

Kiashke Zaaging Anishinaabek (KZA) – Gull Bay First Nation

MASHKAWIZIWIN CLEAN ENERGY FUTURE

NEWSLETTER



**KIASHKE ZAAGING
ANISHINAABEK**

SPRING 2017

**“Is this Mashkawiziwin’s 1st EVER
Clean Energy Future Newsletter?!”**

**“What’s this
I hear about
an Energy
Logo
Contest?!”**

**“Chief and Council
make Clean Energy a
PRIORITY for KZA!”**

**“Which Clean Renewable
Energy Source are we
gonna use?”**

Kiashke Zaaging Anishinaabek (KZA) – Gull Bay First Nation

MASHKAWIZIWIN CLEAN ENERGY FUTURE

A word from your Energy Manager Councillor Kevin King,

Boozhoo!

I am proud to be a member of the Kiashke Zaaging Anishinaabek Clean Energy Team!

Through innovation, new technologies and commitment, we can make the community of Gull Bay First Nation a leader in clean energy.

As Keepers of the Land, it is our duty to use the gifts the Creator has given: Sun, Water, Wind, and other alternative energy options such as Geothermal and Recycling.

By looking toward alternative, cleaner energy options, we reduce our dependency on fossil fuels like diesel. Just imagine, never having to have the odour of diesel fuel floating in the air the community breathes.

Let the Sun Shine. Miigwetch

Councillor Kevin W. King
Gull Bay First Nation

Phone: (807) 627-4819
Email: kevinwking@hotmail.ca



A word from your Energy Projects Coordinator,

Boozhoo Boozhoo! Good day fellow KZA community members,

My name is AJ Esquega and I am your newly appointed Mashkawiziiwin Energy Projects Coordinator! I have been given the honour to responsibly navigate this clean energy initiative canoe for the community in a safe and healthy direction, with on-going direction from Chief & Council and community.

I will also have the support from Chris Henderson and Darrell Brown from Lumos Energy, the top players in Canada for Clean Energy Initiatives on First Nation community energy planning. I strongly believe I have the best community, leadership and team to harbour this clean energy canoe to safe harbour.

Although we are currently in the planning stages for a Gull Bay Micro Grid (GBMG) Solar site, we will also be looking at other clean renewable energies and develop a clean energy plan to satisfy the peaking energy demands in the community.

I look forward to serving you and if you have any questions or concerns, feel free to contact me or stop by my office to visit. I'll put some tea on...

Chi Miigwetch

AJ Esquega
Mashkiwiziiwin Energy Projects Coordinator
Email: energy@gbfn.ca

Phone: (807) 982-0006
Cell: (807) 627-8402
Fax: (807) 982-0009



Kiashke Zaaging Anishinaabek (KZA) – Gull Bay First Nation

MASHKAWIZIWIN CLEAN ENERGY FUTURE

Kiashke Zaaging Anishinaabek is kicking off a community-centered process to build a stronger clean energy future for the community!

Background Information

The Initiative will be coordinated through an Indigenous Community Energy Planning (ICEP) process directed by Chief and Council, and coordinated by the newly appointed Mashkawiziiwin Energy Projects Coordinator – AJ Esquega, with support of Canada's leading Indigenous clean energy advisor – Lumos Energy.

KZA is looking at other clean energy Sources like **WIND**, **HYDRO**, **SOLAR**, **GEOTHERMAL**, and **BIOMASS** and keeping it an on-going and community involved process.



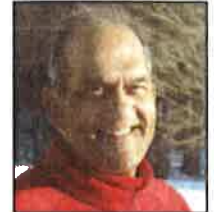
KZA on Solar POWER?!

The first major project being considered is the Gull Bay Micro-Grid (GBMG) Solar + Energy storage facility, to be owned by KZA, that will displace diesel fuel used in the Hydro One Remotes generating plant.

Ontario Power Generation (OPG) has agreed to act as development partner for the GBMG, along with various technical firms and with the support of Ontario Government Ministries.

THE ENERGY TEAM

Chris Henderson – Lumos Energy



Darrell Brown – Lumos Energy



Rosalie Alhan - OPG



Shawn Bremner - OPG



AJ Esquega – KZA Energy Coordinator



KIASHKE ZAAGING ANISHINAABEK

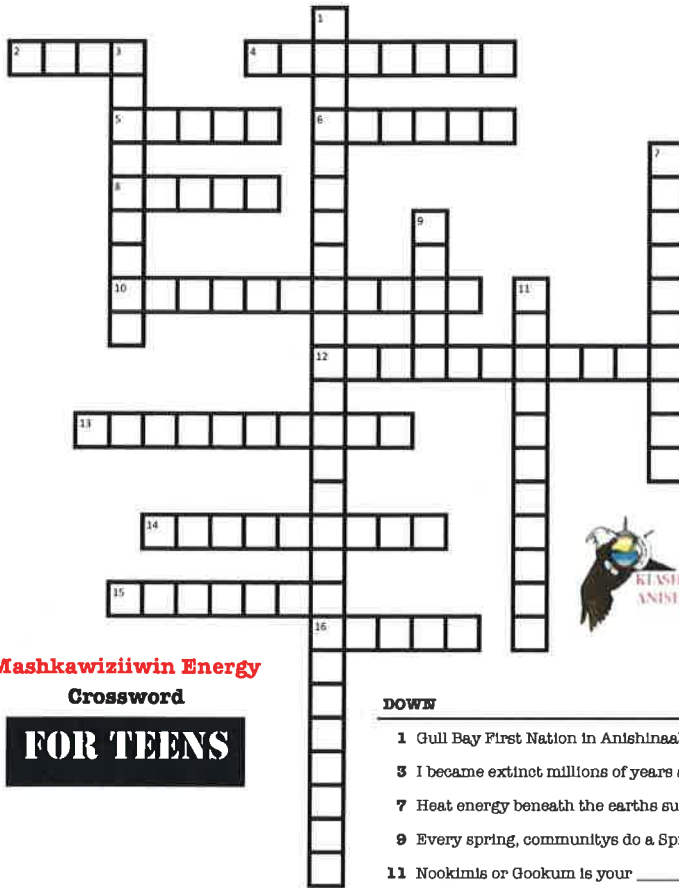


The #1 Goal of the ICEP is to have **KZA** develop a showcase clean energy system that:

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

Chief Wilfred King and Council has made a clean energy future a priority for KZA, and Councillor **Kevin King** has been appointed as Energy Manager.

Mashkawiziiwin Clean Energy Activity Section



**Mashkawiziiwin Energy
Crossword
FOR TEENS**

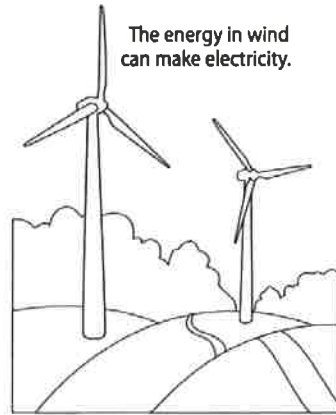
DOWN

- 1 Gull Bay First Nation in Anishinaabemowin
- 3 I became extinct millions of years ago.
- 7 Heat energy beneath the earth's surface
- 9 Every spring, communities do a Spring _____ up!
- 11 Nookimis or Gookum is your _____.

Across

- 2 I cause the leaves to rustle and the waves to turn. I can be used as a source of clean renewable power.
- 4 They are the centre of the community and the next generation.
- 5 Number 2 Across in Anishinaabemowin.
- 6 Everything in life has one and when we are given our native names, we are given it through _____.
- 8 When I rise from the east and set in the west, I can provide _____ Power as a clean renewable energy source.
- 10 Cardboard, paper, plastic containers, and pop cans are all examples of _____.
- 12 In Anishinaabemowin, I would be called your 'Mishoomis'.
- 13 When you put down tobacco, usually you are doing this because you want to _____ (2 wrds)
- 14 A group of people living closely to each other sharing similar values and beliefs.
- 15 I am a renewable energy source that is derived from unused wood products in forest harvesting.
- 16 I am a renewable Water energy source that uses turbines to produce power.

WIND POWER



WORD JUMBLE

Topic: **Pollution**

LOSFIL LFUE

LIO KALE

RITELT

OLAC KTSCAS

STXUHEA

WORD JUMBLE

Topic: **Conservation**

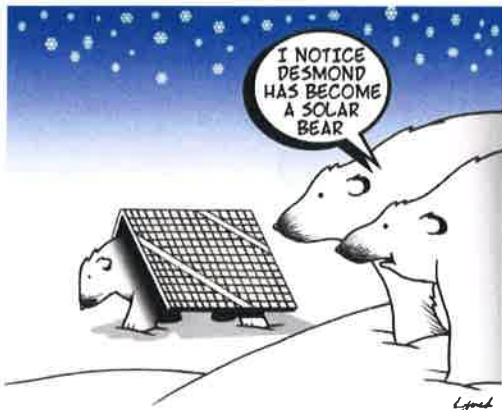
GERNEY

TCFIENFEI

ITGLH SLUBB

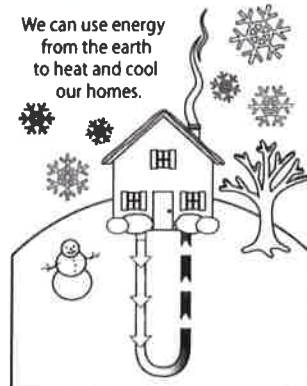
VEAS NYEOM

LEECCRY



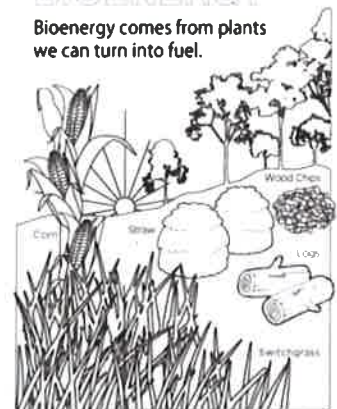
GEO THERMAL

We can use energy from the earth to heat and cool our homes.



BIOENERGY

Bioenergy comes from plants we can turn into fuel.



Mashkawiziiwin Clean Energy Activity Section

ATTENTION KZA ON & OFF RESERVE YOUTH

SEEKING YOUR PARTICIPATION
WITH PLANNING AND DESIGNING
COMMUNITY ENGAGEMENTS FOR
THE KZA ENERGY INITIATIVE.
BRING YOUR FRESH IDEAS AND
ENERGY TO THE CIRCLE.

GATHERING DATES COMING SOON...

Contact AJ Esquega for details.
energy@gbfn.ca

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

RECYCLE!



SOLAR
WIND
GEOTHERMAL
HYDRO
BIOMASS
RIVERS
LAKENIPIGON
WATER

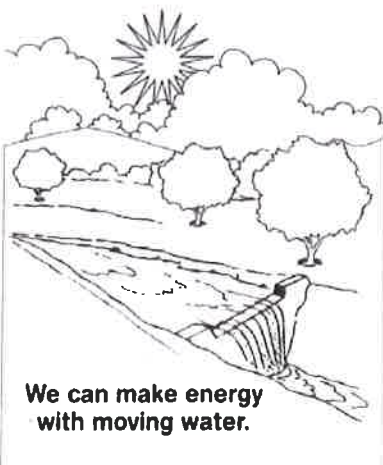
RENEWABLE
MICROGRID
ENERGY X2
LIGHT
HEAT
MOTHEREARTH
MOONLIGHT
CONSERVATION

FIRE
POWER
BALANCE
CYCLE
GULLBAY
PANELS
TOBACCO
SKY

What's Your KZA Energy #HashTag? # _____



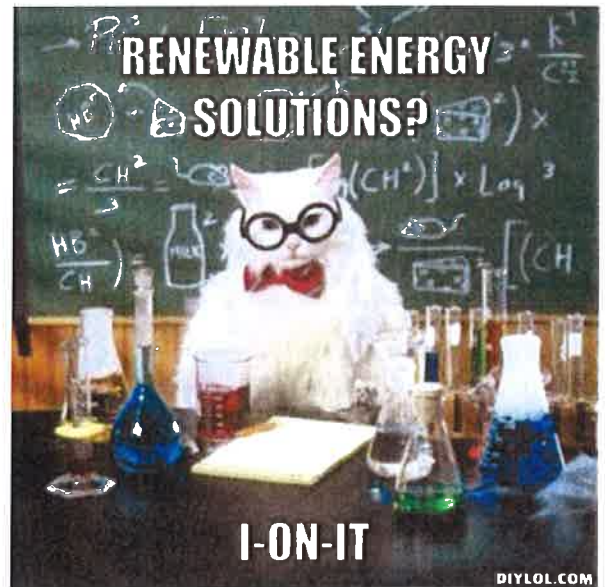
WATER POWER



We can make energy
with moving water.



SOLAR POWER



Frequently Asked Questions

REGARDING: Gull Bay Micro Grid Solar + Energy Storage Facility (GBMG)

What is this project?

The Gull Bay Micro Grid Solar + Energy Storage Facility project (the **GBMG** or the **Project**) is the first major project being considered under the Kiashke Zaaging Anishinaabek (KZA) Mashkawiziwin Clean Energy Future initiative. It involves a micro grid controller that integrates energy production from solar panels and a battery energy storage system with the existing diesel distribution system. The micro grid controller will balance generation and energy storage to reduce diesel use in the community, shutting diesel off entirely at times.

Who is proposing the Project and how will it be developed?

The initiative is coordinated through an Indigenous Community Energy Planning (ICEP) process, directed by Chief and Council, with the support of the Mashkawiziwin Energy Projects Coordinator and Lumos Energy, KZA's clean energy advisor.

Ontario Power Generation (OPG) will act as development partner for the GBMG, along with the support of various technical firms. OPG's role is to coordinate government funding and to manage the procurement and construction process.

KZA's development corporation Ma'iingan Development Inc (MDI) is expected to own the GBMG once the GBMG is completed and operational. MDI and OPG will work together to make decisions about the procurement process and construction process. OPG has extensive experience developing power generation projects. OPG's vision is to be among the best in the power industry at delivering projects safely, with the required quality, on time, and on budget, each and every time. OPG is currently developing an approximately 44 megawatt solar facility in southern Ontario.

What are the benefits to the community?

The GBMG will generate clean, renewable energy from solar panels and be supported by a battery system. Electricity generated by the GBMG will displace diesel fuel used by the existing diesel generators in the Hydro One Remote Communities Inc. (Remotes) generating plant (displacing about 125,000 litres of diesel per year).

In hosting the GBMG, the community gains a unique, showcase project: the GBMG has an innovative design that allows for diesel to be shut off completely for some periods of time. By developing the project, KZA will gain valuable business experience that can help position it as a leader in developing clean energy solutions for communities.

A successful GBMG will be a source of pride for the community and help create learning experiences and opportunities for the youth.

In addition to the benefits of reduced air emissions, MDI will receive ongoing revenue payments from Remotes for the clean energy it provides to the existing Remotes distribution system.

There are also expected to be some economic development opportunities for KZA members and businesses during construction and operations phases.

What kind of economic development opportunities will the GBMG create for KZA members and businesses?

Benefits will mostly focus around the development and construction period. Currently, the GBMG supports the role of the Mashkawiziwin Energy Projects Coordinator. As the project moves into construction, there is expected to be more KZA-provided services and opportunities for interested and qualified KZA businesses to seek subcontracts with the Engineer-Procure-Construct Contractor (EPC Contractor) – the general contractor to be hired for the project. The EPC Contractor and its associated subcontractors may also have direct or indirect employment opportunities for interested and qualified KZA members as well. Jobs may include tree clearing, fencing, site prep, and solar panel racking installation.

During operations, the GBMG should run with minimum oversight. Still, the equipment will have to be checked routinely and there will be maintenance requirements for the solar panels and battery (e.g. clearing snow off the solar panels and access roads, checking trouble-shooting lights, changing heating/ventilation filters, vegetation management). KZA can also develop its ability to perform non-routine inspection and maintenance through training opportunities, as well as manage the business, including the finances and revenue settlements with Remotes.

Other economic development opportunities will be in the form of future opportunities to leverage the skills and experience gained developing a renewable micro grid project for future business (e.g. being a consultant to other communities who may wish to install a similar micro grid).

Will the GBMG reduce our electricity costs?

No, electricity rates will not be affected. However, Remotes will pay MDI for the clean energy that the GBMG delivers to the existing distribution system. After paying operating costs, MDI, which is wholly owned by KZA, can use profits to benefit the community.

Are there any environmental effects associated with a solar and battery micro grid? How is the project team managing risks to the environment?

The main impact of the project will be the loss of habitat required for the site. While we do not anticipate any significant environmental effects, KZA and OPG are completing a detailed environmental review process which includes hiring professionals to study potential effects on local habitat, assess for the presence of potential archaeological sites, and gather traditional and historical information about the site.

During construction, all contractors will be required to follow Ontario's health and safety laws and comply with an environmental management plan. Adverse impacts will be mitigated. The solar panels and racking used on site will not contain any hazardous material that could affect the surrounding area. The battery system will be a lithium-ion type battery that will be contained in its own building and have a dedicated fire suppression system. A fence will be built around the project site to protect the public and the equipment.

Why solar and not wind or hydro? Does the GBMG prevent the development of other renewable projects?

Different renewable energy sources were examined including wind, hydro and biomass. Solar was found to be most flexible in choice of location, to have the shortest lead time and have a relatively straightforward permit process. In preferring solar, the GBMG team also considered that project needs to be completed by mid 2018 to remain eligible for external funding programs and that the overall budget needs to be feasible within that time period.

The GBMG is a stepping stone towards KZA's long term vision for renewable energy. It does not prevent future renewable projects from being developed by KZA. In fact, the micro grid equipment that will be used is adaptable and can be configured to operate connected to multiple energy resources.

How long will the micro grid last?

The GBMG is expected to have a 20-year design life with regular maintenance, servicing and battery replacements. As owner of the GBMG, MDI can choose the approach to reinvesting in the assets and/or safely dispose/sell/recycle the assets.

If you have any more questions or concerns, feel free to contact your Mashkawiziwin Energy Projects Coordinator (AJ) at (807) 988-0006 or email at energy@gbfn.ca

Miigwetch

Good stuff on the web for Energy

YouTube Videos:



Old Crow Solar Project
270 views



T'Sou-ke Nation Solar Community
5,882 views



SolarCity and Tesla: Tsu Microgrid
34,376 views

Search: Old Crow Solar Project

Search: T'Sou-ke Solar

Search: Solar Island

Websites:

<http://www.indigenoucleanenergy.com>

<http://new.abb.com/>

http://www.tesla.com/en_CA/

ENERGY CONSERVATION SEMINAR

WHERE: Gull Bay Recreation Centre

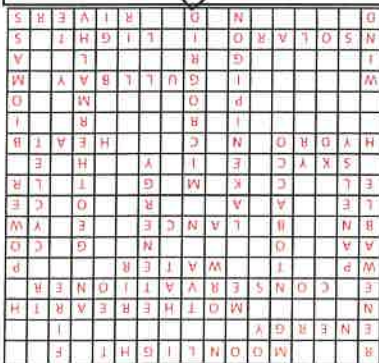
DATE: June 25, 2017

TIME: 6:00pm – 8:00pm

You can save up to ~~\$200.00~~ on your utility bill by learning these effective strategies in this seminar, for energy use in your home.

Energy conservation techniques that will save you money!

EXAMPLE ONLY



Conservation WORD JUMBLE ANSWERS

EFFICIENT ENERGY
LIGHT BULBS
SAVE MONEY
RECYCLE

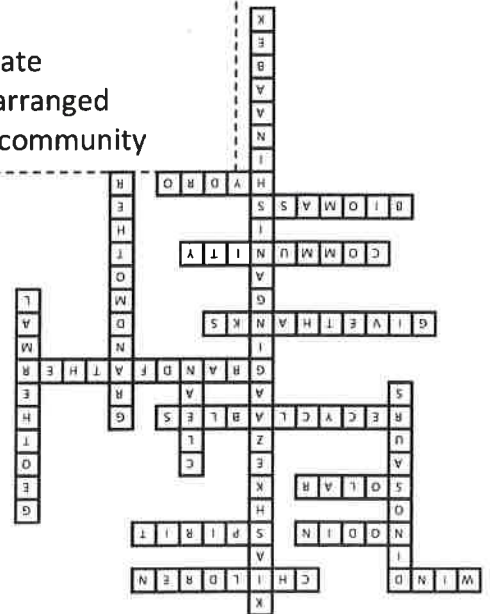
POLLUTION WORD JUMBLE ANSWERS

Fossil Fuel
Oil Leak
Litter
Coal Stacks
Exhaust

****To request an Ad in the next newsletter, contact AJ Esquega at energy@gbfn.ca or call (807) 982-0006.**

Ads must be

- Appropriate
- Already arranged
- Open to community



Logo Design Release Form

I _____, am submitting my KZA Clean Renewable Energy Logo design for entry into the KZA Clean Renewable Energy Logo Contest. I understand that if my logo design is selected as the winner, I will forfeit my rights to the logo design to become the sole property of Kiashke Zaaging Anishinaabek – Gull Bay First Nation, who may use it for purposes of promotion, marketing of Clean Renewable Energy Projects, reports or any other use seen fit. A collage picture will be taken of all the contest designs and presented in the next newsletter as well. Chi Miigwetch

AGE: _____ Parent/ Guardian/ Adult Signature: _____

Contact: _____

Status Card#: _____ Date: _____

Logo Contest Checklist

- Logo must be related to Clean Renewable Energy
- Used Pen, Pencil crayons, markers, etc. (Be Creative)
- Try to keep it simple
- No swears, or disrespectful material of any matter
- Use Logo design page, paper or a computer program
- BONUS POINTS for Nishnaabe style designs + a powerful meaning!
- Fill out release form (If Under 18, parent guardian signature)
- Submit Logo Contest Package

Submit Logo Contest Package by either;

- a. Email: energy@gbfn.ca (Scanned)
- b. Fax: (807) 982-0009
- c. Hand in: On-reserve Gull Bay Government Office

In Care of: AJ ESQUEGA

The Winner will be picked by a panel of 3 judges
AJ Esquega + Councillor Kevin King + Janice Penagin

Kiashke Zaaging Anishinaabek (KZA) – Gull Bay First Nation

MASHKAWIZIIWIN CLEAN ENERGY FUTURE



LOGO DESIGN PAGE

↓ Your KZA Clean Renewable Energy Logo Drawing Here ↓

A large, empty rectangular area enclosed by a dashed black border, intended for the user to draw their logo design.

↑ Your KZA Clean Renewable Energy Logo Drawing Here ↑

Is there a story about your logo design that you would like to share? If so, please use the story space below;

Gull Bay Micro Grid

LOGO CONTEST

\$500.00 for Winner



KEASHKE ZAAGING
ANISHIN'ABEK



Here's an example
of a cool logo



Your Logo Could be
here!

Only Gull Bay members can participate.
Open to all ages.

CONTEST DEADLINE: August 18, 2017