

CITY OF EDMONTON'S EXPERIENCE

CLIMATE RESILIENT EDMONTON

Adaptation Strategy and Action Plan

**CHANGE
FOR CLIMATE**

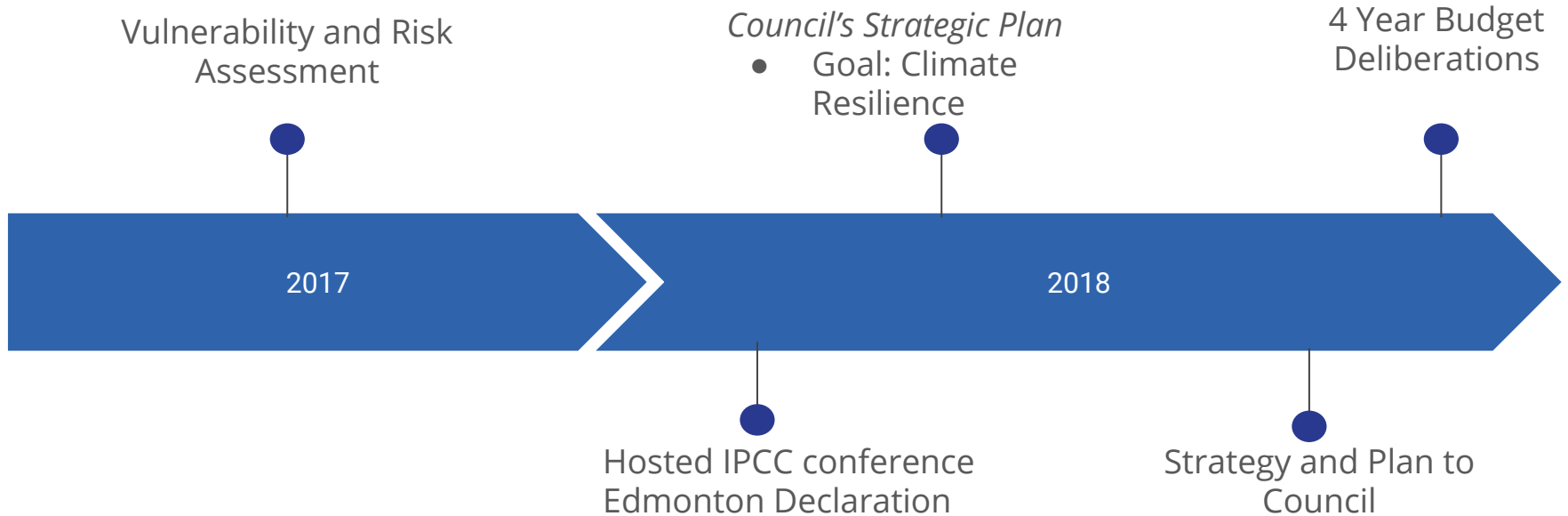


BACKGROUND

- Largest most northern city in North America
- Began working on climate mitigation in 1990's
- Developing first ever adaptation strategy was a corporate priority in corporate 2016-2018 business plan

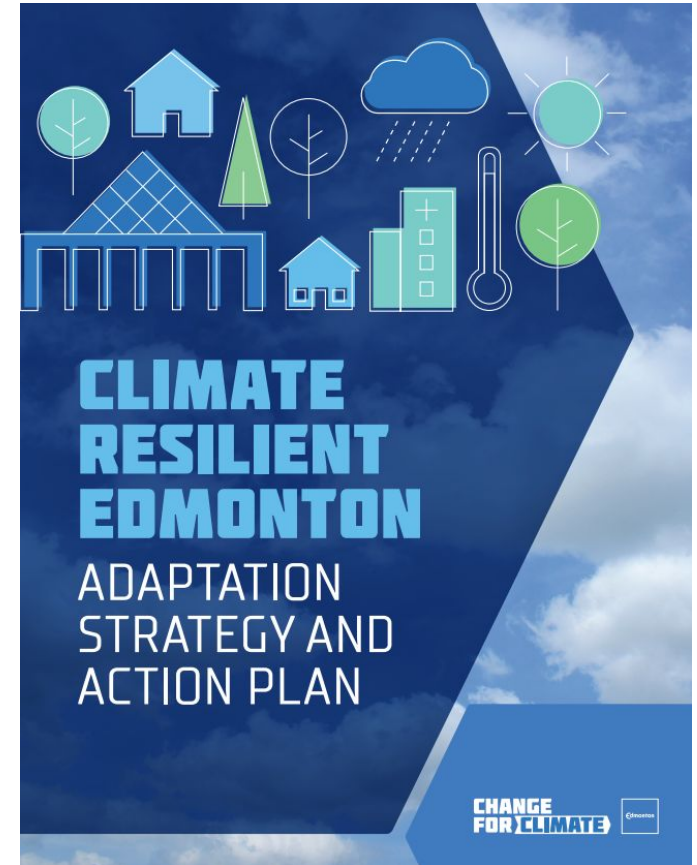


BACKGROUND



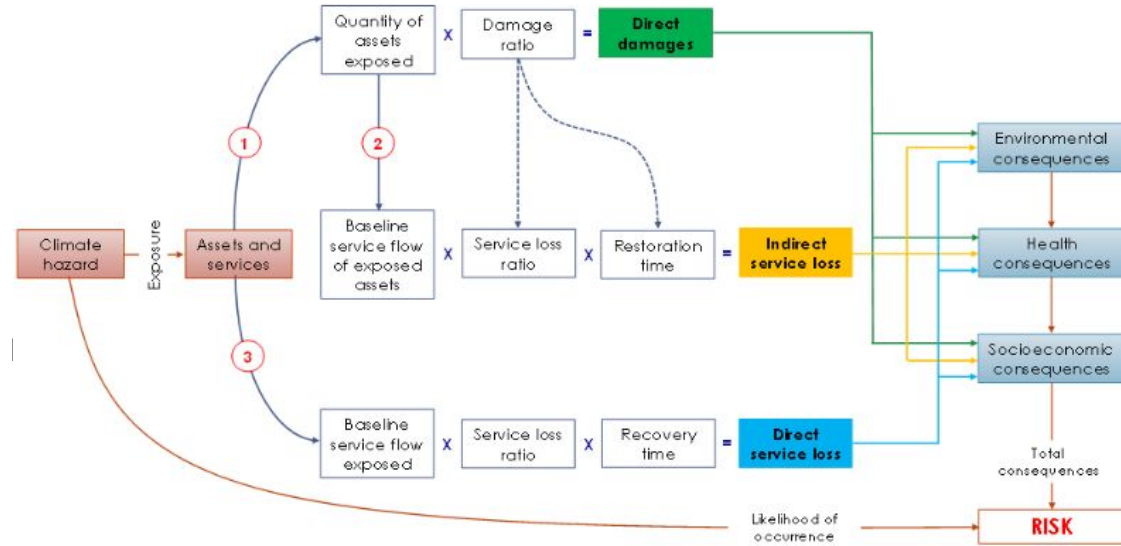
BACKGROUND

- Developed in partnership with community stakeholders and City staff
- Climate scientist and adaptation planning experts
 - Climate modelling
 - Vulnerability and risk assessment
 - Best practices research



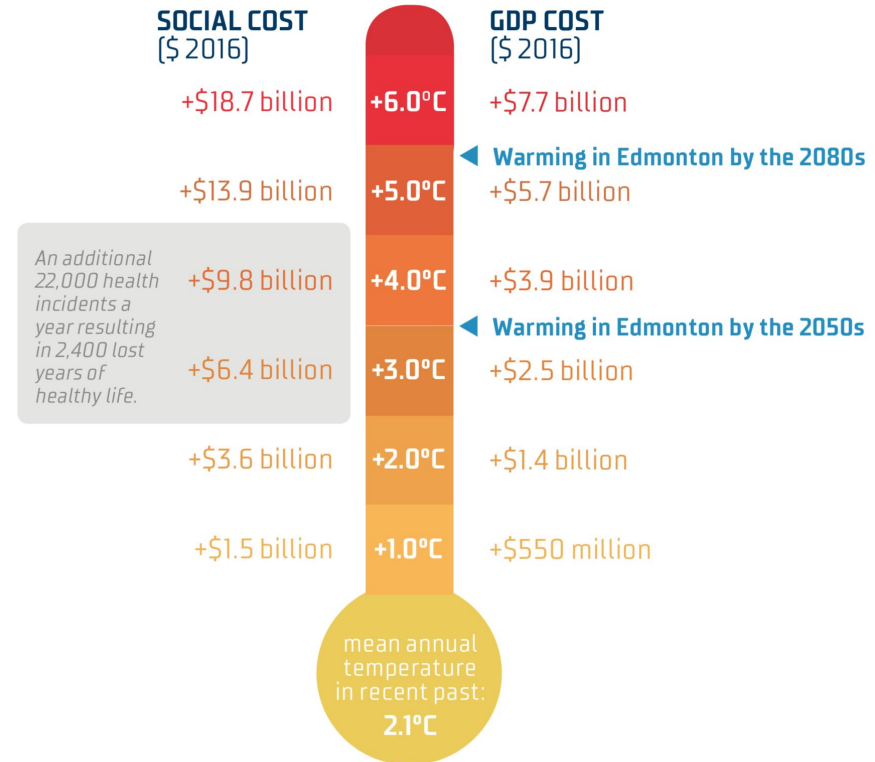
VULNERABILITY AND RISK ASSESSMENT

- 17 climate hazards
 - Established thresholds
 - Modelled likelihood
- 19 asset and service areas
- Quantitative vulnerability and assessment
 - Direct damages
 - Direct service losses
 - Indirect service losses



ECONOMIC AND HEALTH ASSESSMENT

- Edmonton's GDP could be reduced by \$3.2 billion annually on average by the 2050s
- An additional 22,000 health incidents a year are expected to occur by the 2050s
- Social and GDP costs increase for every degree of warming



ACTION PLAN

5

PATHWAYS

11

GOALS

18

ACTIONS



PATH 1:

Science and Evidence Based Decisions



PATH 3:

Preparing for Changing Precipitation



PATH 5:

Preparing for Changing Ecosystems



PATH 2:

Preparing for Changing Temperatures



PATH 4:

Preparing for Changing Weather Extremes

IMPLEMENTATION GROUPINGS

1

Mainstreaming into City
processes and projects

2

Connecting the
community

3

Transformational
Projects

IMPLEMENTATION GROUPINGS

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Mainstreaming into City processes and projects

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Transformational Projects

- Design & Construction Standards
- MDP and TMP
- Zoning bylaw update
- Asset Management Plans
- Integrated Pest Management Plans
- Sustainable & Resilient building policy
- Wildfire and river flood mapping

IMPLEMENTATION GROUPINGS

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Mainstreaming into City processes and projects

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Connecting the community

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Transformational Projects

- Community scale climate change readiness program
- Climate ambassador program
- Green Leagues
- Creating resources

FINANCING

1

Mainstreaming into City processes and projects

2

Connecting the community

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Transformational Projects



- Mainstreaming
- Operating Budget
- Grants

FINANCING

- Implementation Service Package
 - \$500k funded in Operating Budget
 - 3 FTEs
- Mainstreaming
 - Leverage existing budgeted work
- Grants
 - FCM
 - IPCC legacy grant

IMPLEMENTATION GROUPINGS

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Mainstreaming into City
processes and projects

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Connecting the
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Transformational
Projects

- Flood mitigation

FINANCING

1

Mainstreaming into City processes and projects

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Connecting the community

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Transformational Projects

- **Utility rates**
- **Grants**

FINANCING

- EPCOR - 20 year flood mitigation plan
 - Rate adjustments
 - Disaster Mitigation and Adaptation Fund grant

COMMUNITY FINANCING

- Community grants
- PACE/CEIP financing



THANK YOU



**CHANGE
FOR CLIMATE**

Edmonton