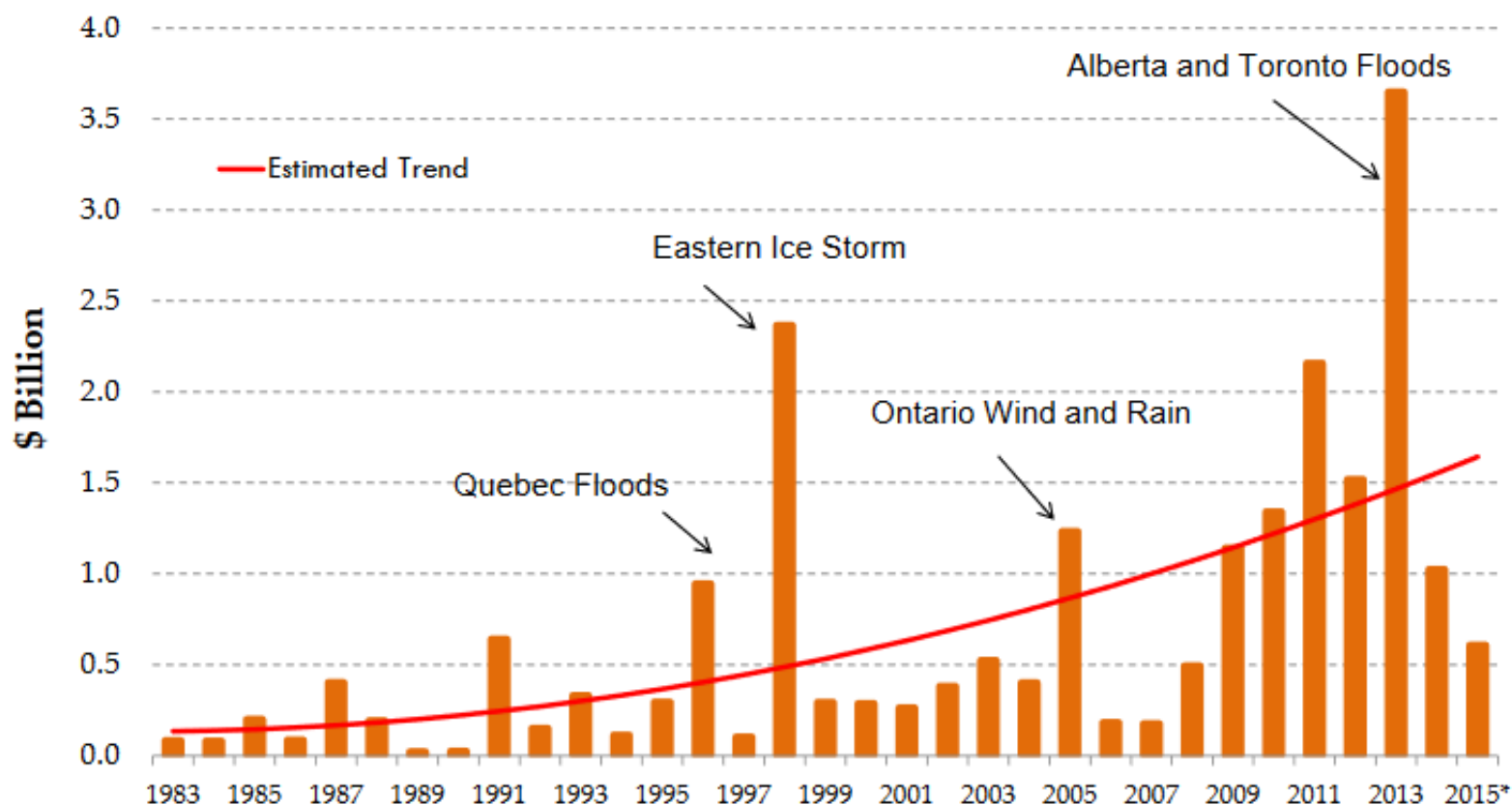
**Drought and low  
water levels**







# Catastrophic Losses in Canada





# Climate Resiliency

- Resiliency required to absorb changing climate and more frequent severe extremes
- Resilient infrastructure system is essential to cope with future extreme events
- Understanding the changes and impacts on the built and natural environment
- Plan and invest to ensure the integrity of the built environment and support natural systems for added resiliency



# ADAPTATION

## Actions

---

### Climate Knowledge

- Supporting prairie based information hubs
- Helping with baseline information
- Incorporating Indigenous knowledge

---

### Sustainable & Climate Ready Communities

- Supporting municipalities to be more resilient
- Designing climate resilient communities

---

### Sustainable Agriculture

---



# Building Manitoba's Adaptation Capacity and Expertise

Building regional capacity and expertise to increase adaptation action and resilience

- Strong partnerships with other prairie provinces and federal government to augment investment in capacity building and prairie expertise.
- Working through service providers to deliver
- Key actions:
  1. Facilitate knowledge to action
  2. Training and capacity building:
  3. Funding to support action for Municipalities and their partners (ie. Watersheds Districts)



# Building Manitoba's Adaptation Capacity and Expertise – Key Actions

## 1) Facilitate knowledge to action:

- **Climate Atlas of Canada** [www.climateatlas.ca](http://www.climateatlas.ca)
  - Reliable data on a changing climate
- **Prairie Regional Adaptation Collaborative** <https://www.prairiesrac.com/>
  - Regional workshops and webinars
- **ClimateWest** <https://www.climatewest.ca/>
  - services for climate data, risk analysis and training on using and applying the



# Building Manitoba's Adaptation Capacity and Expertise – Key Actions

## 2) Training and capacity building:

- Survey of municipalities (All One Sky through PRAC) - 55 municipalities responded
- What you told us - Skills development for staff and supporting staff was identified as critical
  - **Manitoba Climate Resilience Training** - training for professional planners, engineers and indigenous representatives

## 3) Funding to support action for Municipalities and their partners (ie. Watersheds Districts)

- Resilient Built Infrastructure - Disaster Prevention and Climate Resiliency Fund
- Other Funds – Building sustainable Communities, Conservation and Climate Fund
- Natural infrastructure





# Natural and Built Systems

Wetlands & Watersheds	Enhance watershed planning and management. No net loss and maintain as much ecological integrity as we can on landscape.
Agriculture & Land Use	Growing Outcomes for Watersheds ( <b>GROW</b> ) and <b>Conservation Trust</b> for Drainage and Water Retention
Flood & Drought	Maintaining as much ecological integrity as we can on the landscape. Assess and enhance systems capacity
Water Quality	Managing Excess Nutrients. Shoreline Erosion. Drinking Water Quality. Groundwater and Aquifers



# What to Watch For

- Manitoba Energy Strategy
- Additional Efficiency Manitoba programs
- Green Transportation Strategy
- Low Carbon Government
- Support for Municipalities
  - ClimateWest for adaptation planning support
  - Additional programs for climate resiliency
  - Ongoing support through programs like Building Sustainable Communities and the Conservation and Climate Fund
  - Support to municipalities to access grants delivered in partnership with International Institute for Sustainable Development and EcoWest



# Thank you!

To learn more about the Manitoba Climate and Green Plan  
please visit:

[www.manitobaclimategreenplan.ca](http://www.manitobaclimategreenplan.ca)