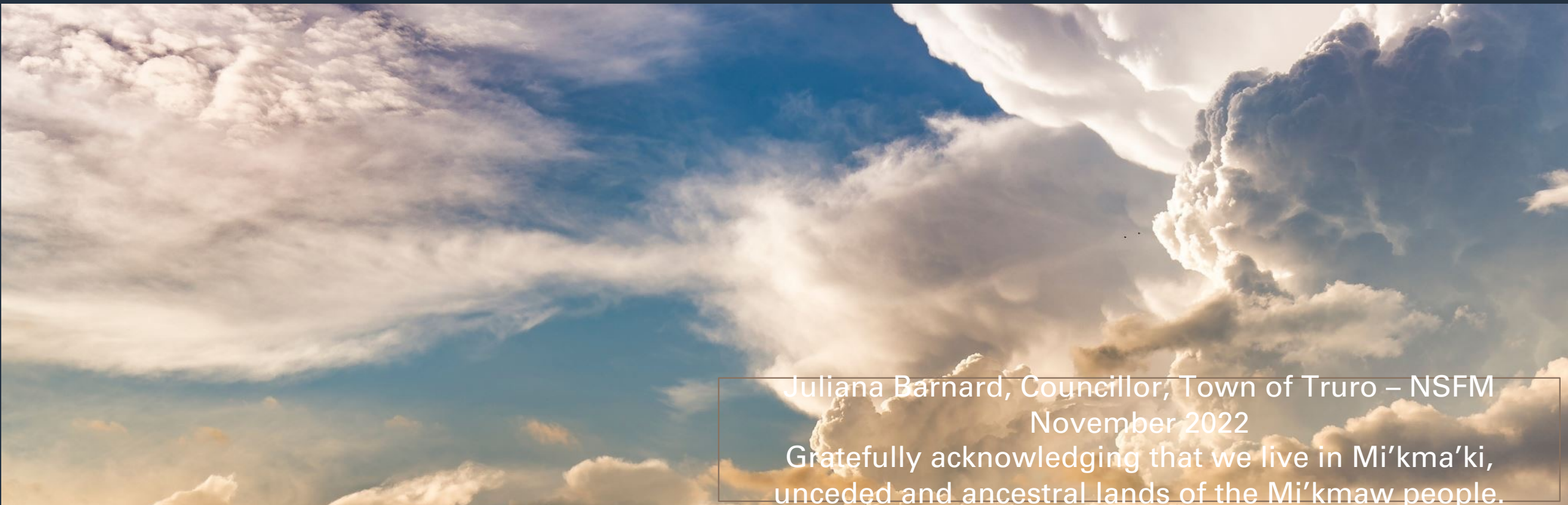
Municipal Climate Action
Building the Best Future



Juliana Barnard, Councillor, Town of Truro – NSFM
November 2022
Gratefully acknowledging that we live in Mi'kma'ki, unceded and ancestral lands of the Mi'kmaw people.

"This is the decade in which, contrary to everything humanity has experienced before, we have everything in our power. We have the capital, the technology, the policies. And we have the scientific knowledge to understand that we have to halve our emissions by 2030."

Christiana Figueres
Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC) 2010-2016

Choosing our future

Degeneration: climate and ecological breakdown

Regeneration: quality of life and wellbeing

Municipal Climate Action – In Every Decision

AREA OF JURISDICTION	EXAMPLES OF WHAT MUNICIPAL GOVERNMENTS CAN DO
TRANSPORTATION (approx. 1/3 of local GHG are from transportation)	➔ Support local public transit (e.g. bus lanes, shelters) ➔ Support electric vehicle use (e.g. charging stations) ➔ Support car sharing ➔ Reduce car use with bylaws (e.g. local roads, parking, pedestrian space, bike lanes, multi passenger lanes)
BUILDINGS (over half of local GHG emissions are from buildings)	➔ Energy efficiency requirements for buildings ➔ Education/rebates/financing for retrofits, heat pumps ➔ Allow/encourage tiny homes, laneway homes ➔ Regulate fuel use in buildings (note that the authority to do so varies by jurisdiction, so check situation in your community)
LOCAL FOOD SECURITY	➔ Establish & support a local food council ➔ Provide space for community gardens, food markets ➔ Recognise and respect Indigenous protection and knowledge concerning local medicine sources and community gardening efforts
LAND USE / PARK SPACE	➔ Land use planning to minimize emissions while addressing social equity questions (e.g. density levels, transit planning, affordable housing plans) ➔ Designate green/natural areas as protected from development
COMMUNITY RENEWABLE ENERGY	➔ 100% Renewable commitments ➔ Community solar/hydro/wind farms ➔ Local distributed energy systems
GHG EMISSION MEASUREMENT	➔ Measure emissions from city government operations ➔ Develop a community GHG inventory ➔ Sign onto national and international commitments to reduce GHGs (e.g. Partners for Climate Protection or the Global Covenant of Mayors)
EMERGENCY RESPONSE	➔ Plan for and deal with climate related emergencies such as wildfires and floods

https://www.youthclimatelab.org/infiltration-manual

Key areas of climate action for municipalities

- Municipal Climate Caucus, Councillors' Handbook

Begin by applying a **Climate Screening Tool for Council Decisions**

Then initiate actions to reduce emissions in three priority areas, transportation, buildings and waste.

Increase resilience through protection of natural assets by taking some first steps to Managing Natural Assets

Key initiatives for reducing greenhouse gas emissions

Transportation	Buildings	Waste
•Prepare for mobility electrification through a Green Fleet Strategy and •EV-Ready Building Codes and Bylaws	•Develop initiatives for Building Retrofits •Nova Scotia has a high-carbon grid, so deep retrofits are necessary	•Start on the road to a circular economy with Sustainable Procurement

Source: Municipal Climate Caucus Councillor's Handbook, Start Here Resource

Reducing Greenhouse Gas Emissions

Municipal governments influence or control **50%** of the sources of Canada's greenhouse gas (GHG) emissions.

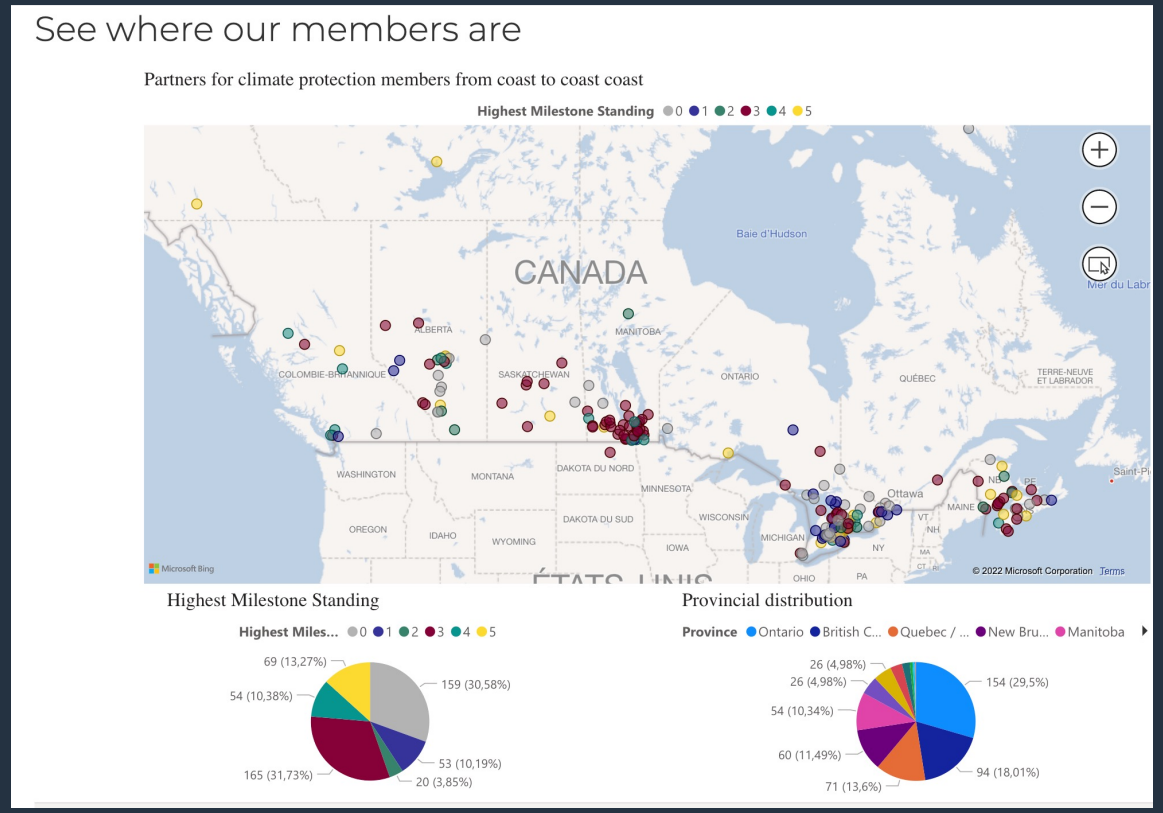
Municipalities have been working for decades at a practical level to reduce GHGs.

<u>One Avenue for Action: Partners for Climate Protection</u>

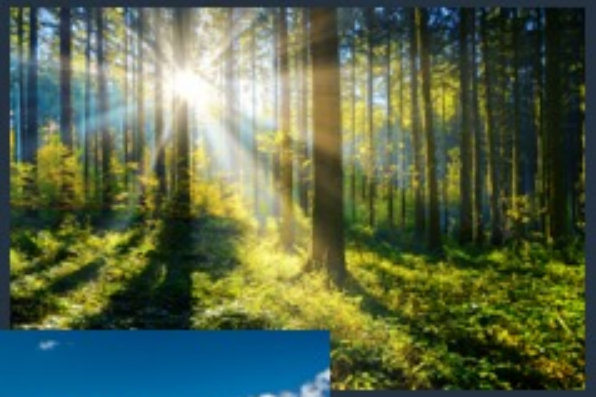
- **500+** Municipalities Participating
- **13** Provinces and territories with members
- **70%** Canadian population represented

Source: Partners for Climate Protection

See where our members are



Increase Resilience through Managing Natural Assets



NATURAL ASSET VS. GREEN INFRASTRUCTURE

The terms natural asset and green infrastructure are often used interchangeably, but one is broader than the other. Whereas natural assets refers to the stock of natural resources and ecosystems that yield a flow of benefits to people, green infrastructure also includes designed and engineered elements that have been created to mimic natural functions and processes in the service of human interests

GREEN INFRASTRUCTURE

NATURAL ASSETS	ENHANCED ASSETS	ENGINEERED ASSETS
Wetlands	Rain gardens	Permeable pavement
Forests	Bioswales	Green roofs
Parks	Urban trees	Rain barrels
Lakes/rivers/creeks	Urban parks	Green walls
Fields	Biomimicry	Cisterns
Soil	Stormwater ponds	

THE GLOBE AND MAIL, SOURCE: THE MUNICIPAL NATURAL ASSETS INITIATIVE

Just a few of the many initiatives in Nova Scotia

Antigonish Community Energy Cooperative and AREA - Municipal Electric Utilities

Bridgewater Energy Poverty Reduction Strategy funding; Energize Bridgewater

CBRM - Cape Breton Regional Municipality Grand Lake Road Multi-Use Path

HalifACT - City of Halifax climate plan - net-zero emissions by 2050.

Lunenburg – natural asset mapping and protection plan

Mahone Bay – 'Living Shoreline' pilot project (to reduce coastal erosion)

Municipality of Colchester - Community Energy and Emissions Plan

Municipality of Cumberland – solar projects

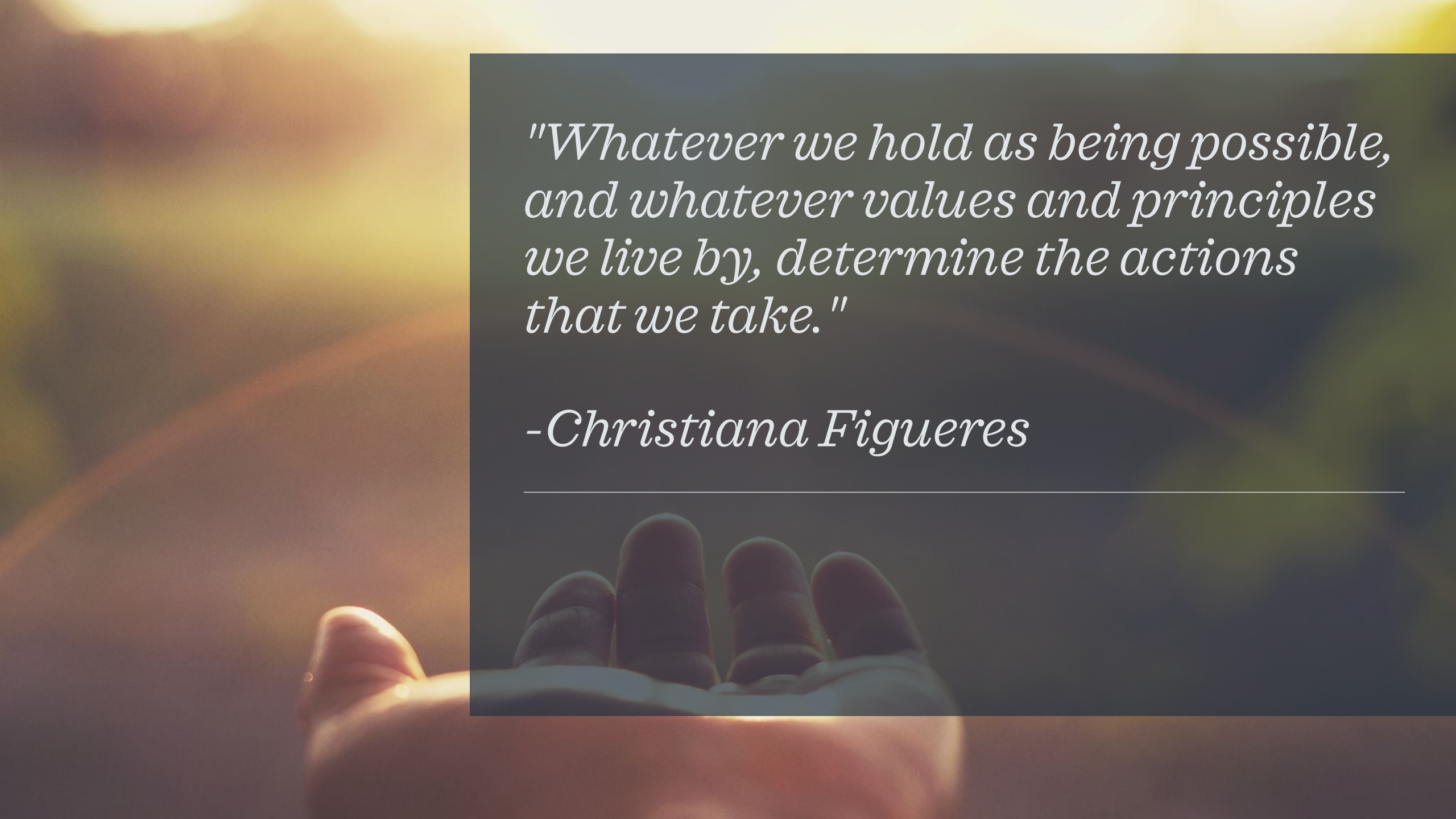
New Glasgow - Community Climate Action Plan

Pugwash – solar installation on farmers' market

Truro - Community Buildings Retrofit; Millbrook Community Wind Farm

Some Resources fo r Municipal Climat

- → Federation of Canadian Municipalities
- → Partners for Climate Protection
- → Nova Scotia Federation of Municipalities
- → Municipal Climate Caucus: Councillors' Handbook
- → Youth Climate Lab: Infiltration Manual
- → C40 Cities
- → Circular Cities and Regions


"Whatever we hold as being possible, and whatever values and principles we live by, determine the actions that we take."
-Christiana Figueres