

Appendix A

1.1 BAND COUNCIL RESOLUTION



Chronological no.

File reference no.

BAND COUNCIL RESOLUTION

NOTE:

The words "from our Band Funds" "capital" or "revenue", whichever is the case, must appear in all resolutions requesting expenditures from Band Funds.

The council of the Kitasoo Band Council		Cash free balance	
		Capital account	\$ _____
Date of duly convened meeting	D M Y 2 9 0 7 1 5	Province	Revenue account \$ _____
		British Columbia	

DO HEREBY RESOLVE:


WHEREAS:

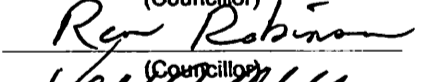
The Kitasoo Nation wishes to adopt policies that incorporate established energy efficiency practices into how the Nation manages housing resources.


BE IT RESOLVED THAT:


The Kitasoo Nation will adopt and implement minimum energy requirements for new and existing homes in the community. The Nation will establish a plan and procedures to ensure homes in Klemtu achieve energy performance equal to or greater than required by the 2015 BC Building Code, EnerGuide 80 ratings, Energy Star requirements, or other similar codes.

Quorum 4


(Councillor)


Ren Robinson
(Councillor)


(Councillor)


(Chief)

(Councillor)

(Councillor)

(Councillor)

(Councillor)

(Councillor)

(Councillor)

FOR DEPARTMENTAL USE ONLY					
Expenditure	Authority (Indian Act Section)	Source of funds <input type="radio"/> Capital <input type="radio"/> Revenue	Expenditure	Authority (Indian Act Section)	Source of funds <input type="radio"/> Capital <input type="radio"/> Revenue
Recommending officer			Recommending officer		
_____ Signature		_____ Date	_____ Signature		_____ Date
Approving officer - Approuvé par			Approving officer		
_____ Signature		_____ Date	_____ Signature		_____ Date

1.2 ENERGY EFFICIENCY HOME EFFICIENCY MEASURE CHECKLIST

The following upgrades are to be completed where appropriate as part of a basic energy efficiency home visit.

Home Efficiency Measure	
Air Sealing	(✓)
Doors – weatherstripping, sweep/bumper, cracks/gaps around frame	
Windows – cracks/gaps around frame, weatherstripping if loose	
Walls – cracks/gaps at floor and ceiling, along baseboard, holes and penetrations	
Fireplace – where it meets the wall	
Electrical outlets / light switches on exterior walls	
Heating vents – in top floor ceiling or bottom floor over crawlspace	
Pipe entries – kitchen sink, bathroom sink, washer	
Vent ducts – kitchen range hood, dryer vent	
Attic – plumbing vents, exhaust fan ducts, chimney/flues (high temp caulk), heating ducts, weatherstrip attic hatch	
Basement – framing/foundation join, service entries (oil, propane, elec, water)	
Crawlspace – plumbing drains, service entries (oil, propane, elec, water), heating ducts	
Hot Water Tank	
Insulate pipes	
Turn down temperature setpoint to 120°F or low/med	
Furnace	
Seal leaks in ducts	
Check if filter is dirty	
Check type and setpoint of thermostat.	
Water	
Switch to low-flow shower head (less than 2.0 gpm)	
Switch to low-flow faucet aerators (1.5 gpm)	
Lights	
Switch high use lights to LED (not on dimmer switch)	

1.3 MATERIALS AND TOOLS LISTS

Material	Specifications
Insulation	
Foam backer rod	Various sizes
High temperature caulk	
Elastomeric caulk	Clear
Low-expansion urethane foam	
Electrical box gaskets	
Hot water tank blanket	
Pipe insulation	1/2", 3/4"
Weather stripping	
Adhesive closed cell foam	Various sizes
Adhesive open cell	Various sizes
Door bumper	Various types
Door bumper gasket and sweeps	Various types
Door frame weather stripping	
Lighting	
LED Lights	Standard shape (A-lamp)
LED Lights	Other shapes (pot lights, track lights, etc)
Water Conservation	
Low Flow Shower Head	Flow Rate 1.5-2 gpm
Faucet Aerators	Flow rate 0.5 gpm (bathroom) 1.5 gpm (kitchen)
Other	
Energy Star windows	Energy Star Climate Zone 2 rated
Energy Star doors	Energy Star Climate Zone 2 rated
Programmable Thermostats	Multi-day programmable, or Smart learning (e.g. Nest)
Foil duct tape	
Teflon tape	
Sheet metal flashing	

Tools	
Caulking gun	Cloths
Exacto knife	Shears
Multi-tip screwdriver	Scissors
Small screwdriver for elec plates	Plastic gloves
Flashlight/headlamp	Paint thinner
Paper towels	Spare batteries
Adjustable wrench	Masks
Flashlight/ headlamp	Lighter and smoker pen

1.4 TRAINING MATERIALS

Training of local energy retrofit personnel took place over 2 days and during multiple home visits. The following topics were covered in the training sessions.

1. **Safety considerations and materials** - masks, vermiculite, gloves, electrical practices
2. **Primer on energy use and loss in homes** - where is energy used in the home?
3. **Meter reading**
4. **Air Infiltration in homes**
 - a. Why seal up the building?
 - b. Why do we need some air leakage (if no HRV)?
 - c. Where are the leaks? – doors, windows, cracks, penetrations
 - d. How do we find them? – smoke test, feel, dirt stains, visual
 - e. Selecting the right measure - what do we use to seal a home
 - i. weather stripping – open cell, closed cell, door seals
 - ii. caulk – latex, elastomeric, high temperature
 - iii. backer rod
 - iv. expanding foam
 - v. elec outlet gaskets
5. **Walls**
 - a. R-values
 - b. Insulation – batt, rigid, loose fill.
 - c. How to determine construction, age, elec outlets
 - d. Thermal bridging
 - e. Air and vapour barriers
 - f. Upgrading insulation
6. **Windows**
 - a. Number of panes
 - b. Low-e coatings – lighter check
 - c. Gas fill – air, argon
 - d. Frames – aluminum, vinyl, wood, fibreglass
 - e. Heat shrink film
 - f. Drapes & blinds
7. **Basements**
 - a. Insulation
 - b. Wall/foundation joins
 - c. Rim joists – insulate and seal
 - d. Heating – source, control, ceiling insulation
8. **Crawl spaces**
 - a. Insulation location
 - b. Continuity, condition
 - c. Penetrations
 - d. Heating, heat tracing

9. Attics

- a. Insulation levels and continuity
- b. Hatches
- c. Penetrations – look for light

10. Furnace

- a. Filters
- b. Duct insulation, leaks
- c. Programmable thermostats
- d. High-efficiency furnaces – flame retention/high static burners, mid-efficiency, condensing

11. Other heating

- a. baseboards,
- b. space heaters,
- c. fireplaces/stoves

12. Water heating

- a. Reducing the load with showerheads and aerators
- b. Reducing water heater losses – blankets, pipe insulation, heat traps
- c. Reduce setpoint

13. Lighting

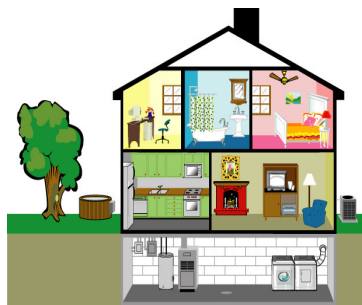
- a. Incandescent, fluorescent, LED
- b. Turning lights off
- c. Occupancy sensors, photocells

14. Appliances – Energy Star, water savings

15. Other plug loads

- a. Energy Star
- b. Turn them off
- c. Phantom loads

Where does the energy go?



\$2,000 per year!

Roof	4 %
Walls	8 %
Windows / doors	9 %
Basement / floor	10 %
Infiltration / ventilation	7 %
<u>Furnace efficiency loss</u>	<u>12 %</u>
Heating sub-total	50 %
Hot water load	15 %
<u>Water heater efficiency loss</u>	<u>10 %</u>
Water heating sub-total	25 %
Total Fuel	75 %
Lights	5 %
Major appliances	7 %
<u>Other</u>	<u>13 %</u>
Total Electrical	25 %