



Infrastructure Canada Climate Lens Climate Change Resilience Assessment

Fraser Basin Council Webinar

December 4, 2018

Today's Presentation

- Infrastructure Canada funding
- Drivers for the lens
- What is the climate lens
- Climate change resilience assessment
- Climate lens guidance
- Costs
- Concluding remarks

Question 1

- Have you been involved in an infrastructure project that has taken future climate considerations into account in its design?



INVESTING IN CANADA

\$180 + BILLION INFRASTRUCTURE PLAN OVER 12 YEARS



Create
long-term
economic growth

Build
inclusive
communities

Support
a low carbon, green
economy



Investments to support Canada's long-term infrastructure plan will flow through:

Bilateral agreements with provinces and territories

A series of national programs

Canada Infrastructure Bank

Innovative Challenges

Investing in Canada Infrastructure Program – \$33 Billion flowed through bilateral agreements

\$20.1
Billion

Public Transit

Funds construction, expansion and improvement of public transit networks

\$9.2
Billion

Green Infrastructure

Funds improvement of environmental quality, reduction of GHG emissions and increased resilience of communities under three separate sub-streams

\$1.3
Billion

Community, Culture and Recreation

Funds increased citizen participation and appreciation of cultural, recreational and community spaces

\$2.4
Billion

Rural and Northern Communities

Funds improvement of the quality of life in rural and northern communities.
Includes the \$400 million Arctic Energy Fund

National, Merit-based Programs

DISASTER MITIGATION AND ADAPTATION FUND

Strengthening the
**Resilience of
Canadian Communities**

APPLICANT'S GUIDE



Domestic Drivers

December 2015 – **UNFCCC Paris Agreement**

May 2016 – Audit Recommendations - **Commissioner of the Environment and Sustainable Development Spring Report**

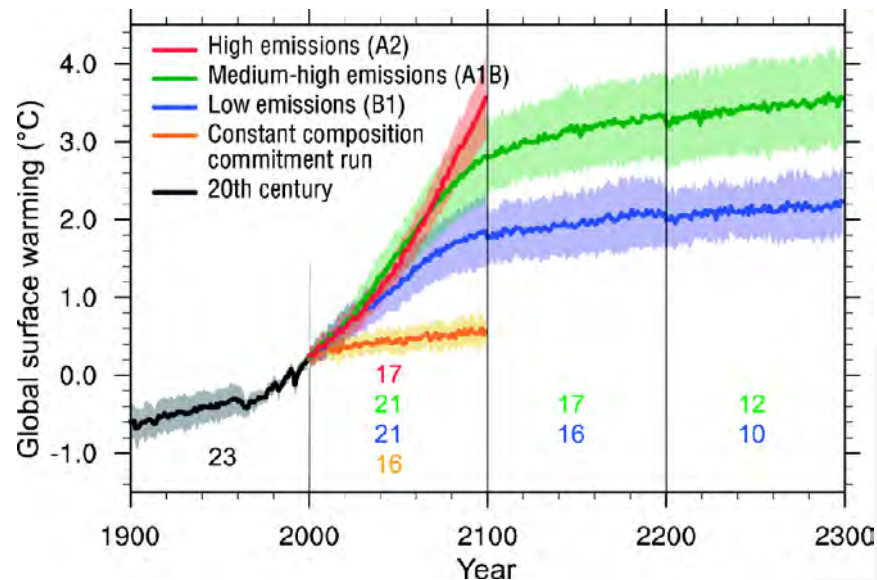
September 2016 – **Private Members Motion M-45**, Passed by the House of Commons

November 2016 – *Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy*,

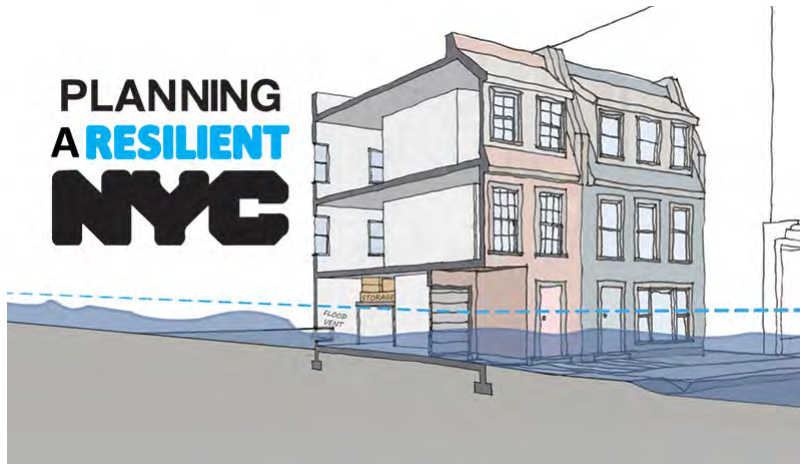
December 2016 – *Pan-Canadian Framework on Clean Growth and Climate Change*

Question 2

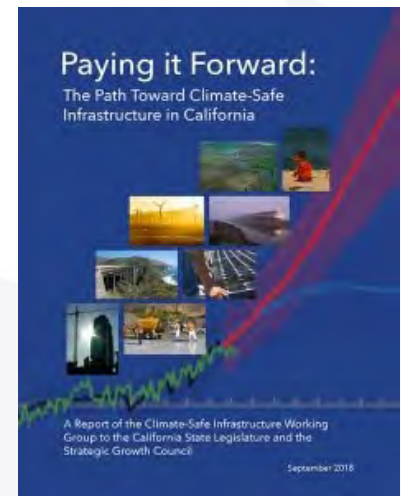
- In thinking about the climate change resilience assessment, for what areas are you seeking more clarity today?



International and National Momentum



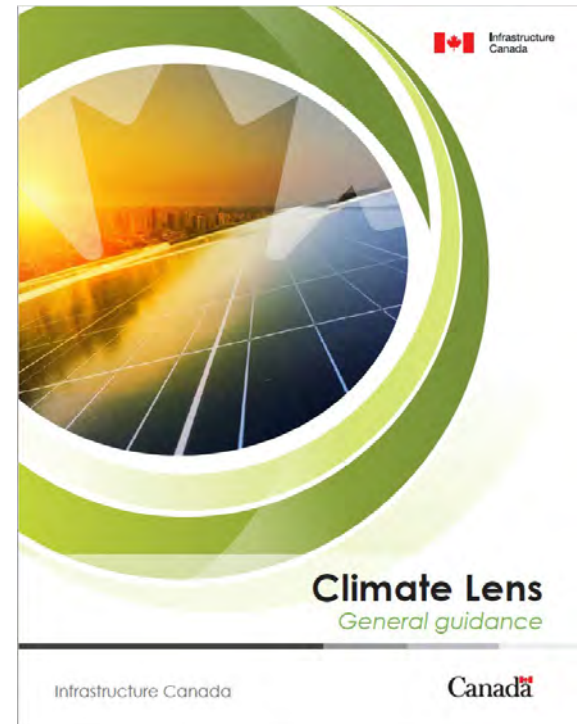
ENVISION™



What is the Climate Lens?

A requirement that will drive climate-focused planning behaviours by requiring INFC-supported projects to assess their expected:

- **greenhouse gas (GHG) emissions and/or**
- **resilience to the impacts of climate change.**



Where Does the Climate Lens Apply?

Programs and Streams	GHG Mitigation Assessment	Climate Change Resilience Assessment
Investing in Canada Infrastructure Program (<i>Integrated Bilateral Agreements</i>)		
Green Infrastructure – Climate Change Mitigation sub-stream	All projects <u>(eligibility requirement)</u>	If total eligible project costs are \$10M or greater
Green Infrastructure – Adaptation, Resilience and Disaster Mitigation sub-stream	If total eligible project costs are \$10M or greater	All projects <u>(eligibility requirement)</u>
Other streams and Sub-streams (Environmental Quality, Public Transit, Culture and Recreation, Rural and Northern Communities)	If total eligible project costs are \$10M or greater	If total eligible project costs are \$10M or greater
National Programs		
Disaster Mitigation and Adaptation Fund	All projects	All projects
Smart Cities Challenge (Winner)	If total eligible project costs are \$10M or greater and project is a mitigation project	If total eligible project costs are \$10M or greater and project is a climate change resilience project

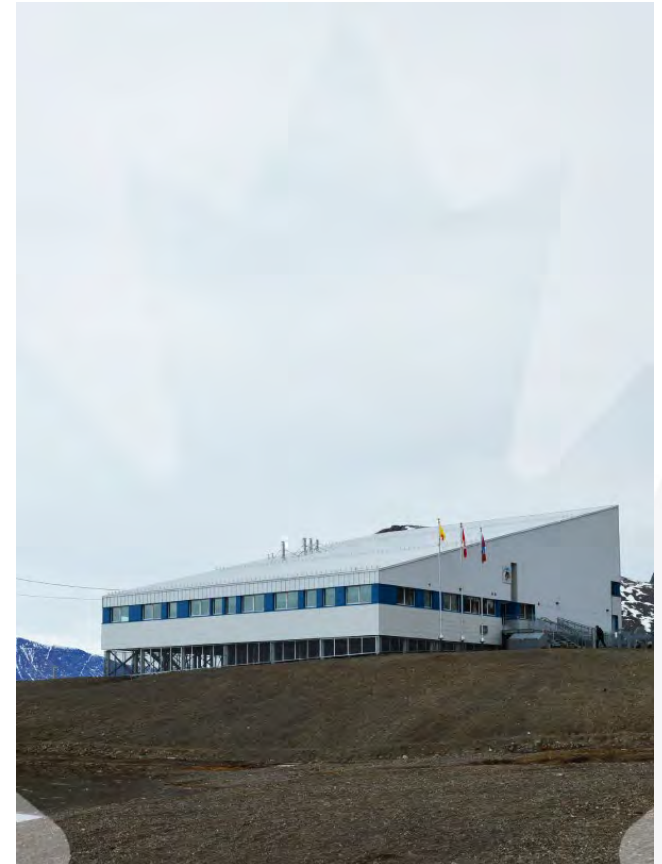
Expected Results

1. Facilitate behavioural change
2. Support performance measurement and evidence-based policy
3. Public awareness, transparency, and accountability



Climate Change Resilience Assessment

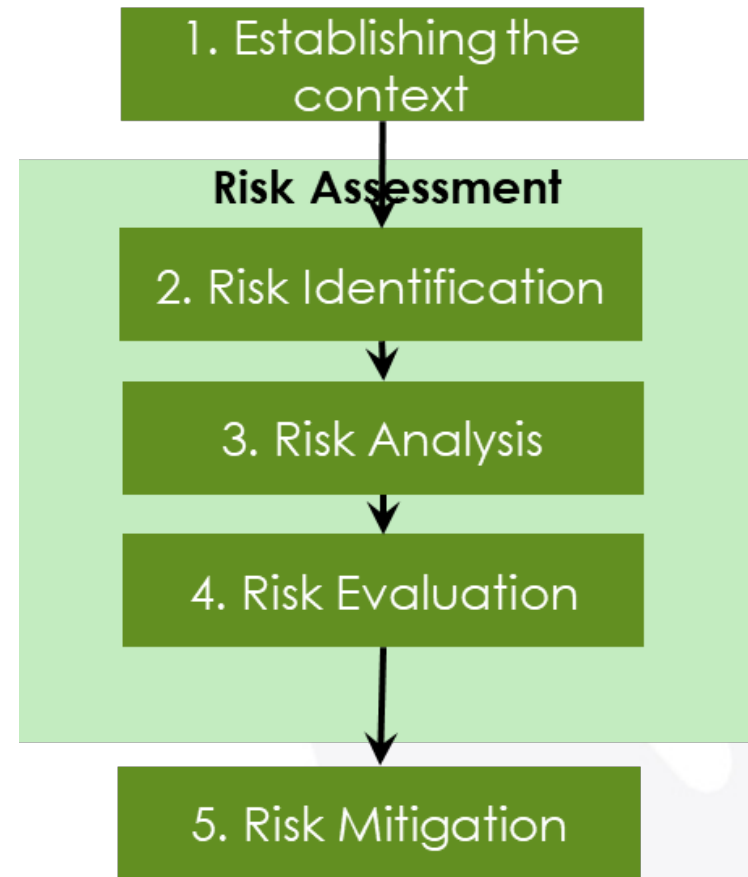
- A risk assessment, with analysis of future climate conditions and risk treatment
- Designing, locating or re-locating, retrofitting, upgrading and enabling planned operation to be resilient



Hamlet Office Community Hall Complex,
Grise Fiord, Nunavut

Approach

- ISO 31000 on Risk Management
- Guiding principles
- PIEVC protocol is one tool that would support this approach
- Look at different climate change scenarios



Guiding Principles

- Proportionate Assessment
- Systemic Analysis of Risk
- Pursuit of Multiple Benefits
- Avoiding Unintended Results

Sustainable Development Goals

GOAL 9

BUILD RESILIENT INFRASTRUCTURE, PROMOTE
INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND
FOSTER INNOVATION



Main Elements of the Report

- Methodology
 - Scope and timescale of the assessment
 - Identification and assessment of climate hazards
 - Impact on asset
 - Consequence of Impact
- Analysis of Resilience Options
 - Identification of resilience measures identified for each impact
 - Cost/benefit analysis
 - Consideration of resilience principles
 - Additional Co-benefits (*optional component*)
- Resilience Measures Selected (or not) and Justification
- Projected Return on Investment (Loss Avoided in relation to the Project Cost) (*if available*)
- Description of Evidence Base

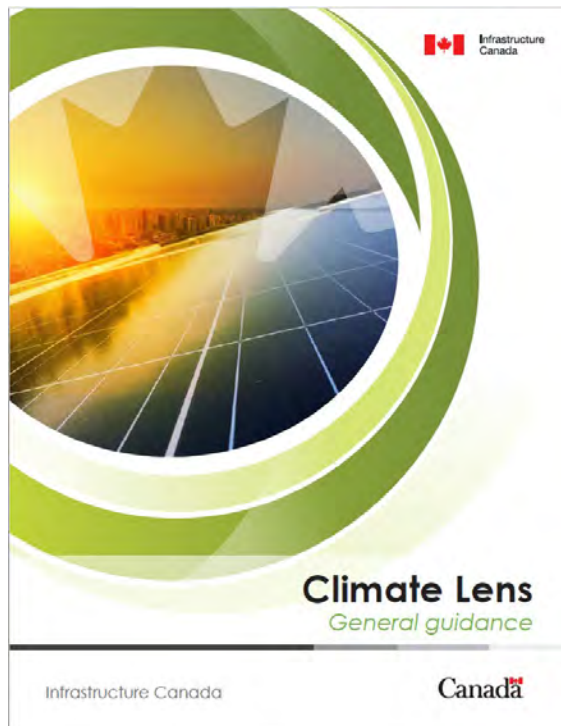
Attestation

- P. Engineers
- Professional registered planners
- Hydrologists or Biologists (natural infrastructure project)

Submission of Climate Lens Reports

- Shared at time of application
- This includes required information, assessment document(s) and signed attestation(s)

Climate Lens Guidance



- General guidance available online: http://bit.ly/INFC_climate_lens
- Aligned with international best practices
- Worked with provinces and territories, FCM and industry
- Written for qualified / experienced professionals
- Evergreen in nature

Costs of Climate Lens

- Retroactively eligible for federal cost-sharing
- Municipal Own Force Labour: In-house assessment costs are not eligible
- Indigenous applicants may be eligible for additional support for resilience assessments

In Conclusion

- We want to foster climate-smart and creative solutions
- It is still early days for project intakes, and this is a new approach
- The climate lens guidance and reference information will evolve in light of new models and methodologies
- Please direct questions to: infc.info.infc@canada.ca

Canada 