



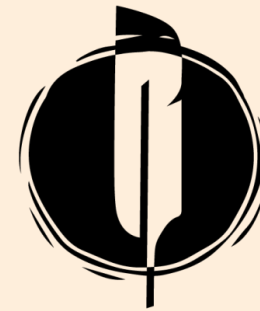
# Housing and Climate Change

November 21st 2023

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# About us



**First Nations** of Quebec and Labrador  
**Sustainable Development Institute**

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Our Mission

**Collaborate with First Nations  
in implementing their vision of  
sustainable development.**

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# Let's talk Climate Change

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# Climate Trends

## Temperatures

### Observed

- Warming of 0,5 to 1,5 °C depending on region
- Fewer heating degree dayx
- Fewer freeze-thaw cycle events annually

### Projected (under a high emissions scenario)

- Temperature increases of 2 to 3°C for 2050 and 4 to 6°C for 2080
- More frequent heat waves
- Increases in freeze-thaw cycles during in winter in the south
- Fewer extreme cold events

# Climate Trends

## Precipitations and high water events

### Observed

- 10% increase of mean annual precipitation
- Higher increases in spring and fall (around 20%) and lower in winter (6%)
- Less precipitation in the form of snow
- Earlier high water events in spring

### Projected (under a high emissions scenario)

- Continued increases,
- Increase in heavy precipitation, both in quantity and frequency
- Earlier high water events in spring
- Likely increase in summer and fall floods

# Climate Trends

## Forest Fires

### Observed

- Complex, but the effects of climate change are already felt
- Several factors influence forest fires (availability and type of fuel, topography, weather, human activity)

### Projected (under a high emissions scenario)

- Increase in the frequency of fires, annual burned areas and the number of major fires
- Longer forest fire season

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# Resources Available Online

[Ouranos](#)

[Climate Atlas of Canada](#)

[Climatedata.ca](#)

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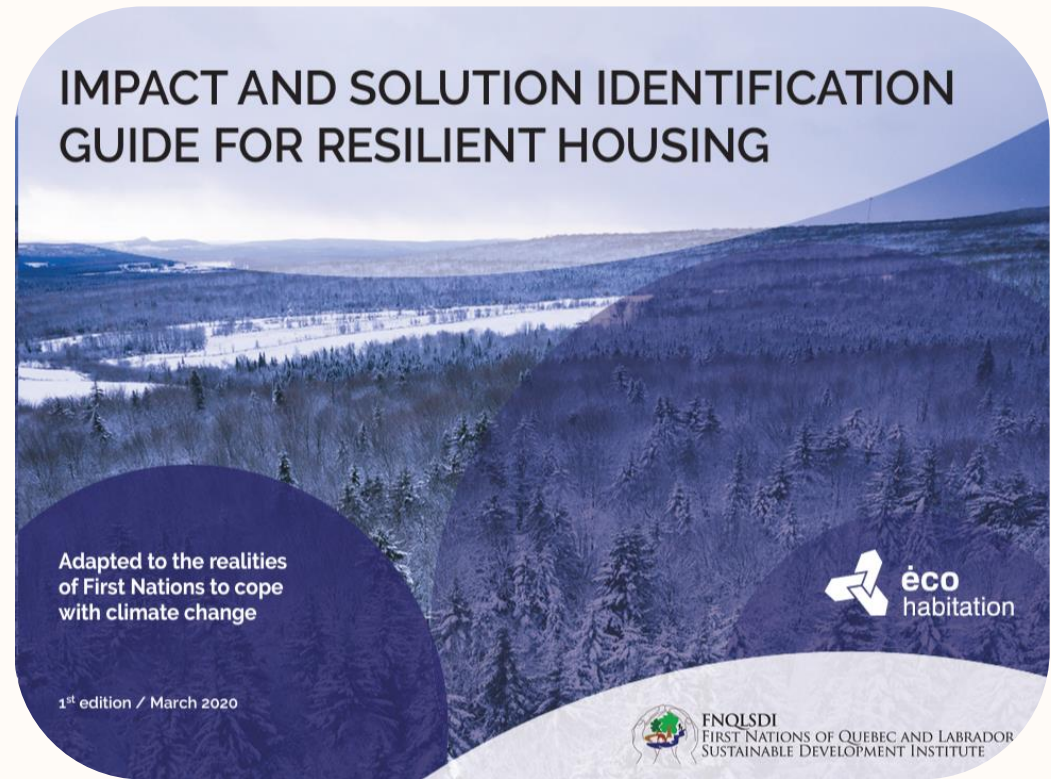
# Workshop in Small Groups

## 1) Discussions on

- Impacts/challenges of climate change
- Solutions to make buildings more resilient

## 2) Return to plenary

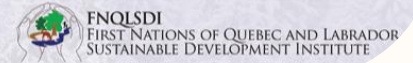
# Solution for Resilient Housing



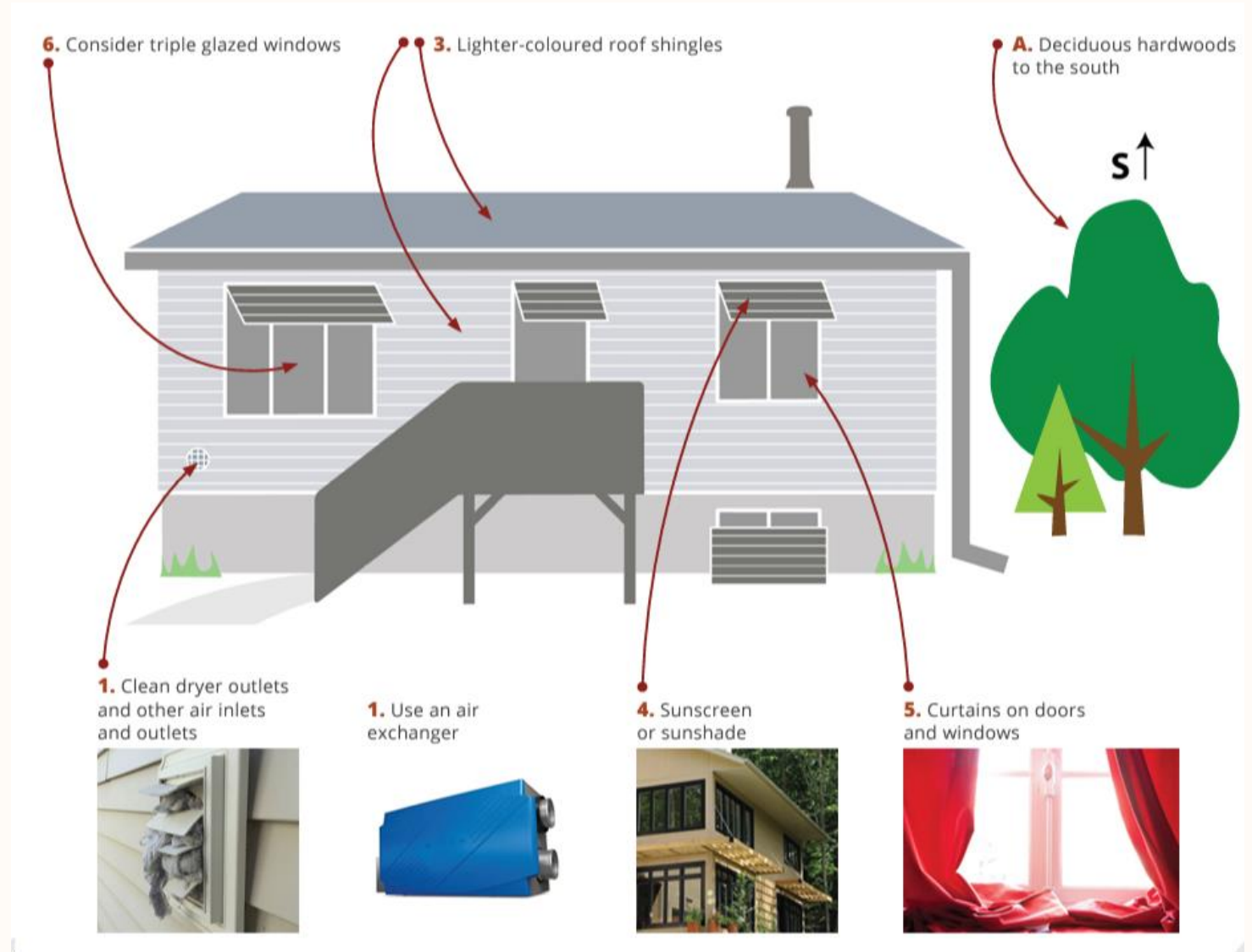
## IMPACT AND SOLUTION IDENTIFICATION GUIDE FOR RESILIENT HOUSING

Adapted to the realities  
of First Nations to cope  
with climate change

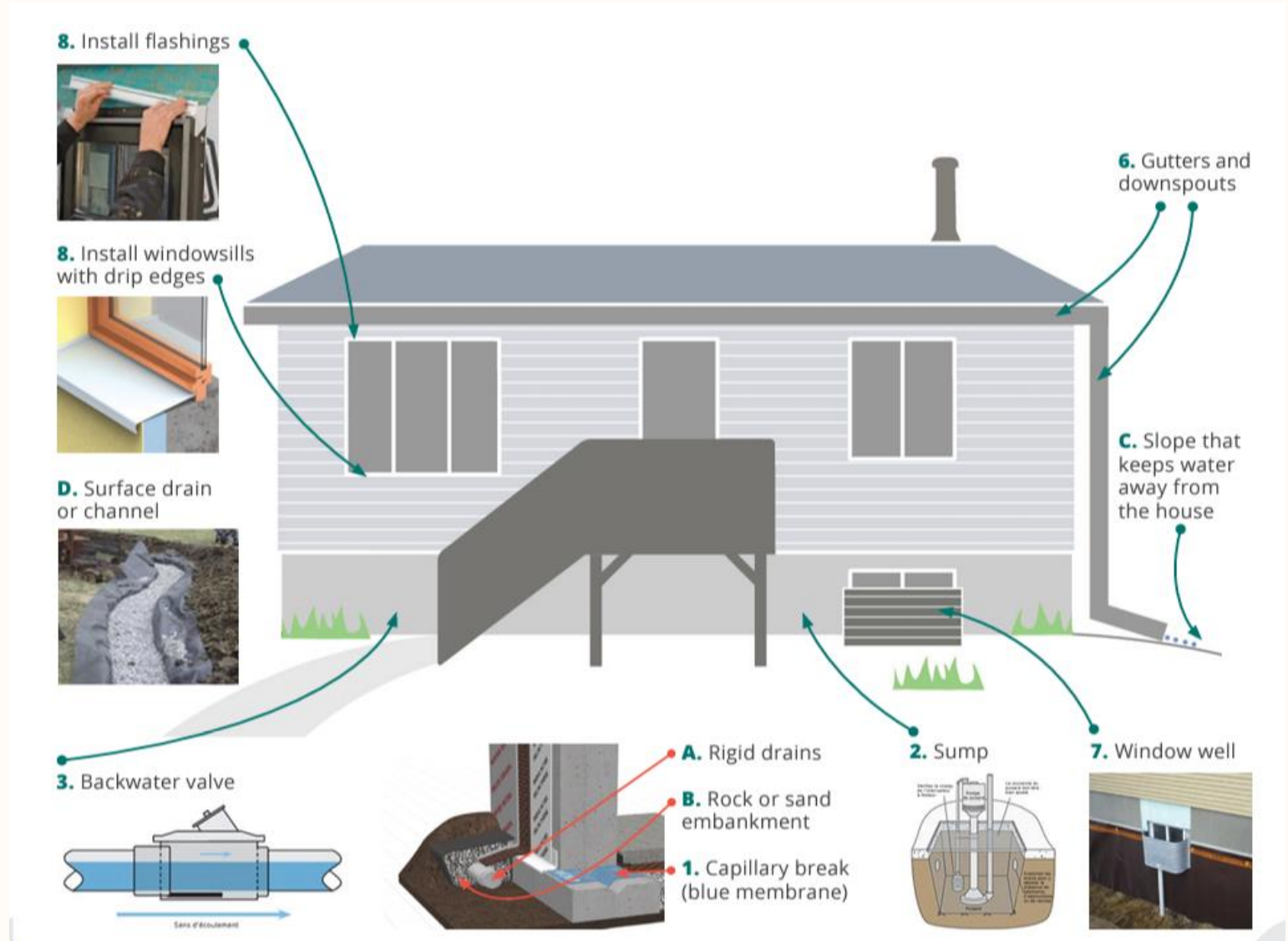
1<sup>st</sup> edition / March 2020



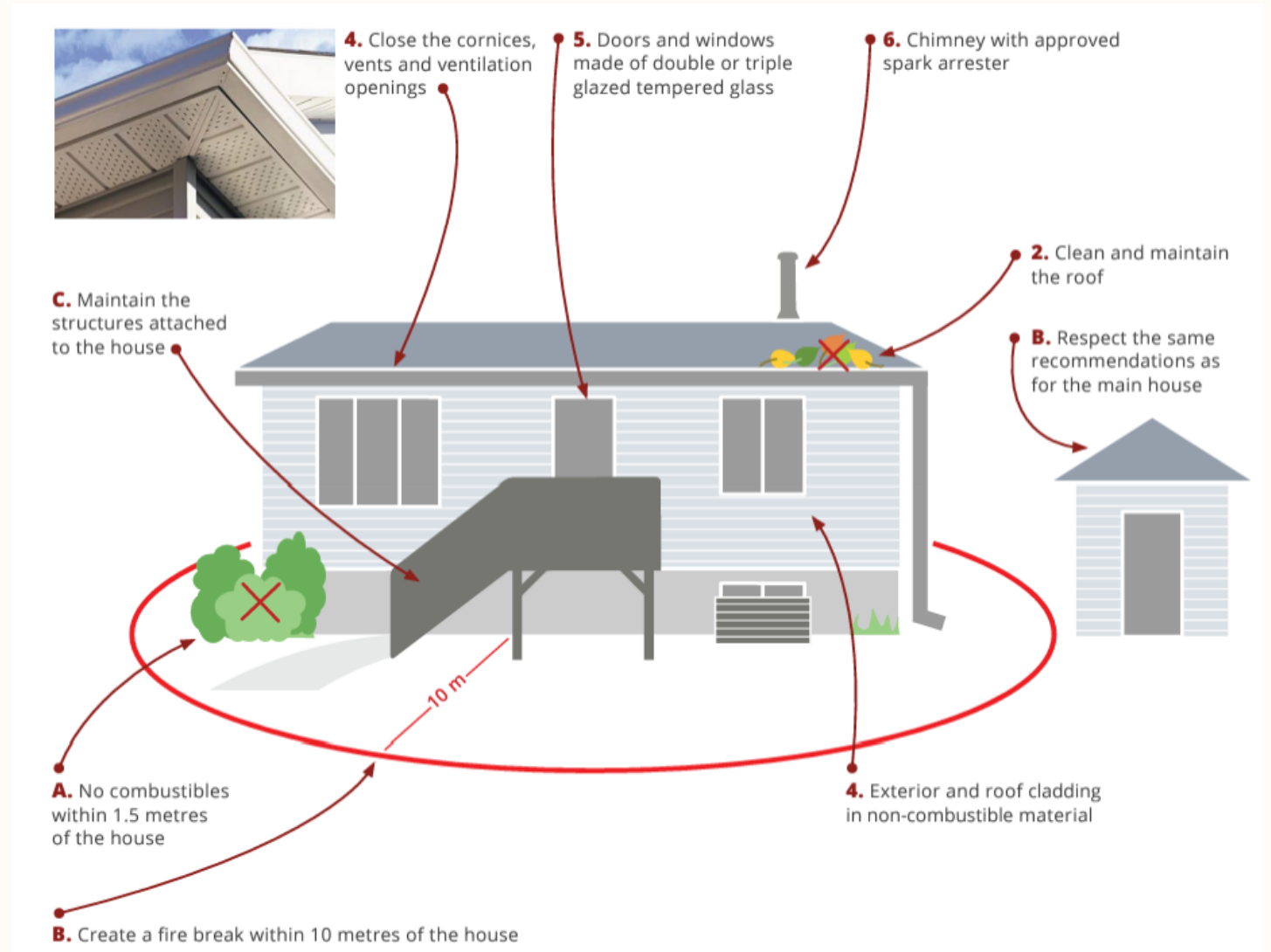
# Heat



# Heavy Rains and Floods



# Forest Fires



# Why Climate Resilience ?

- To better plan housing design, construction and maintenance.
- To ensure housing durability at the lowest long-term cost.
- To ensure the safety and comfort of occupants.

# Steps to Resilience

**1. Understanding  
climate impacts.**

**2. Gather housing data.**

**3. Analyze and  
prioritize risks.**

**4. Identify measures to  
make housing more  
resilient to risks.**

**5. Integrate measures  
into planning and  
decision-making.**

**6. Seize opportunities  
to act.**

# Questions ?

