

## PROJECT IN PROGRESS

# METHODOLOGY FOR ASSESSING THE INSTITUTIONAL BUILDING STOCK OF THE SQI TO DETERMINE ITS VULNERABILITIES TO CLIMATE CHANGE



VULNERABILITIES, IMPACTS AND ADAPTATION PROGRAM: BUILT ENVIRONMENT

PROJECT STARTING DATE AND LENGTH  
APRIL 2019 • 18 months

INFORMATION  
[projet@ouranos.ca](mailto:projet@ouranos.ca)  
514-282-6464  
[www.ouranos.ca](http://www.ouranos.ca)

PRINCIPAL INVESTIGATOR  
Nathalie Rhéaume,  
Société québécoise des infrastructures (SQI)

OTHER PARTICIPANT  
Institut national de santé publique du Québec

## CONTEXT

The Société québécoise des infrastructures (SQI) owns a vast building stock of some 350 institutional buildings with a variety of purposes, and is responsible for their operations and sustainability. Although it does not own the health network's building stock, the SQI acts as project manager for its major construction projects. Climate change therefore has – and will have – an impact on its design, operation, upkeep and asset maintenance activities. As a government centre for real estate expertise, the SQI aims to better understand the impact of climate change on its building stock in order to better prepare and adapt it and, ultimately, to ensure the health and safety of its occupants.

## OBJECTIVE

Identify the vulnerabilities of the SQI's building stock to climate change and draw a general portrait of the risks posed by climate change to the built environment and its occupants, with a view to developing and implementing an adaptation plan to strengthen their resilience to the impacts of climate change.

## METHODOLOGY

- Develop or adapt a reproducible methodology for assessing the vulnerability of the building stock and its occupants;
- Prioritize building to be assessed according to their mission;
- Apply this methodology to priority buildings in order to validate the developed methodology;
- Provide a toolbox for other owners to enable them to reproduce the process;
- Develop a dissemination strategy for the process and the tools produced.

## EXPECTED RESULTS

This project will enable the SQI to draw up a general portrait of the risks related to climate change, including those on the health of occupants. The SQI will then use the expertise acquired to apply the methodology to its entire building stock to ensure the continuity of the government's essential missions. Several knowledge transfer activities will be organized to raise awareness and train SQI staff (real estate managers, expertise managers, project management directors, architects, real estate development engineers and technicians) as well as stakeholders from the health network, the construction industry, property management and land management.

## BENEFITS FOR ADAPTATION

The SQI will adopt an action plan to correct the vulnerabilities identified by the project and to adapt its building stock. This plan will contain specific projects as well as changes to asset maintenance and preventive maintenance programs.

In addition to enabling the SQI to undertake this important adaptation process, the project will help other institutional and commercial owners to consider climate change in the various operations related to the life cycle of buildings.