Managing Risk through Sustainable Practices

Trina Innes, Director

AUMA Public Risk Conference, May 8, 2019

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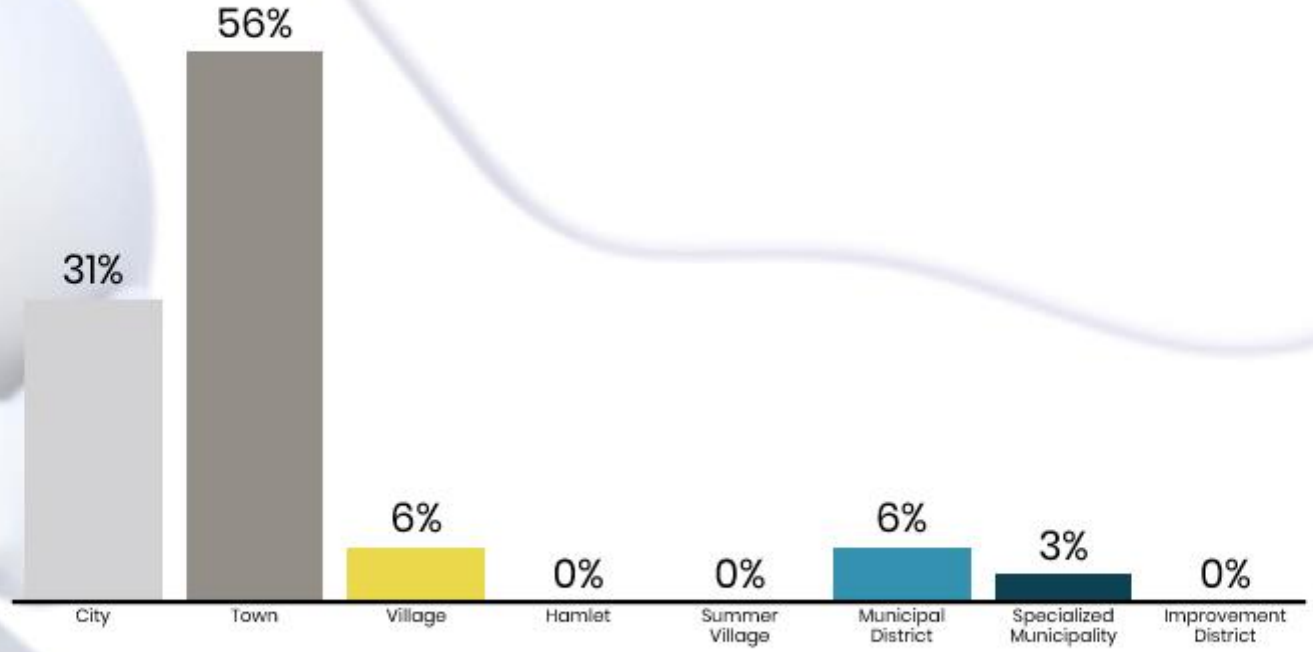
Municipal Climate Change Action Centre

AGENDA

- Sustainability risk management
- Megaforces
- Climate risks
- Mitigation solutions

Go to **www.menti.com** and use the code **27 51 92**

What type of municipality do you represent?



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RISK MANAGEMENT

- Identifying and analyzing risks inherent in activities
- Trying to <u>control</u> all risks will put us out of business
- Trying to <u>ignore</u> all risks will put us out of business

The global state of sustainable insurance

Understanding and integrating environmental, social and governance factors in insurance

SUSTAINABILITY RISK MANAGEMENT

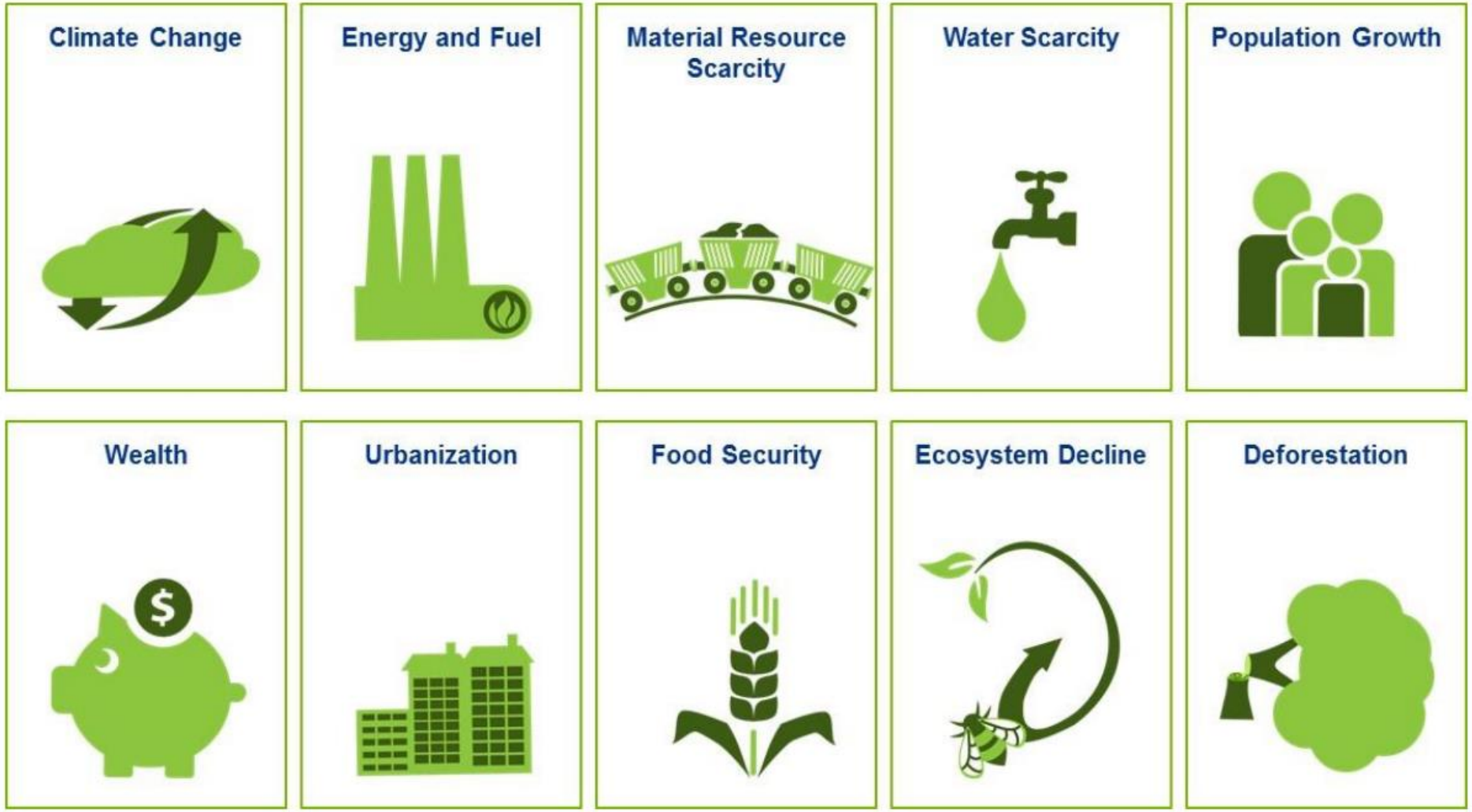
- Risks and issues that emerge from social, environmental and governance (ESG) trends
- Aligns organizational goals with internal sustainability strategies and policies

Risk management practices are not adequately addressing sustainability risks”

70%
agree

Management tends to view sustainability risks as less likely and less impactful on a company’s performance then financial risk”

74%
agree


Climate Change
Energy and Fuel
Material Resource Scarcity
Water Scarcity
Population Growth
Wealth
Urbanization
Food Security
Ecosystem Decline
Deforestation

What 3 megaforces will most impact your municipality?

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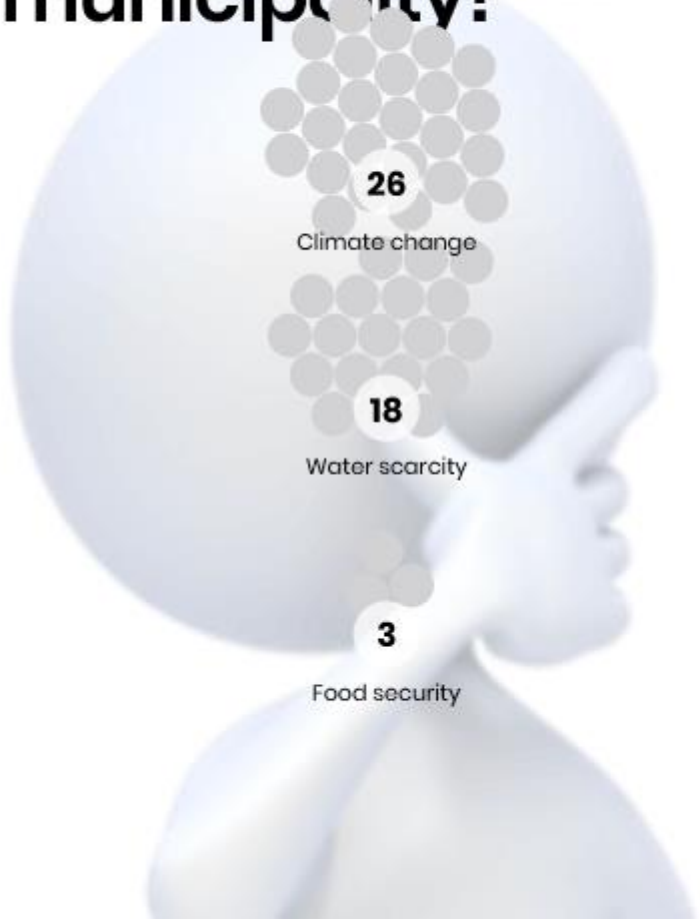


26
Climate change

22
Energy and fuel

6
Material resource scarcity

18
Water scarcity

12
Wealth

15
Urbanization

3
Food security

10
Ecosystem decline

4
Deforestation

39

THE GLOBAL RISK OUTLOOK FOR 2019

Types of Risks: ENVIRONMENTAL GEOPOLITICAL SOCIETAL TECHNOLOGICAL ECONOMIC

Top 5 Global Risks in Terms of **Impact**

1. *Weapons of mass destruction*
2. *Failure of climate-change mitigation and adaptation*
3. *Extreme weather events*
4. *Water crises*
5. *Natural disasters*

Top 5 Global Risks in Terms of **Likelihood**

1. *Extreme weather events*
2. *Failure of climate-change mitigation and adaptation*
3. *Natural disasters*
4. *Data fraud or theft*
5. *Cyber-attacks*

iDENTiFY
ASSESS
ANALYZE
RiSK MANAGEMENT
REDUCE
CONTROL
TRANSFER

SUSTAINABILITY RISKS

Social

- Human Rights
- Working Conditions
- Equity & Diversity
- Community
- Culture
- Gender & Sexuality
- Health & Wellness
- Safety
- Democracy
- Governance
- Education

Environmental

- Air, Land, Water
- Energy
- Climate Change
- Non-Renewable Resources
- Pollution
- Resources
- Blodiversity
- Ecosystems

Economic

- Transparency
- Governance
- Financial objectives
- Utility costs
- Wages
- Reputation
- Infrastructure
- Investments
- Operating costs
- Insurance premiums
- Carbon taxes

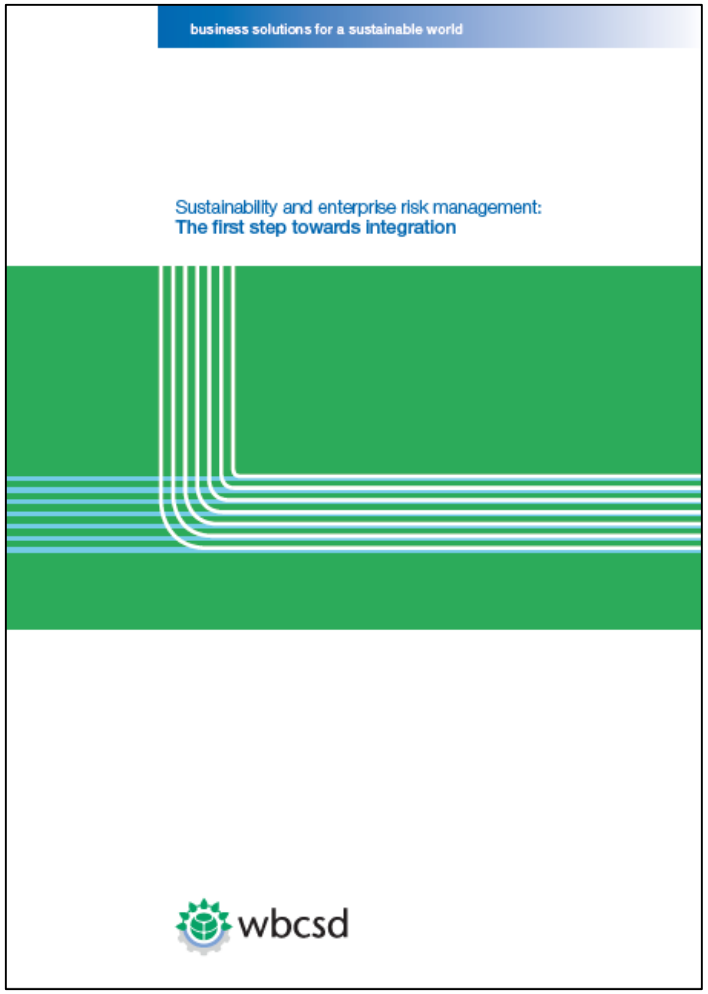
SUSTAINABILITY RISK MANAGEMENT

Impacts

- Penalties/fines/litigation
- Waste management
- Lost of social/regulatory license to operate
- Health & wellbeing
- Reputation/brand
- Price volatility (energy, resources)
- Increased competition for resources
- Increased regulation

Opportunities

- Operational efficiency
- Reputation/brand
- Innovation and learning
- Avoid/reduce costs
- Improved risk management
- Improved access to capital
- Employee attraction/retention
- Value creation



- Limited knowledge of sustainability risks
- Omission of opportunities or strategic risks
- Difficulty quantifying sustainability risks
- Limited cross-functional collaboration
- Longer time horizons for sustainability risks

CCCR2019

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EN FR

Canada's Changing Climate Report

Canada warming at twice the global rate

This report is about how and why Canada's climate has changed and what changes are projected for the future. Led by Environment and Climate Change Canada, it is the first report to be released as part of *Canada in a Changing Climate: Advancing our Knowledge for Action.*

Explore Chapters ↓

Download Full Report (PDF, 34MB) ▶

STRATEGY CORP

CANADIAN MUNICIPAL CHIEF ADMINISTRATIVE OFFICER SURVEY 2018

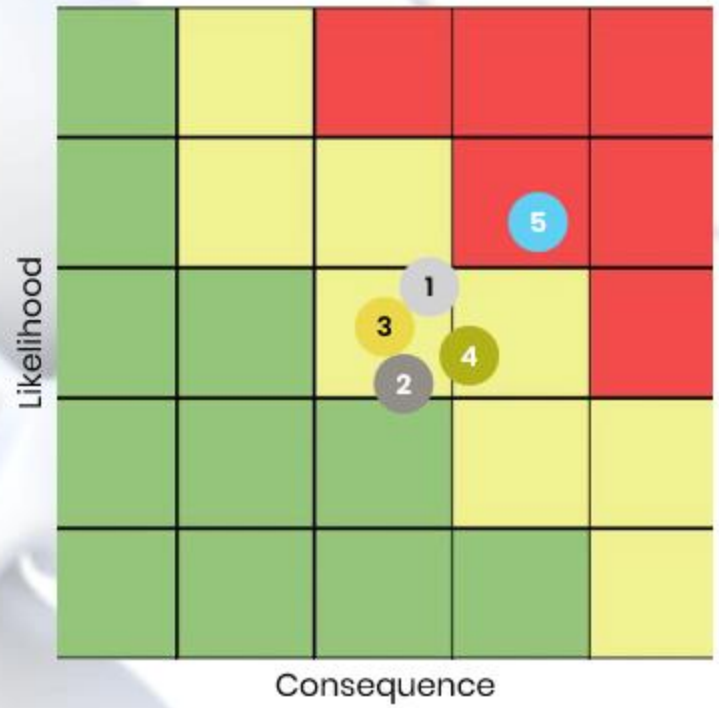
A candid look at the issues on the minds of Canada's CAOs

Risk Matrix

Impact →

Likelihood ↑	Negligible	Minor	Moderate	Significant	Severe
Very Likely	Low Med	Medium	Med Hi	High	High
Likely	Low	Low Med	Medium	Med Hi	High
Possible	Low	Low Med	Medium	Med Hi	Med Hi
Unlikely	Low	Low Med	Low Med	Medium	Med Hi
Very Unlikely	Low	Low	Low Med	Medium	Medium

To what extent is your municipality is at risk for:



1 Droughts

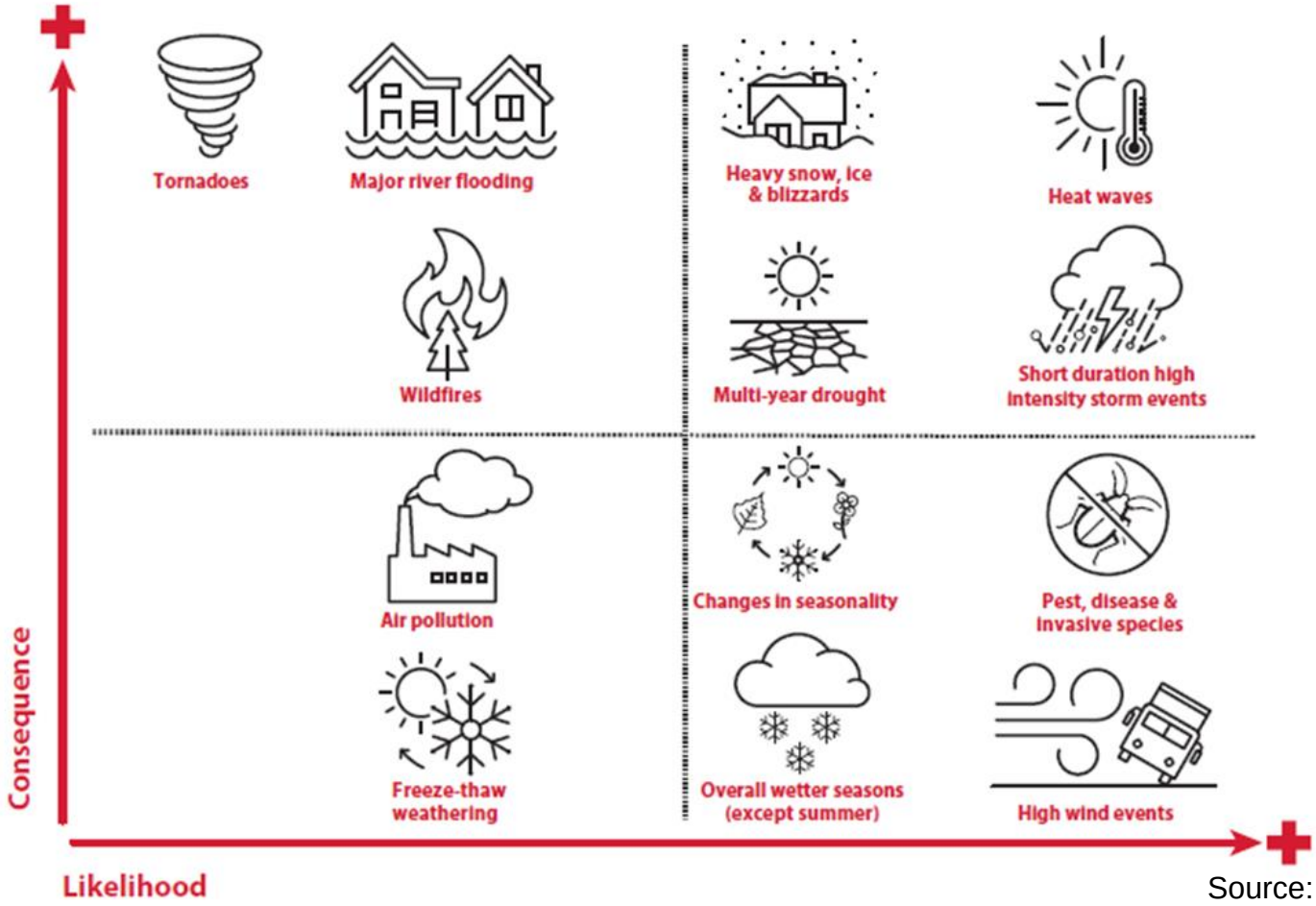
2 Flooding

3 Heat waves

4 Wildfires

5 Short, high intensity storms

Calgary's Climate Risks profile



Source: City of Calgary

SUSTAINABILITY RISKS

Operations

Environment

Finance

Health & Safety

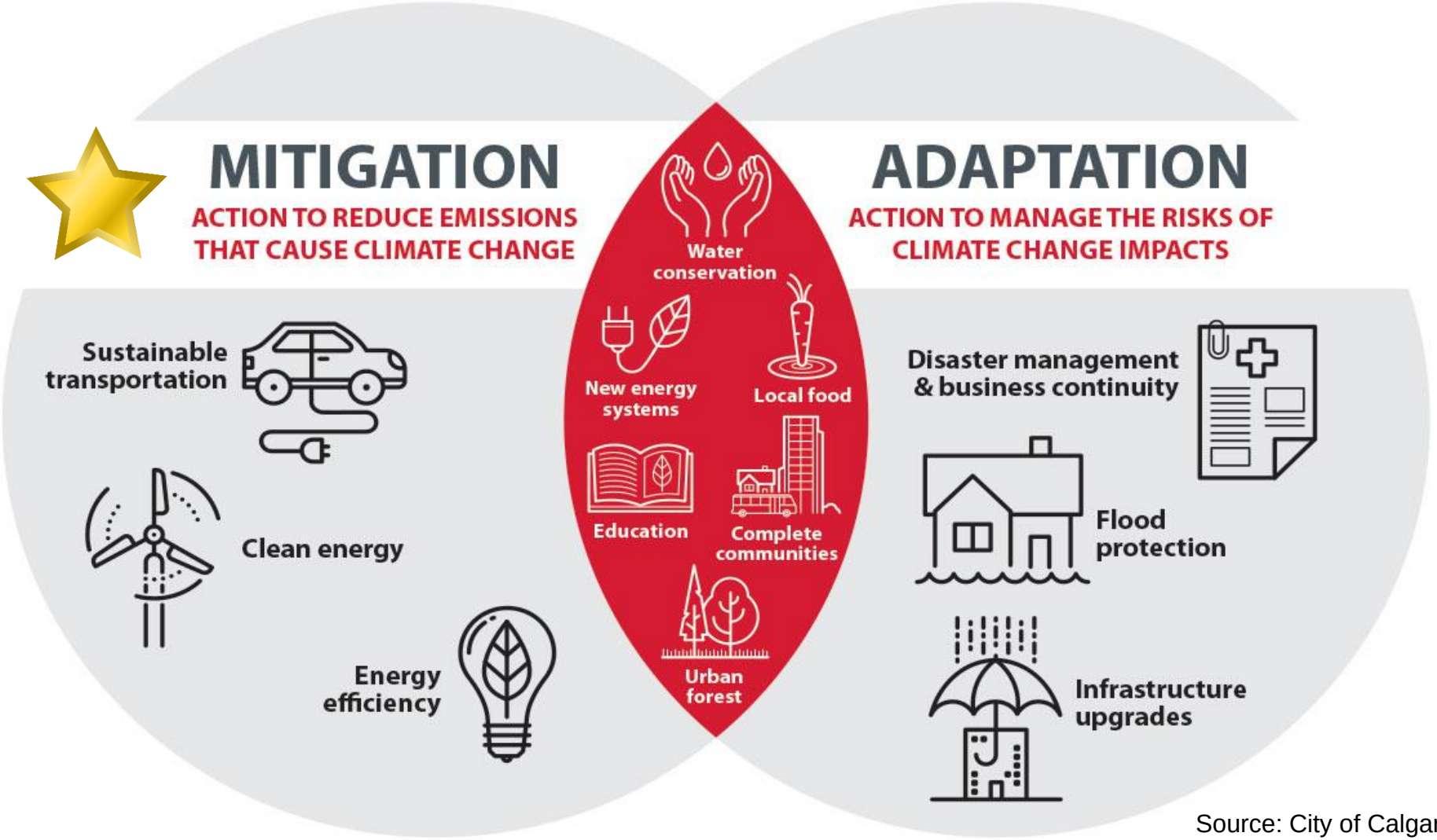
Strategic

Logistics

Reputation

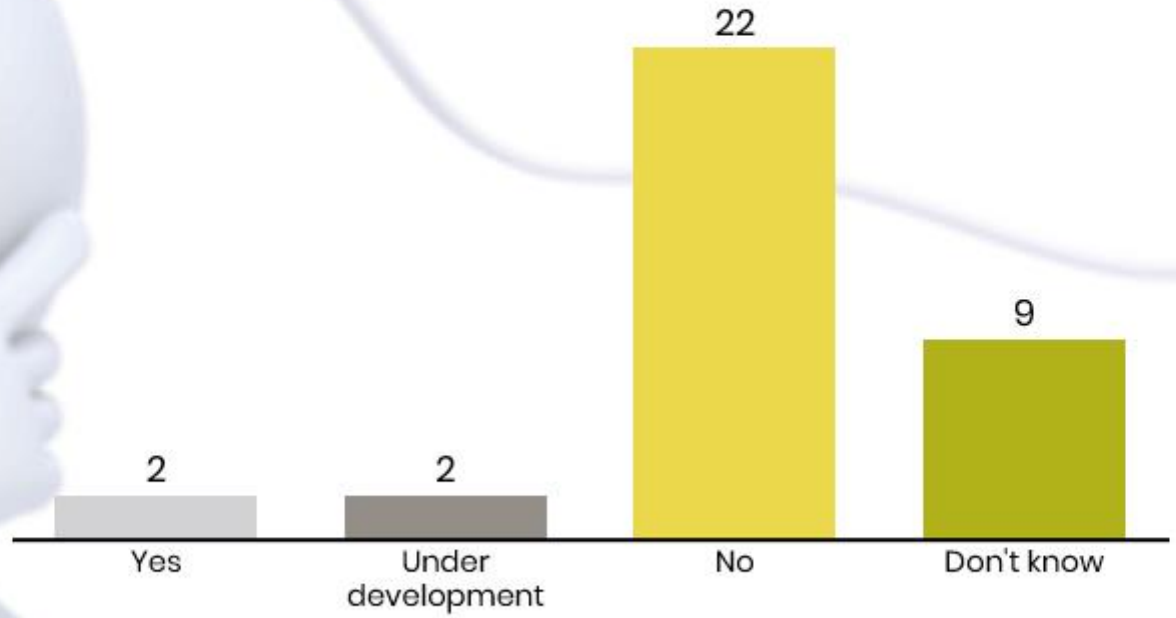
Premises

Building Climate Resilience



Source: City of Calgary

Does your municipality have a climate action plan or energy management plan?



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2019

Mitigation Programs

MUNICIPAL CLIMATE CHANGE ACTION CENTRE

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Alberta Government

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ALBERTA MUNICIPAL SOLAR PROGRAM

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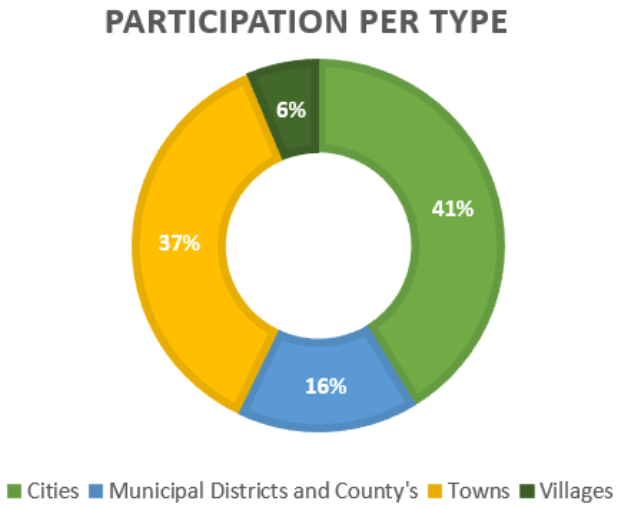
PARTICIPATION

Alberta Municipalities	Projects funded
29	63
Installed Capacity	**Annual GHG Reductions**
7.8 MW	5,489 tonnes CO2e



SOLAR FOR SCHOOLS

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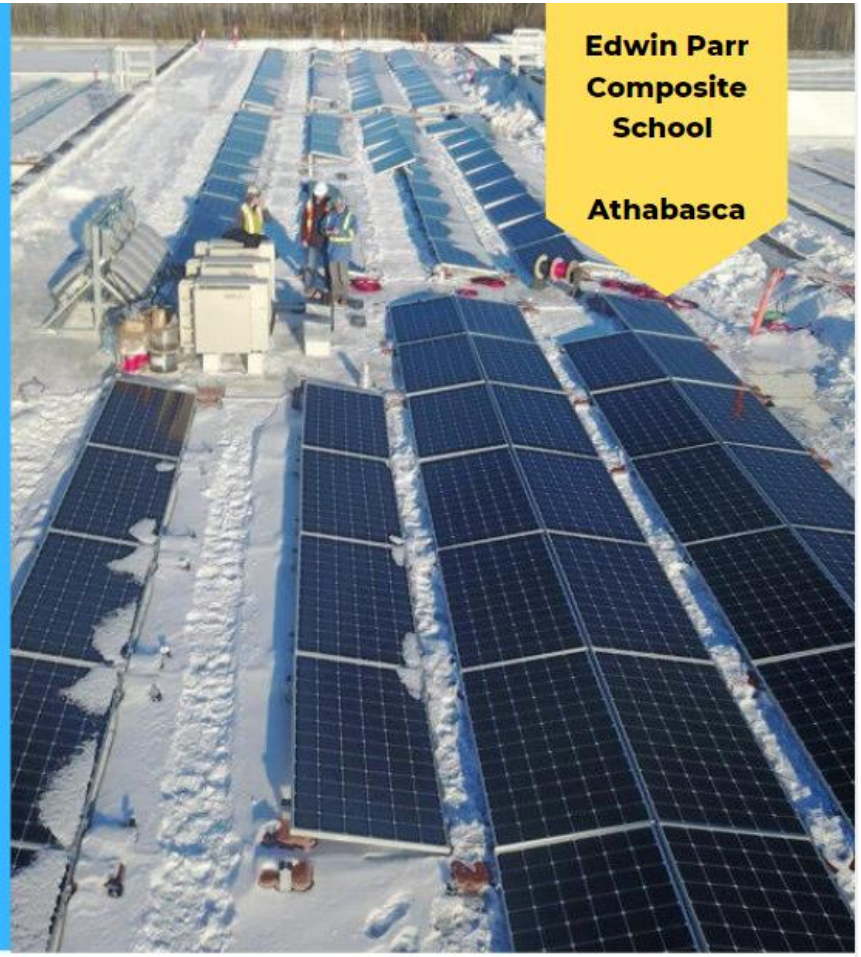
SCHOOL AUTHORITIES ARE ELIGIBLE IF...

they govern Kindergarten (K), and/or a set of grades 1-12 and are defined by Alberta Education as:

- Public
- Charter
- Francophone
- Separate



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MUNICIPAL COMMUNITY GENERATION CHALLENGE

Funding for municipalities to form a partnership with an Alberta based Small and Medium Enterprises (SME) and other collaborators leading to the installation of a community generation facility

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ALBERTA INNOVATES

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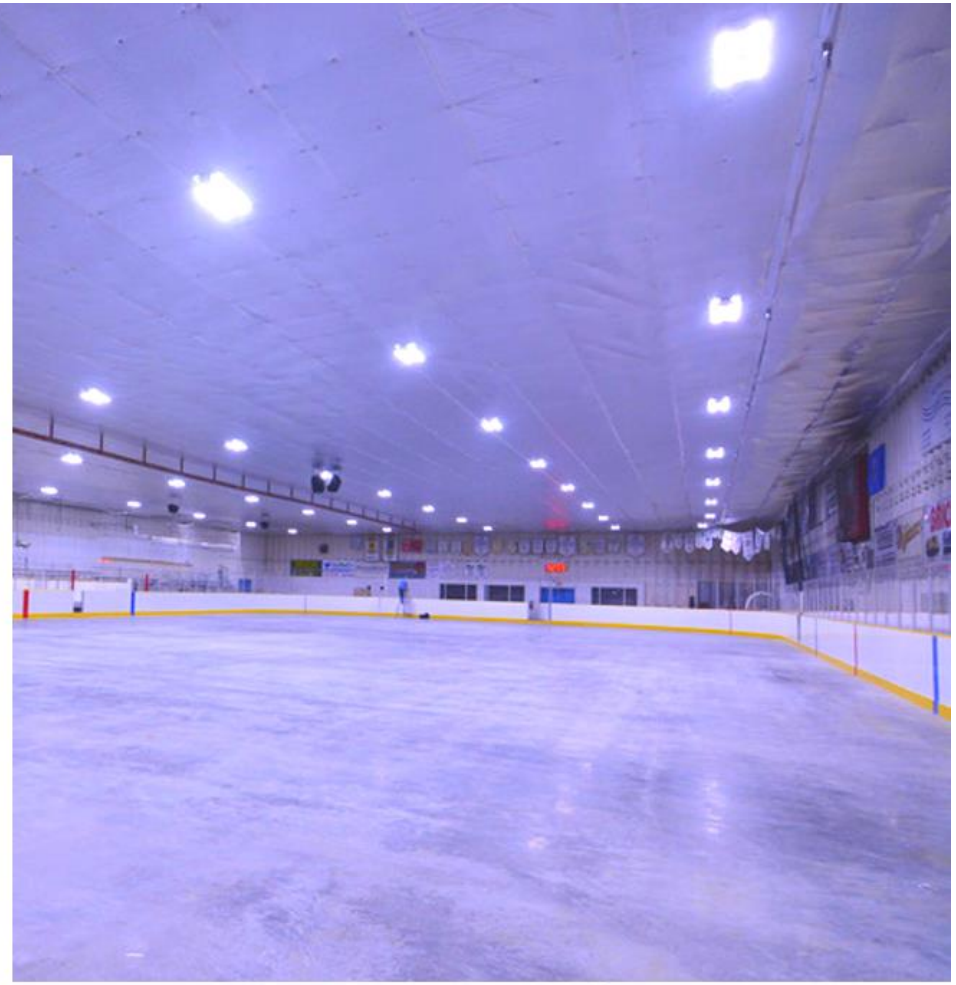
RECREATION ENERGY CONSERVATION

MUNICIPAL CLIMATE CHANGE ACTION CENTRE



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ELIGIBLE FACILITIES

- Arenas
- Ice Rinks and Curling Rinks
- Aquatic Centres
- Dry Sport Centres
- Multiplexes
- Other recreation facilities

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RECREATION FACILITIES...

Use a lot of energy

Produce greenhouse gas emissions

Are expensive to maintain

ELECTRIC VEHICLES FOR MUNICIPALITIES

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ELECTRIC VEHICLES FOR MUNICIPALITIES PROGRAM

Participants can apply for multiple components

Eligible Participants

- Rural Municipalities
- Urban Municipalities

Eligible Project Components

- Passenger Electric Vehicles
- Heavy Duty Electric Vehicles
- Non-road Electric Vehicles
- Level 2 and 3 Charging Stations
- Feasibility Studies

Recruit energy expertise to reduce utility costs.

Municipal Energy Manager Program

SUMMARY

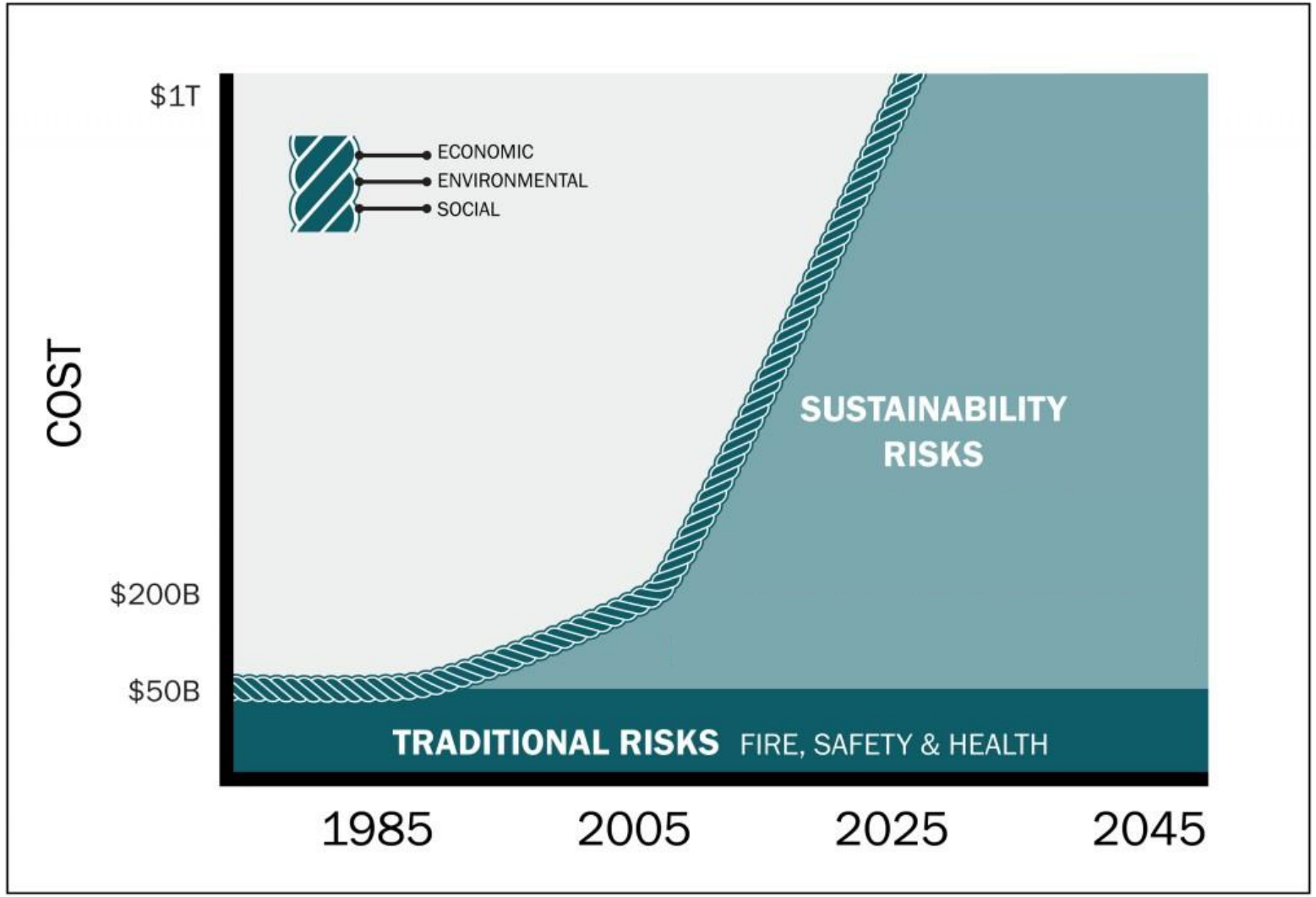
- Sustainability risk management
- Megaforces
- Climate risks
- Mitigation solutions

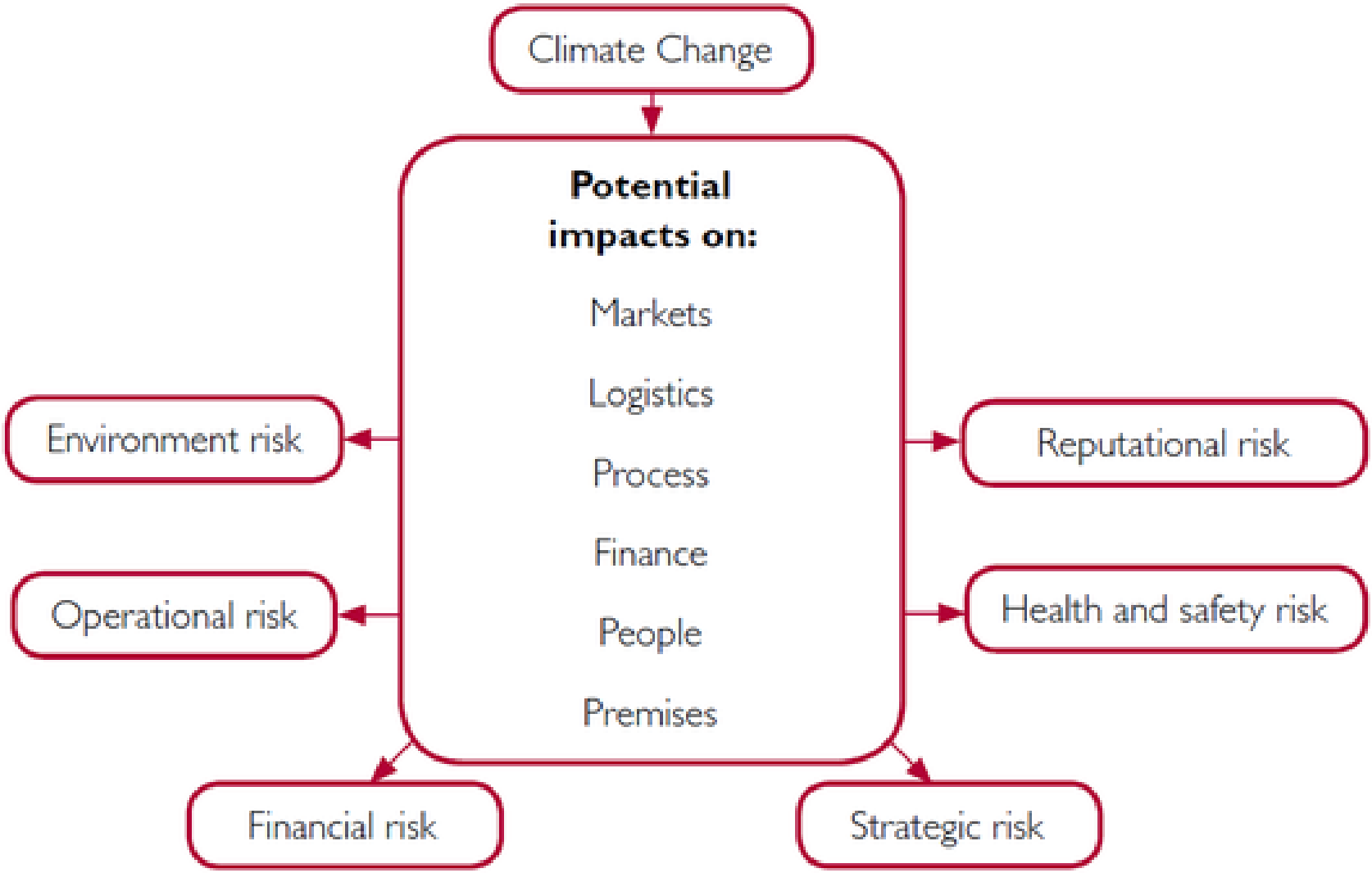
Go to **www.menti.com** and use the code **27 51 92**

MUNICIPAL SUSTAINABILTY AWARDS

1. Sustainability in Action
2. Sustainability in Collaboration
3. Above and Beyond

Deadline: June 28, 2019
Details: https://auma.ca/events/auma-awards


$1T
$200B
$50B
COST
ECONOMIC
ENVIRONMENTAL
SOCIAL
SUSTAINABILITY RISKS
TRADITIONAL RISKS FIRE, SAFETY & HEALTH
1985
2005
2025
2045


Climate Change
Potential impacts on:
Markets
Logistics
Process
Finance
People
Premises
Environment risk
Operational risk
Financial risk
Reputational risk
Health and safety risk
Strategic risk

Questions?

Email us at contact@mccac.ca

Learn more about our other programs:

Alberta Municipal Solar Program

Municipal Community Generation Challenge

Electric Vehicles for Municipalities

Municipal Energy Manager

Recreation Energy Conservation

Solar for Schools

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