

Kiashke Zaaging Anishinaabek - Gull Bay First Nation

MASHKAWIZIWIN CLEAN ENERGY FUTURE

NEWSLETTER



Winter 2017

KZA Microgrid Naming Engagement

Children, Youth, Adults and Elders of KZA can take pride in the naming the "currently known" KZA Micro Grid Project

Holiday Activities

Puzzles, drawings, games and cartoons to enjoy during the Winter season!

Indigenous Clean Energy Planning

Preparing for KZA's Clean Energy Plan and what to expect

"A Movin & A Shakin"

Fall Activity and GBFN Micro Grid development from the KZA Clean Energy Team

Perspectives from your Energy Team

Councillor Kevin W. King, Youth Dylan Penagin and AJ Esquega give a perspective on Clean Energy

Community Heat

A glance at BioEnergy, a growing source of heat and power in Canada

Limited Copies of the Winter 2018 Newsletter can be found at the KZA Government Office

& MUCH MORE

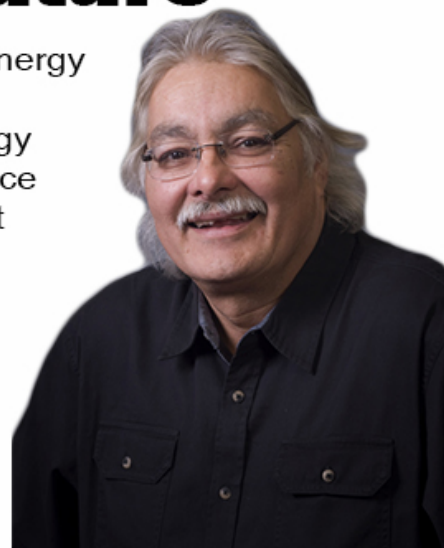
Gull Bay First Nation

Clean Energy Future

Boozhoo Everyone

Welcome to our winter edition of the Mashkawiziwin Clean Energy Newsletter.

As we transition into shorter days and colder nights, our energy costs rise. There are a few small changes one can do to reduce energy use in your home, for example, switching to LED (light emitting diode) bulbs, using programmable thermostats, and insulating exterior wall receptacles with non-conductive foam insulated covers. You can even open curtains on south facing windows during daylight hours to gain passive solar energy. These are just a few ways you can reduce energy consumption and there are many other great inexpensive ideas to save energy on the internet. Remember reducing your energy consumption reduces your costs and contributes to a clean and healthy environment.



Councillor Kevin W. King -
Clean Energy Manager

Have a very Merry Christmas and wonderful winter season.

Miigwetch



“At the IESO Community Energy Symposium, I learned how communities in the North can reduce the use of diesel fuel and turn to alternative energy efficiency such solar energy! Example, The Gull Bay First Nation Micro Grid Project. We can have clean energy to ALL First Nations if we essentially learn about the resources available and continue to act on Clean Energy.”

Dylan Penagin -
GBFN Youth voice

“2018 is going to be an exciting year for sure! With the development and construction of the KZA Micro Grid Project, project video, and clean energy plan, KZA is well on its way towards a clean future! PLUS we are in talks with being on an exciting new series hitting APTN! I can feel the energy in the community electrifying all with hope and positivity.” - **AJ Esquega**



GBFN Energy Projects Coordinator

Food Energy

SHOUT OUT

Mashkoozi-ninih

Leonard
McCauley

Farrell Bouchard Jr

Murphy Bouchard Jr

to Amber Dawn Bouchard and all the Volunteers, Workers, and People who helped make the Fall Harvest 2017 Event a success. Way to keep the Tradition of Hunting alive. And to the Hunters who gave Elders and community members Moosemeat. Miigwetch, Miigwetch, Miigwetch

Giving Thanks to our Traditional Foods

What we put into our body is imperative to our physical, mental and spiritual health. The best source of nutrients and energy is from our Traditional food sources such as moosemeat, fish, plants and harvest berries. These foods have sustained our People since time immemorial, giving us what our body and self need. Some of our Traditional food sources, for example Moose, eat the medicines and plants that are good for our health. In return, they share the medicine through that process. It is good to give thanks to the sustenance and life all around us everyday and to leave enough food behind for it to replenish and return so that we can live a healthy and good life for generations to come.



Slow cooker Moose Bones/ Ribs for Broth and/or meat

What you will need;

A Slow Cooker or Crock Pot
1lb of frozen moose ribs
1 packet of Onion Soup Mix
1 Onion
Table Spoon of Garlic
8-12 cups of Water

Directions:

- Step 1 - Dice onions & garlic
- Step 2 - Turn crock pot on to medium heat.
- Step 3 - Put 8-12 cups of water in the Crock Pot or fill 3/4 of crock pot with water.
- Step 4 - Place moose ribs/bones in the centre of the crock pot and pour onion soup mix, onions and garlic on top.
- Step 5 - Let it slow cook for 8-12 hours (or overnight) until meat is tender and light pink.
- Step 5 - Remove meat and bones from crock pot.
- Step 6 - Pour broth in a container and let cool. When cooled, store in freezer and save for soups or use right away.

Keep the meat for sandwiches or use in broth for Moose meat Barley Soup or other favourite dishes.

Hope you enjoy.

Recipe shared by Emma King

Smoked Whitefish

Moosemeat

Moose Tongue

Fried Bannock -
Not really Traditional
but Delicious



Gull Bay is making good movement

Fall Activity: @ 20/20 Catalyst Roundtable @ Generation Energy

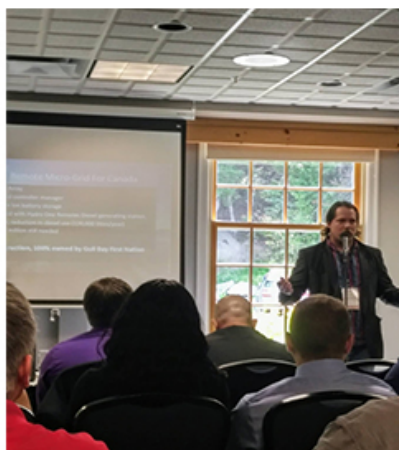


2020CatalystsProgram · 2017-07-18
Enjoying the sun while talking about how to put #cleanenergy revenues to work benefiting communities. #indigenous #2020catalysts



2

4



Darrell Brown @kisikdarrell · 2017-07-20
@2020Catalysts AJ Esquega from Gull Bay First Nation bring micro grid and solar power to his community



3

3



2020CatalystsProgram · 2017-07-20
AJ Esquega, Kiashke Zaaging Anishinaabek talking about their community solar storage microgrid #iceroundtable #2020Catalysts



2

3



UPCOMING

KZA Micro Grid & Clean Energy Development

Dates are tentative and may be subject to change

Dec 2017

“Alltrade wins constructor bid”

Feb 2018

“Recruitment for KZA Energy Intern begins”

Mar 2018

“Site Prep for the KZA Micro Grid Project”

Mar 2018

“Job Fair”



Darrell Brown @kisikdarrell · 2017-10-11
@2020Catalysts Kim Scott on Indigenous views for northern lights session. #GenEnergy #GenerationEnergy



3

4



@ IESO Community Symposium

@Remote Indigenous Communities Offgrid



Mar 2018
"Honour the Sun
Ceremony for
KZA Micro
Grid Project"

AJ ESQUEGA will be the Community contact for any questions or inquiries regarding construction of the KZA Micro Grid Project.

Feb 2018
"Starting of
KZA Clean
Energy Plan"

Mar 2018
"Community
Engagement
and
Feedback
Session"

**Spring/
Summer
2018**
"APTN"

**Summer
2018**
"Construction
for KZA Micro
Grid begins!"



Zoë Caron
@ZoeCaron

Indigenous leaders & communities present micro-grid solutions to move off diesel, here in Winnipeg pre-Generation Energy. #GenEnergy



KZA Micro Grid needs a NAME!



ATTENTION KZA!!

**CHIEF & COUNCIL
NEED YOUR HELP!**

They are looking for
Community Member's
suggestions for the
OFFICIAL NAME of
the *Kiashke Zaaging
Anishinaabek Micro
Grid Project!*

**What do you think would
be an everlasting name
for the KZA Micro Grid +
Solar + Battery Energy
Storage Site?** - *more
information on the next page*

**Start a conversation, ask
for advice, talk to an
Elder, Youth or fellow
Community Member.**

**All community input will be put into a poster
encompassing the logo and presented to Chief
& Council.**

*SUPER-
COMPUTER-
BATTERY SOLAR
-ENERGY
FACILITY*

*YOUR
SUGGESTION
HERE!!*

ALL INPUT MUST BE RECEIVED BY MARCH 16, 2018

Please bring your KZA Micro Grid Project OFFICIAL NAME
input to AJ Esquega at Gull Bay Government Office.
Have question? Contact AJ at (807) 982-0006 or email energy@gbfn.ca

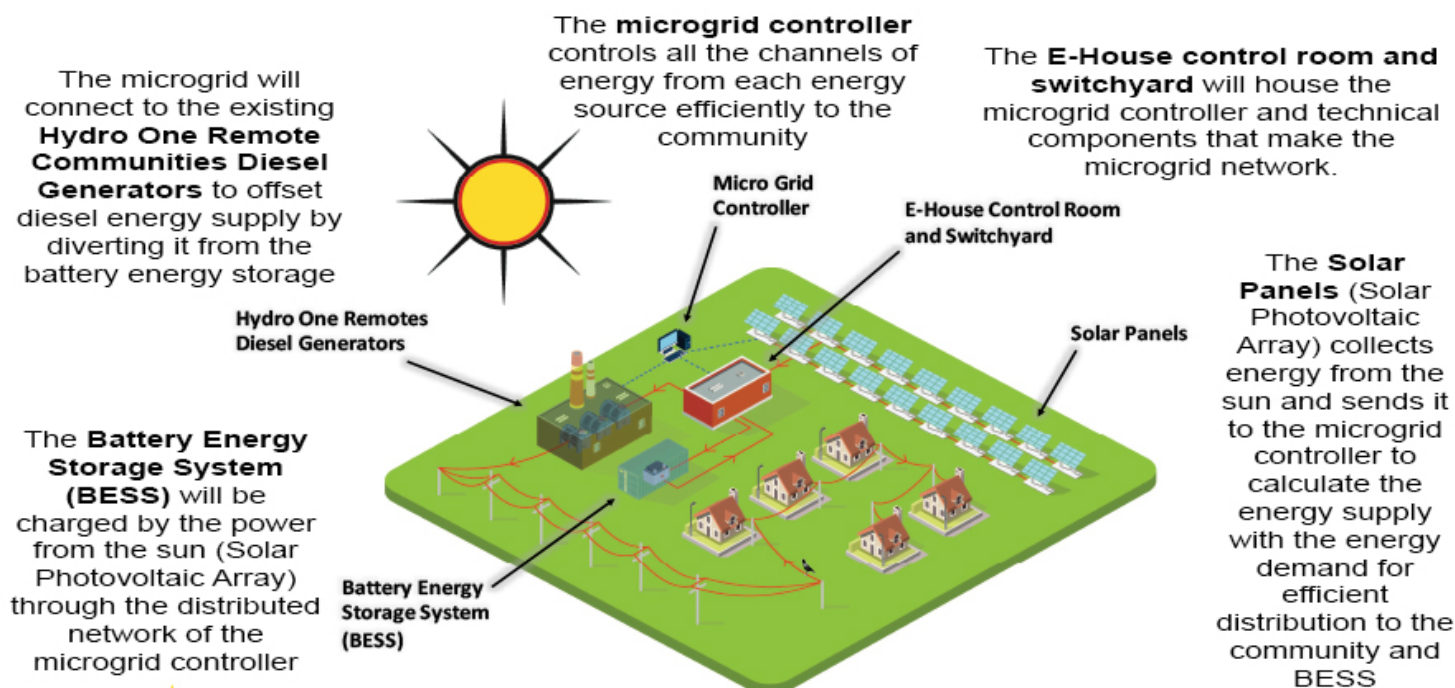
The GBFN Micro Grid Project

Here is a little bit of information about "the Gull Bay First Nation Micro Grid Project" to help you with your idea for an OFFICIAL NAME.

The GBFN Micro Grid Project consists of 5 major components: *The Micro Grid Controller, Battery Energy Storage System (BESS), Solar Photovoltaic Array, Hydro One Remotes Diesel Generator and the Community.*

Microgrid

- an energy distribution system that's localized and has the ability to connect several energy sources to work together to supply and distribute energy efficiently to the local community.



All the components that make up the **microgrid system** are: *The Microgrid Controller, Energy Sources (Diesel Generator and Solar Photovoltaic Array), Battery Energy Storage System (BESS), E-House Control Room and Switchyard and Gull Bay First Nation Community Homes and Infrastructure.* They work together to supply the community with efficient use of power by the microgrid controller.



DEBWEWIN

The Gull Bay First Nation Microgrid will be Canada's 1st fully-intergrated renewable energy-storage microgrid!

Gull Bay First Nation will be able to connect to other renewable energy sources such as **Wind, Hydro, Biomass etc.** in the future once the GBFN Microgrid is in operation!

"The Gull Bay First Nation Microgrid Project is featured in the Ministry of Energy's Long Term Energy Plan."

During the environmental study, a total of **40 species of birds** was heard or seen within or adjacent to the study area. The most numerous species included *Tennessee Warbler, Ruby-crowned Kinglet and Red-eyed Vireo.*

Solar Photovoltaic Panels still capture power from a **full moon**. Although not enough to provide a charge but enough to slow down the depletion of stored energy.



Gull Bay First Nation

KIASHKE ZAAGING
ANISHINAABEK

ACTIVITY

CONNECT THE *ANISHINAABEMOWIN* WORDS
WITH THE MATCHING *ENGLISH* WORDS
Miigwetch to Chris King Sr. for providing Ojibwe
Translation

Word Jumble

YRAETT TGRISH

KEAL NNI OGIP

GINAMNIA

SMOUL GERNEY

ROMETH RAHTE

RWETA SI FILE

IN ANISHINAABEMOWIN

MINO AANMOWIN

MISHKOWENMI NINIH

MASHKOZII'ENMOWI MINDOMOWE

MASHKOZII'ENMOWI ABINOOJII

MISHI

MAADJI-GI-SHKADJI-IGAN

BAAG-NAAZ-WIN

WA-WAS-KINEG NE'AAP

ANIMKII ZAAIGAANG

MINIDO

NODNIWIN

GIIZISNOWIN

NIBI NIDJIWIN

AANAWENDJWIN



MANY BIRDS MIGRATE SOUTH FOR
THE WINTER, BUT THE CROW AND
RAVEN NEVER LEAVE.

FOR FUN - FIND THIS
CROW ON EVERY PAGE!



Word Jumble Answers
From top to bottom
Treaty Rights
Lake Nipigon
Ma'lingan
Lumos Energy
Mother Earth
Water is Life

F
I
Q
R
S
C
R
A
V
E
N
W
M
N
fin
PA
M
I
FLYIN

Lean Energy Future

Y PAGE



ENGLISH

POWER WOMAN

OTOR

IND POWER

OOD/CLEAN AIR

IGHTNING

HUNER BAY

OWER CHILD

PIRIT

IN/SOLAR POWER

ATER FLOW

OWER MAN

ASTE/ WASTEFUL

REWOOD

LETRICITY CURRENT

O	L	F	R	W
N	D	L	P	I
X	F	Y	Z	N
B	B	I	T	T
O	X	N	Y	E
T	A	G	S	R
S	K	S	N	J
O	B	Q	O	M
L	W	U	W	A
Y	H	I	B	R
N	M	R	I	T
X	O	R	R	I
O	S	E	D	N
I	G	L	A	Y

ER AND THE WINTER ANIMALS

GE	CROW	LYNX
	FOX	SNOWBIRD
	WOLF	RAVEN
RR	MARTIN	WINTER

Write down four (4) ways to save Energy

1. _____
2. _____
3. _____
4. _____

COLOURING SECTION

DRAWING BY TARA NOWEGEJICK



KZA Clean Energy Plan

The #1 Goal of the ICEP (Indigenous Clean Energy Plan) is to have KZA develop a showcase clean energy system that:



- ✧ Reduces overall demand and costs for residents
- ✧ Generate some revenue for KZA
- ✧ Promotes some local development, and
- ✧ Utilizes renewable energy instead of dirty diesel fuel



Reducing overall demand and costs for residents of KZA

will come from home and commercial energy audits. KZA Energy team will work with an energy audit service provider to do building assessments on homes and community buildings with the purpose of;

1. Assess typical construction condition of homes;
2. Identify opportunities to reduce energy consumptions
3. Train community members to perform basic upgrades, and
4. Implementing into the design of the overall comprehensive community plan

Generating some revenue for KZA

through a Power Purchase Agreement between Ma'iingan LP (KZA) and Hydro One Remotes. Because the Community will be using primarily a clean energy source (solar) instead of dirty diesel fuel, KZA will be making revenue from the offset of greenhouse gasses. The more greenhouse gas KZA offsets, the more revenue for the community. Opportunities from these revenue streams could go towards employment opportunities, Youth incentives, Elder & Child care services, or other. Ultimately it will be the communities decision which source of community benefit it wishes to direct revenue to.

Blower Door Tests - used in home energy audits to check for air leaks/ drafts that might need to be sealed. like around windows

Programmable Thermostats - used to monitor and control energy efficiency in the home



Light-emitting diode (LED) bulbs - greatly reduces home energy costs

Continued on the next page

Promote some local development for KZA by increasing the communities energy supply of servicable power. As you may know, KZA is reaching it's tipping point of energy capacity and demand. The community needs more power in order to grow and develop new infrastructure such as an elementary school, water treatment facility, youth centre, more homes etc.

Thankfully Clean energy is a growing trend in Canada, making it more popular for green eco-business ventures and social enterprises to have access to funding, entrepreneurship support and incentives.

Happy Holidays!

On December 17 and 20th 2017, KZA hosted two Christmas dinners for community members. The event was well received and kids had a blast! Thanks to KZA and the staff team for providing the time and energy to make this happen. The kids made their own Christmas ornament and crafts. #FutureCrafters



From Right to Left: Crystal Nowegejick, Cheryl King, Santa!, Amber Dawn Bouchard, Janice Penagin



Kids crafting and putting their creative minds to work

SHOUT OUT!
to Janice Penagin for the fun ugly Xmas Sweater Idea!

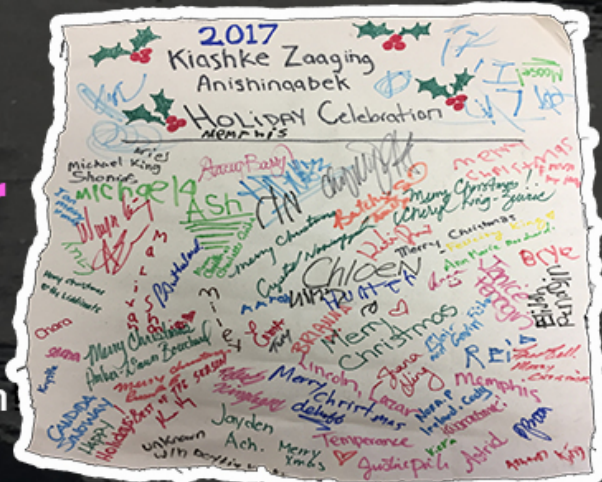


Clockwise from bottom right: Shana King, Janice Penagin, Trina Wanakamik, Amber Dawn Bouchard, Patsy Sutherland, AJ Esquega, Stacey Barry, Crystal Nowegejick, Cheryl King #PowerHouse

Below right is a community signatures and drawings as a memorabilia for the 2017 Christmas Dinner Events. It will be posted on the wall at the Gull Bay Government Office in Gull Bay, ON. It is an expression of love and appreciation to all your energies as we gather in celebration and unity. #PowerToThePeople

Wishing everyone a Happy New Year as we journey into 2018!

Mino-Animikikodaadim



Continued from Previous Page

Utilize renewable energy instead of dirty: KZA wants to protect and maintain the quality of life for its People and the Next Generations to come. In order to keep the air clean, water protected, land monitored and quality of life for the People of KZA a priority, we must utilize the clean energy sources around us and consume only enough to satisfy the community need and not to over-use or be wasteful. However, with the micro grid computer and battery energy storage, KZA will have the option to explore other renewable energy sources, such as wind, hydro, geothermal, etc. etc. to create more power supply that the community can then potentially sell to surrounding businesses, industries, communities, etc. Currently, the community is operating solely (%100) on diesel fuel and gasoline. With the help of our friends at Lumos Energy (KZA's clean energy advisors), OPG and collaborators, KZA will be making the transition from dirty diesel to clean SOLAR POWER (with micro grid technology and battery energy storage). This will be a historical event for KZA, moving to clean energy and be being leaders in Canada's Clean Energy Sector!

BIOenergy: Heat & Energy Source

Biomass energy or BioEnergy is a growing source of heat and power across Canada including in Ontario.

BioEnergy is a combination of three factors:

1. The feedstock or source of biomass energy,
2. The technology which converts biomass feedstocks in energy, and
3. The type of application of energy which can be generally summarized as being in one or more of the following 3 applications: a) *Electrical Power Generation*; b) *Production of Heat/Steam*; and c) *Production of Biomass Fuel Commodities and Secondary Products*

Sources of biomass feedstocks are diverse and growing. Major categories of biomass energy feedstock include: a) Wood, wood products, wood residues including woodchips, sawdust, "hog fuel" and spent pulping liquor; b) Landfill gas methane, municipal solid waste, industrial wastes, and sewage biogas; c) Short rotation energy crops such as willow, poplar, switchgrass, miscanthus grass; and d) Agricultural wastes such as chaff, straw, husks and shells; food processing and manure.

A range of technologies are being employed to convert biomass. These technologies are also in a rapid state of development. Conventional technologies "combust" feedstocks to generate energy. Newer and more promising technologies convert biomass into a syngas, and use it to produce power and heat, much as one would use natural gas: an example is a technology developed by a Canadian firm, Nexterra



1. Fuel In-Feed
Locally sourced wood waste (including recycled clean wood construction and municipal tree trimmings) is loaded into the fuel bin and

2. Gasifier
Fuel enters the gasifier and goes through several stages including drying, Pyrolysis (chemical change brought about by heat), and gasification. The wood is converted into synthetic "syngas" that can be used like natural gas.

3. Oxidizer
The syngas is conveyed into the oxidizer where it is combusted, with the resulting flue gas directed through a boiler.

4. Boiler
Hot water from the boiler is transported by an underground pipe to provide heat and hot water for Dockside buildings. The cold water then returns to the boiler to start the heating process

5. ESP
After exiting the boiler, the flue gas is cleaned in an electrostatic precipitator (ESP) that filters out virtually all of the remaining particulate matter.

EMPLOYMENT POSTING

Mashkawiziwin Energy Projects Intern On-reserve (Part-time)



Kiashke Zaaging Anishinaabek – Gull Bay First Nation (KZA – GBFN) is recruiting for an intern to assist in the development of the current KZA – GBFN micro grid project, upcoming community energy plan and future clean energy initiatives. The position is part-time but will boast bountiful transferable skills, knowledge and experience in the energy industry.

Duties may include (but not limited to):

- Assisting KZA – GBFN Mashkawiziwin Energy Projects Coordinator
- Informing Council/members about their options regarding energy usage and helping them to develop systems to improve their efficiency
- Analyzing the current/future usage of energy and collecting data using data modelling software
- Developing/organizing/conducting field and feasibility studies
- Writing concise and intelligible project proposal and reports on research results
- Researching available funding to develop community energy projects
- Reporting regularly to update on ongoing processes and recommend the best energy solutions
- Developing strategies marketing and business development opportunities and creating methods on how to practically implement solutions
- Maintaining professional relationships with Council, members, employees and provincial/federal stakeholders while also developing new business relationships
- Adhering to hours of operations, and all duties as assigned by the coordinator.
- Development of presentations, community engagements, GBFN Micro Grid Marketing Material, Newsletters and social media updates.

Applicants must present (or willing to strengthen) these KEY SKILLS:

- An understanding of creative problem solving
- Good communication and presentation skills
- Good organization skills and an analytical eye for detail
- Conduct of precise research based on a large amount of data
- Demonstrated interest in energy, economic and/or policy analysis
- Good quantitative, analytic and statistical skills
- Some skills Microsoft Word, PowerPoint, Microsoft Excel and/or Photoshop
- Ability to write and communicate technical analysis clearly
- Able to work independently as well as in a team.

Preferred Qualifications;

- Must have minimum Grade 12 Education,
- Must be willing to travel, for instance, attending a conference, meetings, training etc.
- Post-Secondary Education and/or Training in the Energy Industry, Economic Development, Engineering, Community Development and/or advocacy considered an asset.
- Must be living on-reserve or have own lodging in the community.

Miigwetch for your interest; however only those selected for an interview will be contacted. Please send (or hand-in) your resume, and 2 working references by

4:00 p.m. Monday February 26, 2018 to:

Hiring Committee
Kiashke Zaaging Anishinaabek – Gull Bay First Nation
General Delivery
Gull Bay, ON P0T 1P0
Fax: (807) 623-3010 or Email: kevinwking@hotmail.ca



This position made possible with the support from Chief and Council and Independent Electricity Systems Operator (IESO). ~Chi miigwetch

KZA's little Bird Guide

Here are 23 of the
40 types of birds
spotted during the
environmental scan
of the Micro Grid
Project Site.

**See how
many you
can spot in
2018**

Alder
Flycatcher

☐

Crow

☐

American
Redstart

☐

Mourning
Warbler

☐

Bay
Breasted
Warbler

☐

Blackburnian
Warbler

☐

Blue Jay

☐

Blue
Winged Teal

☐

Broad
Winged
Hawk

☐

Magnolia
Warbler

☐

Northern
Flicker

☐

Red
Breasted
Nuthatch

☐

Red
Eyed
Vireo

☐

Red
Winged
Blackbird

☐

Cedar
Waxwing

☐

Common
Loon

☐

Common
Snipe

☐

Eastern
Wood
Pewee

☐

Bald Eagle

☐

Least
Flycatcher

☐

Connecticut
Warbler

☐

Common
Yellowthroat

☐

Lincoln's
Sparrow

☐


Use this page as a resource for bird
watching around the community.
Note: Male and female bird colours may
differ depending on species. Only one
gender is shown due to newsletter space.

Do you have a comment, suggestion or
would like to give a shoutout. Fill out the
feedback form at the office or found on
the GBFN Micro Grid x Clean Energy
Facebook Page.

20/20 Catalysts Program



About the Program

The 20/20 Catalyst Program is a hands-on program designed to support Indigenous communities embarking on clean energy projects.

Working collaboratively with the guidance of Indigenous leaders and clean energy practitioners from across the country, Catalysts will gain the skills and tools needed to maximize the social and economic benefits communities gain through clean energy initiatives.

The 20/20 Catalysts Program is an interactive three-month program that connects First Nations, Metis, and Inuit Catalysts to a network of Indigenous and non-Indigenous Clean Energy Project Mentors and Caching Specialists involved in clean energy project development - including: energy efficiency, solar, wind, hydro, biomass, and geothermal, both on and off-grid.



20/20 Catalysts at the Oldman River Hydro Electric Power Dam in Piikani Nation Territory

Catalysts will learn from Program Mentors, Coaches and each other by sharing experiences and lessons learned from past projects. Ultimately, Catalysts will walk away from the Program with the skills, tools, and resources to maximize the social and economic benefits their community gains through participation in clean energy projects.

Last year, I (**AJ Esquega** - your Mashkawiziwin Energy Projects Coordinator) went through the 20/20 Catalysts program. I made valuable connections throughout Turtle Island and expanded my knowledge on Indigenous Clean Energy Projects and Development. It was the best training experience I have ever taken.

If you are interested in the The 20/20 Catalysts program, they are accepting applications for 2018 year and the **deadline is March 2, 2018**. This year, the program is travelling to Nova Scotia, Yukon and Ontario. Ask AJ some questions about the program or check out the email link below.

For more information visit: <http://indigenouscleanenergy.com/2020-catalysts-program/>



The Edelweiss House - An EcoHome in Quebec

SHOUT OUT!

to **Eryn Stewart** and **Ian Scholten** for organizing such a remarkable program and keeping us all together! Much Love!

Chi miigwetch

English to Anishinaabewomni
Good/Clean Air --> Mino aanmowin
Power Man --> Mishkowemni ninin
Power Child --> Mashkozil'emowil mindomow
Power Woman --> Mashkozil'emowil mindomow
Firewood --> Mishi
Motor --> Maagji-gi-shkadji-ligan
Electricity current --> Baag-naaz-win
Lightning --> Wa-was-king ne'aap
Thunder Bay --> Animkiil Zaaigaang
Spirit --> Minido
Wind Power --> Nodniwin
Sun/ Solar Power --> Giliizisnowin
Water Flow --> Nibi niidjwin
Waste/ Wasteful --> Aanawendjwin



KIASHKE ZAAGING
ANISHINAABEK

Happy 2018



LUMOS
CLEAN ENERGY
ADVISORS

ONTARIO **POWER**
GENERATION



MA'IINGAN
DEVELOPMENT INC

