
 ARCTIC ENERGY ALLIANCE

Community RESILIENCE
through
Climate ACTION

Teresa L. Chilkowich, CCEM
Dehcho Community Energy Coordinator



information session for:
Dehcho First Nations Annual Assembly
(28 June 2016)
(Tthets'éhk'é Déli – Jean Marie River First Nation)

*... to begin by acknowledging
the Dene ... People of this Land,*



*... the original stewards & custodians
of this territory ...*

I would also like to express my GRATITUDE
... to the Dehcho First Nations Leadership

... for this opportunity
*to discuss **Community RESILIENCE***
*through **Climate ACTION!***

... Mahsi cho!

Dene Principles

"The land was created by 'the one who provides for all,' and we come from this land. We recognize our equality with this land and all living things.

We recognize and respect the natural laws, which regulate the cycles and seasons, the rhythms of the earth, the way of the animals.

No one individual has the right to own the land. As the ones who come from this land, we have a collective right to use the land and its resources to ensure our survival as a people. We also have a collective responsibility to protect the land and resources for our children and grandchildren.

We take only what we need from the land. We honour and give thanks to the spirit of the land and that which we take from the land. We do not waste anything that we take from the land, but share it with who all are in need.

The survival of the whole group (family, community) is more important than the accumulation of individual wealth or status.

Individual rights and freedoms are respected and encouraged within the larger, more important context of a collective identity and collective responsibilities for the survival and well-being of the entire group.

The laws of the Dene, which have been passed down to us by our elders, teach us how to respect the land, ourselves, and each other. They teach us how to live in balance and good health, and how to protect ourselves and our children. We must continue to live by these laws and pass them on to our children.

We respect and care for each other, in particular, we honour and provide for our elders, who care for us and passed on gifts of generations past. We also honour and provide for our children who will pass on the ways of the Dene to generations yet to come.

We come from male and female, and we respect and honour the contributions which both men and women make working together for the survival of the people.

We respect and honour our leaders and medicine men and women who share their special skills, experiences, wisdom, and prayers for the benefit of our people. We don't expect them to work for us or serve us, but we look to them for guidance and instruction to help us govern ourselves in a good way.

Everyone has the right to be heard and to take part in the decision-making process on discussion of matters which will affect us.

We respect the right of Dene, in family groups, in communities, or in regions, to make decisions, without interference from outside, with respect to matters which affect them alone in their territory.

George & Riffle

Clas (Yellow Lake)

Community Energy ACTION
... has MUCH in COMMON with
Dene Principles

"... We recognize our
EQUALITY** with this **LAND &
***ALL** living things."*

"We recognize & respect
*the **NATURAL LAWS,** ..."*

"... We also have a
COLLECTIVE RESPONSIBILITY
to protect the land &
resources for our children
& grandchildren."

"We take only what
we need from the land ...
We do not waste anything"

Introduction to AEA

Partnering is at the core of everything we do!

Mission

"To promote and facilitate the adoption of renewable energy and energy efficiency by all members of Northwest Territories (NWT) society."



AEA Dehcho office, Ft. Simpson

Background

Not-for-profit, non-governmental organization (NGO) - established in 1997.

AEA has 6 offices across Denendeh (NWT)

... Dehcho, Akaitcho, Sahtu, Inuvik, T'licho, Yellowknife (main)



AEA main office, Yellowknife



Community RESILIENCE
Adapting & Thriving in a Changing Climate
in Denendeh
thru Climate ACTION!

Let's Talk Energy
Engaging Ideas for Canada's Future

A colorful graphic with a central globe. The globe has four faces: a blue face with rain clouds, a blue face with wind turbines, a green face with a recycling symbol, and a red face with a flame. The globe is surrounded by icons of wind turbines, solar panels, buildings, and trees. The text "Community RESILIENCE" is at the top in orange and purple. "Adapting & Thriving" is on the left in blue, and "in a Changing Climate" is on the right in orange. "in Denendeh" is at the bottom center in purple. "thru Climate ACTION!" is at the very bottom in orange and blue. The "Let's Talk Energy" logo is in the bottom right.

Community RESILIENCE

... in a Changing Climate

... in Denendeh

"Resilience"
... a community's ability to:
Adapt & Thrive

Adapting & Thriving

thru Climate ACTION!

in Denendeh



"We take only what we need from the land ... We do not waste anything."

↓

Community Energy & Emissions Planning

 ARCTIC ENERGY ALLIANCE



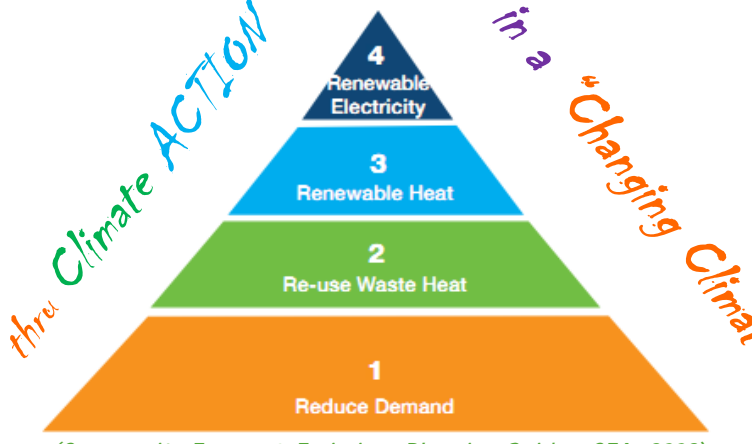
Community Energy Planning
your community your energy your plan

IMPORTANCE of the 4 R's of Sustainable Community Energy Planning:

1. *REDUCE* your energy use
2. *REUSE* excess heat
3. *RENEWABLE* heat
4. *RENEWABLE* electricity

Community Energy Planning

4 R's of Sustainable Community Energy Planning



thru Climate ACTION

in a "Changing Climate"

4 Renewable Electricity

3 Renewable Heat

2 Re-use Waste Heat

1 Reduce Demand

(Community Energy & Emissions Planning Guide - CEA, 2008)


Community Energy Planning



AEA Community Energy Planning

Toolkit

November, 2006
<http://aea.nt.ca/files/download/31>



Community Energy Planning

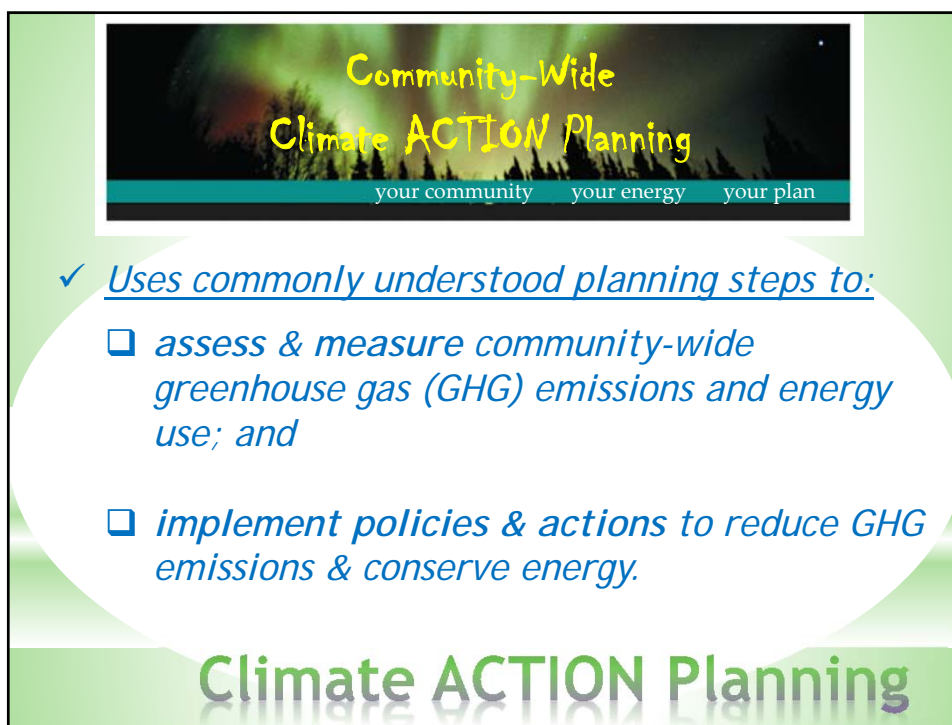
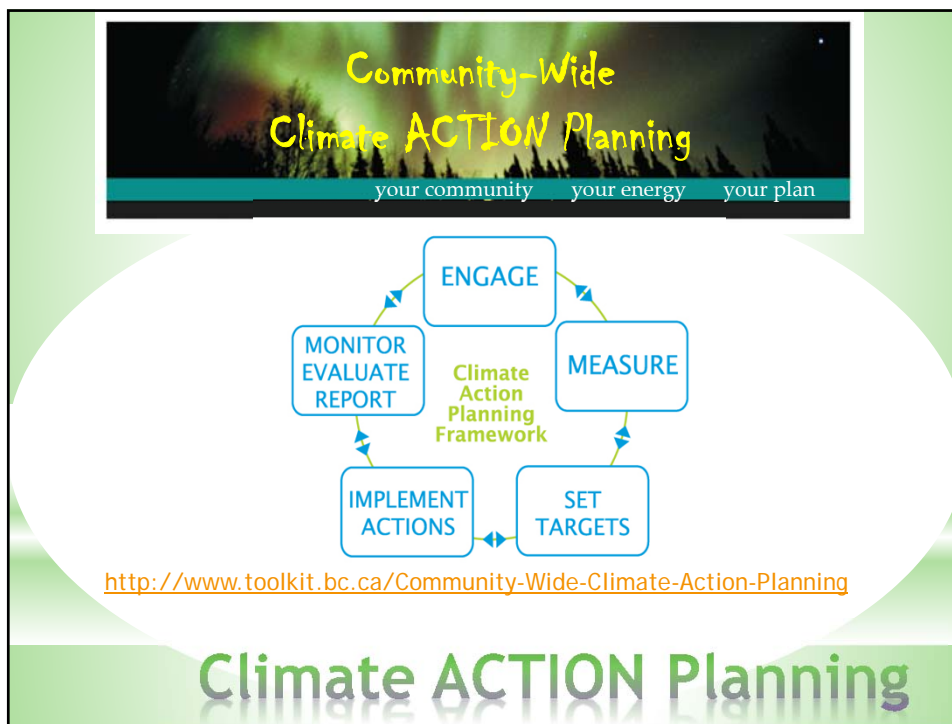


Dehcho – Community Energy Plans



SKFN <http://aea.nt.ca/files/download/387> KTFN <http://aea.nt.ca/files/download/388>
KFN <http://aea.nt.ca/files/download/389>

Community Energy Planning






This ongoing process involves 5 steps:


- ENGAGE**
- MEASURE**
- SET TARGETS**
- IMPLEMENT ACTIONS**
- MONITOR/EVALUATE/REPORT**

Climate ACTION Planning



- ENGAGE**
 - **Effectively Engage**
your community, staff, & elected officials;
 - **Clear Understanding** → *change occurs with effective implementation strategies.*

Climate ACTION Planning



**Community-Wide
Climate ACTION Planning**
your community your energy your plan

☐ **MEASURE**

- *Measuring your community's greenhouse gas (GHG) emissions is an important step in understanding the source of your GHG emissions;*
- *Helps you identify GHG reduction targets & corresponding ACTIONS.*

Climate ACTION Planning



**Community-Wide
Climate ACTION Planning**
your community your energy your plan

☐ **SET TARGETS**

- *Targets establish GOALS to work toward;*
- *Can be effective in GETTING STARTED & encouraging ACTION.*
- *BC Local Government Act - GHG reduction targets, policies, & actions required in Official Community Plans (OCP's)*


Climate ACTION Planning



**Community-Wide
Climate ACTION Planning**
your community your energy your plan

- ❑ **IMPLEMENT ACTIONS**
 - *develop an ACTION PLAN*
(e.g. Climate Action Plan, Community Energy & Emissions Plan, Integrated Sustainability Plan);
- or
- *use OCP or Regional Growth Strategy review processes to identify climate action planning goals & opportunities*

Climate ACTION Planning



**Community-Wide
Climate ACTION Planning**
your community your energy your plan

- ❑ **MONITOR - EVALUATE - REPORT**
 - *To determine whether reduction measures are producing expected results & if targets will be met;*
 - *Opportunity to identify next steps*
(possibly revisiting targets & implementation strategies);
 - *Important to develop a monitoring system.*

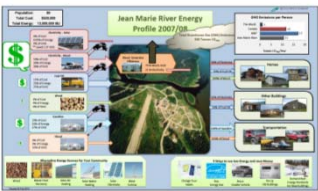
Climate ACTION Planning

Jean Marie River ... Climate ACTIONs

your community your energy your plan

Dehcho CASE STUDY - Jean Marie River

- ❑ *AEA Community Energy Profiles (2007-08)*



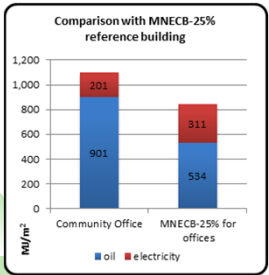
- ❑ *Jean Marie River Community Energy Plan (~2010)*

Climate ACTION

Jean Marie River ... Climate ACTIONs

your community your energy your plan

- ❑ **ENERGY AUDITS**
 - ✓ *Yardstick (2012, Electricity & Fuel Bills)*
 - ✓ *Targeted Energy Audits (2015)*



Building Type	Oil (MJ/m ²)	Electricity (MJ/m ²)	Total (MJ/m ²)
Community Office	901	201	1102
MNECB-25% for offices	534	311	845

Climate ACTION

Jean Marie River ... Climate ACTIONs
your community your energy your plan

- ❑ **Energy Conservation & Efficiency UPGRADES (2015, 2016)**
 - ✓ Programmable Thermostats
 - ✓ LED Lighting (outside & inside lighting)
 - ✓ Home Winterization "hands-on" workshop



Climate ACTION

Jean Marie River ... Climate ACTIONs
your community your energy your plan



- ❑ **Solar PV Installations:**
 - ✓ Band Office (installed 2005) &
 - ✓ Water Treatment Plant (2016)





Climate ACTION

Jean Marie River ... Climate ACTIONs

your community your energy your plan

- ☐ **Electricity Monitoring project**
(2012 - 2017+)
- ✓ *Data loggers (NRCan) ... more specific data analysis on heavy circuits of larger buildings*
- ✓ *Intelligent Meters (NTPC)*
- ✓ *EMU's - home Electricity Monitoring Units*

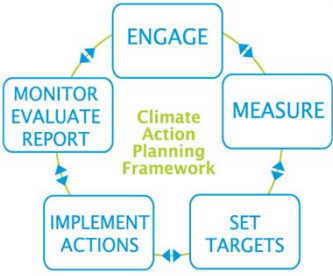



Climate ACTION

Jean Marie River ... Climate ACTIONs

your community your energy your plan

- ☐ **NEXT STEPS:**
- ✓ *REVIEW Targets*
- ✓ *EVALUATE*
- ✓ *Update CEP*
- ✓ *MONITOR*



- ☐ **MONITOR - EVALUATE - REPORT**
- *To determine whether reduction measures are producing expected results & if targets will be met;*
- *Opportunity to identify next steps (possibly revisiting targets & implementation strategies);*
- *Important to develop a monitoring system.*

[/www.toolkit.bc.ca/Community-Wide-Climate-Action-Planning](http://www.toolkit.bc.ca/Community-Wide-Climate-Action-Planning)

Climate ACTION



AEA Climate ACTION projects (2015-17)
your community your energy your plan

- ✓ *High Efficiency LED lighting retrofits*
 - TK(JMR)FN & TK(JMR)FN Dev. Corp.
 - Liard Valley General Store & Motel



- ✓ *Residential LED COMMUNITY light bulb exchange*
 - *What timing would work for your community?*

**Community Climate ACTION
around the Dehcho (2015-17...)**



AEA Climate ACTION projects (2015-17)
your community your energy your plan

- ✓ *Solar PV installations (2016)*
 - Village of Ft. Simpson - Recreation Centre
 - TK(JMR)FN - Water Treatment Plant



**Community Climate ACTION
around the Dehcho (2015-17...)**





AEA Community Partnerships

your community your energy your plan

AEA's Successful Community Partnership Approach:

- IDENTIFY Community Energy ACTION priorities
- ENGAGE communities - Expressions of Interest
- REQUEST INPUT from Contractors - RFP's & RFQ's
- COORDINATE activities through Partnership Agreements with Communities & Contracts btwn. Communities & Contractors

Community Climate ACTION

around the Dehcho (2015-17...)



Community Energy ACTION around the Dehcho (2015-17...)



"Looking forward to working with you to create your Community Energy projects & seeing the SUCCESS you achieve through them!"

Mahsi cho!



ARCTIC ENERGY ALLIANCE

Teresa L. Chilkowich
Regional Energy Project Coordinator

Dehcho First Nations
PO Box 89
Fort Simpson, NT
X0E 0N0
www.aea.nt.ca

Telephone 867 695 2355
Toll Free 1 866 995 3748
Fax 867 695 2038
Email dehcho@aea.nt.ca



Tom Gross – AEA Hay River office
(867) 874-3434
hayriver@aea.nt.ca