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Municipality of Sanikiluaq

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August 5th, 2016

To Whom It May Concern:

The Municipality of Sanikiluaq endorses the proposal for the development of wind energy as outlined by Mr. Sheldon Nimchuk of the Qikiqtaaluk Business Development Corporation.

The reduced dependence on fossil fuels and its associated infrastructure is a laudable goal, and we whole-heartedly support it. Sanikiluaq's geographic location exaggerates the usage that would be typical in most other Canadian communities, and even a minor shift away from that establishment could have a significant impact.

Thank you,

A handwritten signature in black ink, appearing to read "Michael Rowan".

Michael Rowan

Senior Administrative Officer





Sanikiluaq Wind Potential

❖ 2016 Qulliq Energy Corp initiated a study to look at the potential for wind energy in all 25 communities.

❖ Sanikiluaq is within the top 5 communities with wind energy potential

❖ Sanikiluaq Development Corporation (SDC) and Qikiqtaaluk Business Development Corporation (QBDC) want to work with Hamlet to pursue the opportunity for wind energy generation



SDC, QBDC and Hamlet Collaboration

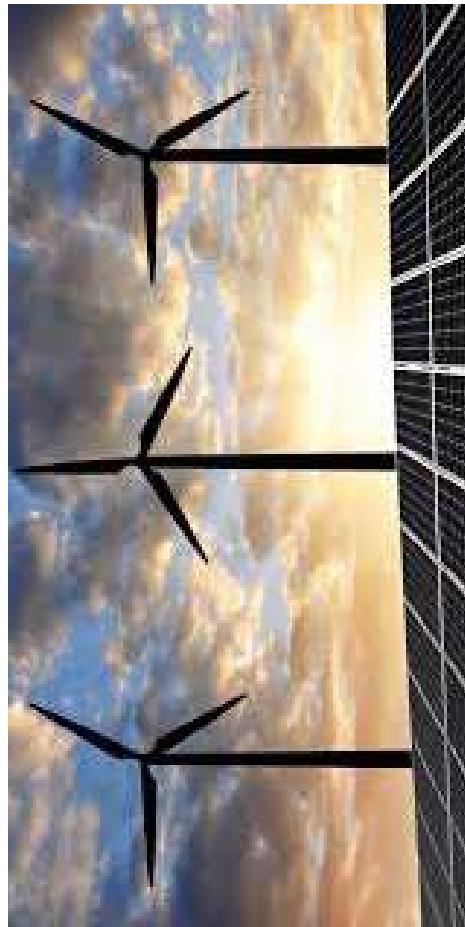


- Sanikiluaq Development Corporation (SDC)
- Qikiqtaaluk Business Development Corporation (QBDC)
- SDC/QBDC/Hamlet of Sanikiluaq Collaboration



Benefits to Hamlet

- First wind project of its kind in Nunavut
- Opens the door to other renewable energy opportunities
- Ownership stake
- Training and employment opportunities
- Reduces dependence on diesel



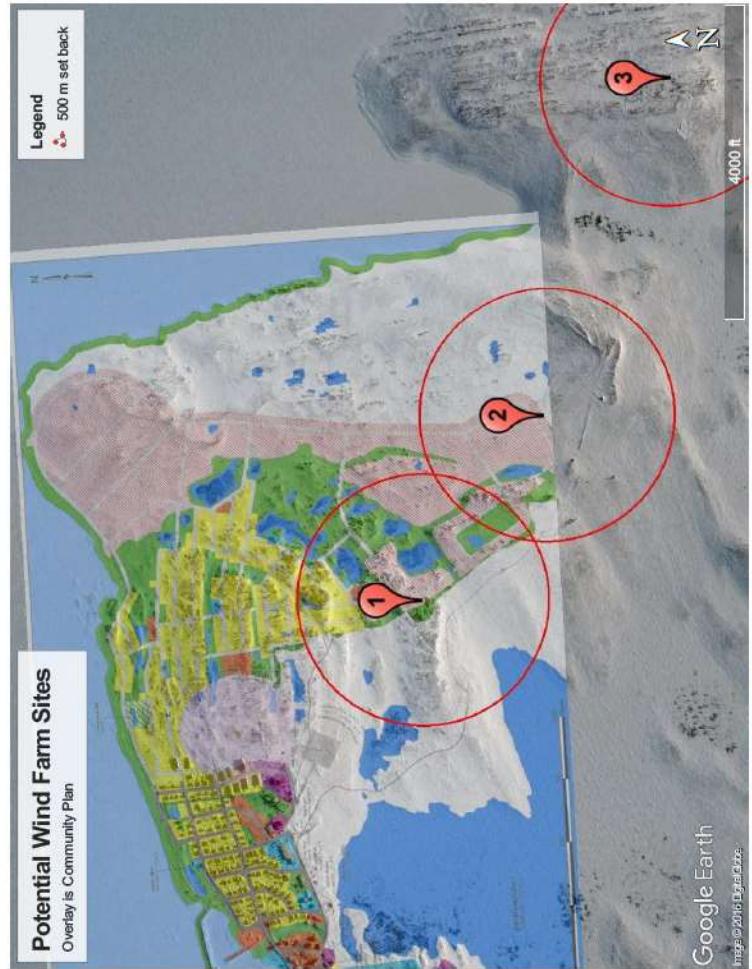
Wind Energy in Sanikiluaq



Site Selection

Suggestions for sites?

Comments on Sites 1, 2
and 3?



Municipal Reserve Zone

Residential

Open Space

500 m set back



sanihta

From: "Erin Mentink" <ementink@sanidevcorp.com>
Date: December-09-16 2:27 PM
To: <sanihta@qiniq.com>
Cc: "Sheldon Nimchuk" <snimchuk@qcorp.ca>; "Daryl" <ddibblee@rogers.com>
Subject: Sanikiluaq Wind Monitoring

Good afternoon Lucassie,

□ □

Qikiqtaaluk Corporation (QC) and Sanikiluaq Development Corporation (SDC) are looking into wind power in Sanikiluaq. A community meeting was held on Nov 26, 2016 and the area south of the airport was chosen by locals and elders as a good location. The two sites are shown on the picture below (labeled Wind Met Tower 1 and 2).

?? Do you have any thoughts if this is a good location?

?? Are there any worries about birds in this location?

□ □

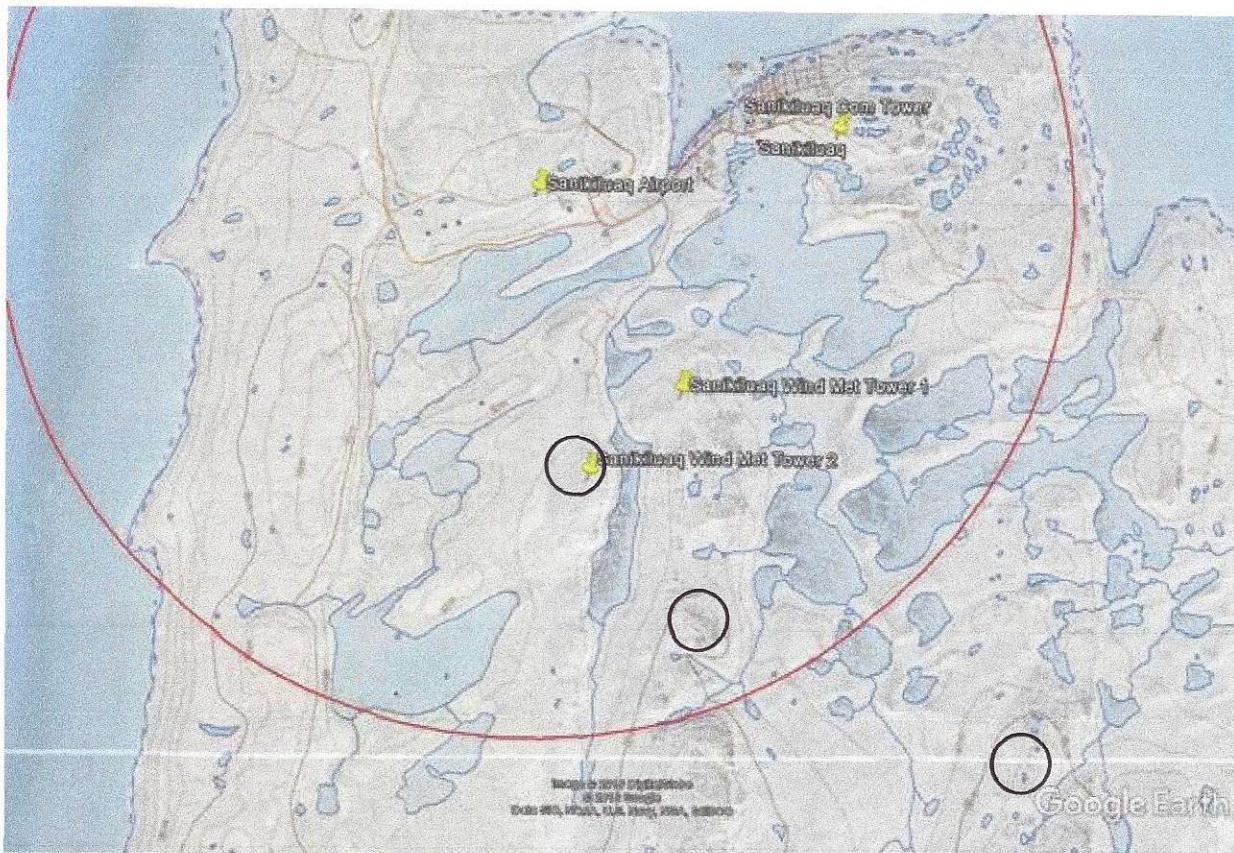
Thank you,

Erin Mentink

SDC

902-802-9465

8-111



Sanikiluaq Hunters & Trappers after discussion 3 Options of Wind Met Tower were selected.

Meeting Agenda

Sanikiluaq Wind Energy

Date: January 16th, 2017

Location: conference call

Time: 2:00 PM EST; 3:00 PM AST

Minutes taker: Erin Mentink

Call-in number: 1-866-969-8429

Attendees: Mike Rowan (Sani SAO)

Conference ID: 7756737

Sheldon Nimchuk (QC)

Daryl Dibblee, Erin Mentink (SDC)

Agenda Items:

1. Update on project
 - a. Site
 - b. Monitoring Phase
2. Community Visit
 - a. Dates
3. Council Meeting
 - a. Date/Time
 - b. Translator and translation equipment
4. Community Meeting
 - a. Advertising-Facebook, Radio, Flyers
 - b. Dates
 - c. Location
 - d. Translator
 - e. Equipment (translation equipment, projector, etc.)
 - f. Catering
5. Installation of MET Tower
 - a. Dates-week of March 13th (tentatively)
 - b. Two local labourers (2-4 days, ~8 hr days)
 - c. Snow machine rental (with kamatiq to carry equipment)
 - d. 2 kW generator
6. Other Items

Sanikiluaq Wind Resource Assessment -Overview

Project Purpose: To assess the wind in Sanikiluaq for potential wind energy generation.

Who: Qikiqtaaluk Business Development Corporation (QBDC), Sanikiluaq Development Corporation (SDC), Hamlet of Sanikiluaq

Project Timeline:

March 2016: Qilluq Energy Corporation (QEC) did a desktop study for all Nunavut communities to determine wind energy potential. Sanikiluaq was found to be one of the top 5 communities.

2016: QBDC secured funding from Qikiqtaaluk Corporation (QC), Polar Knowledge Canada, and Bullfrog for wind data collection in Sanikiluaq.

March 2017: Install a weather station to collect wind data and host engagement sessions

2017/2018:

- Assess data for wind energy generation potential
- Host Council meetings to provide updates on data and future activities
- Host community engagement sessions on clean energy
- Conduct necessary environmental surveys (Bird Studies, etc.)

Site Selection/Consultations:

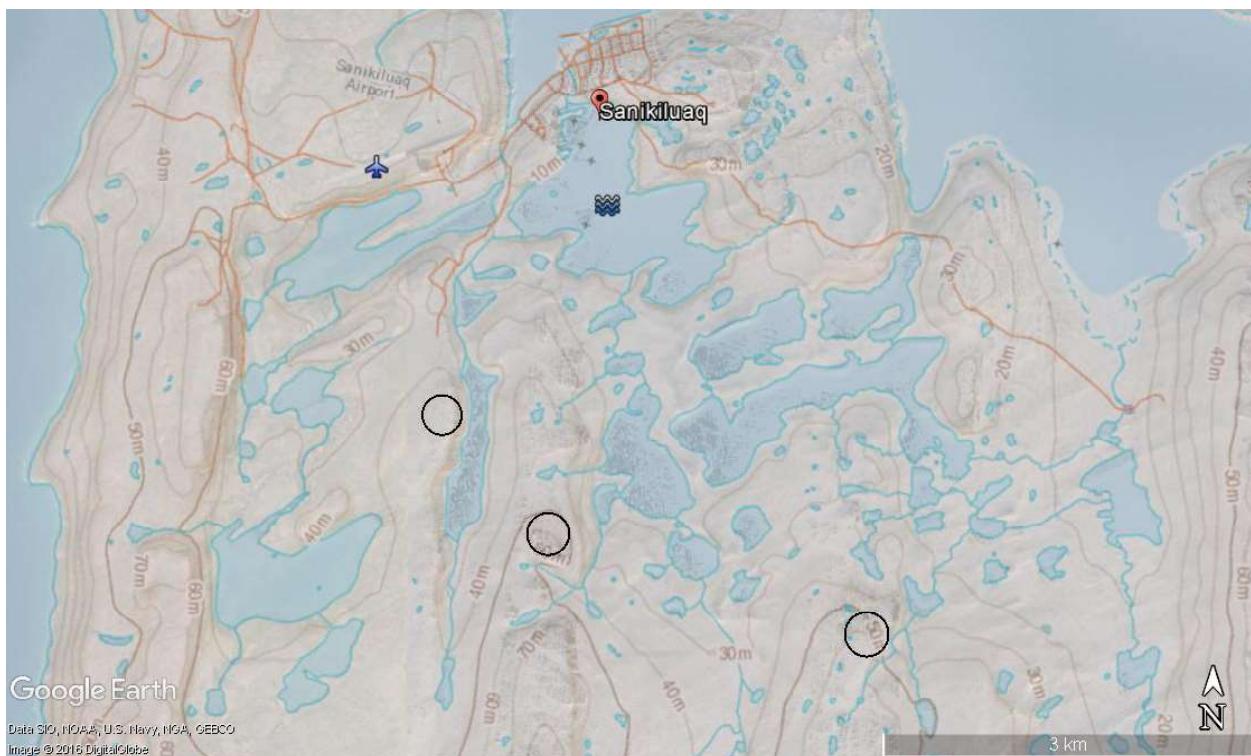
Consultant recommended locations to collect wind data:



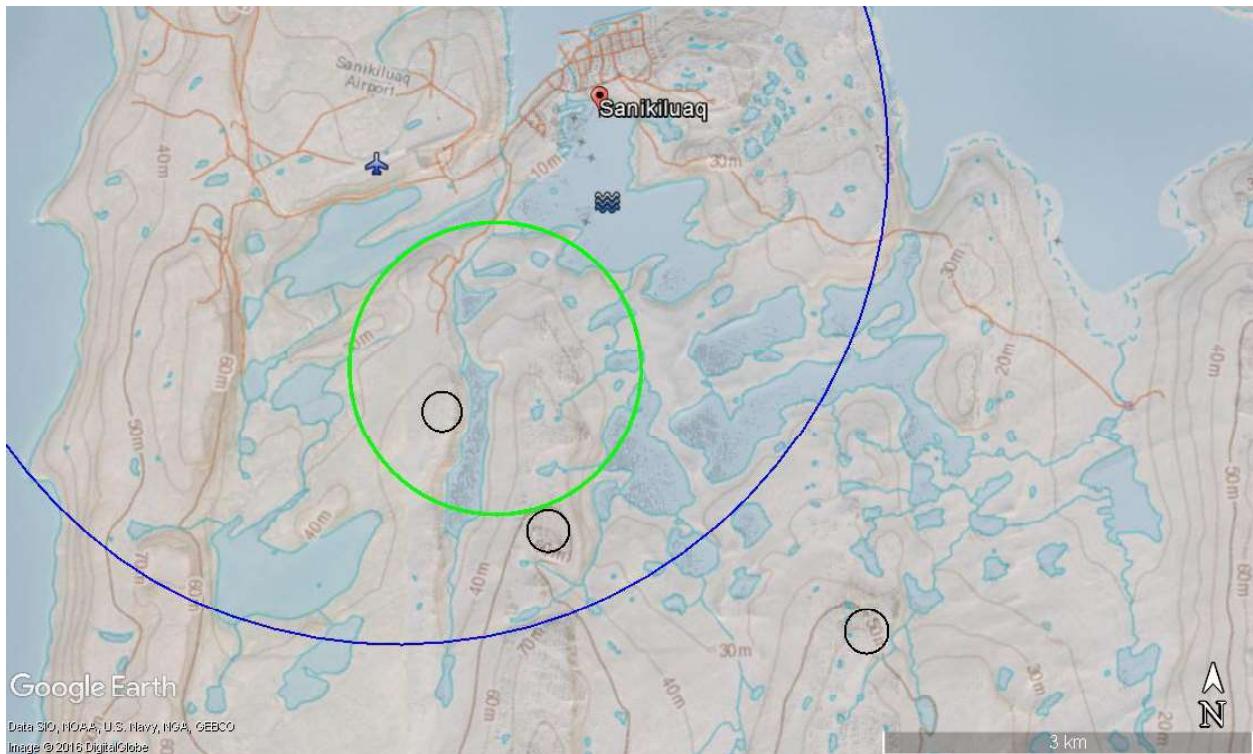
QBDC and SDC hosted a Council and community meetings in November 2016. New area recommended:



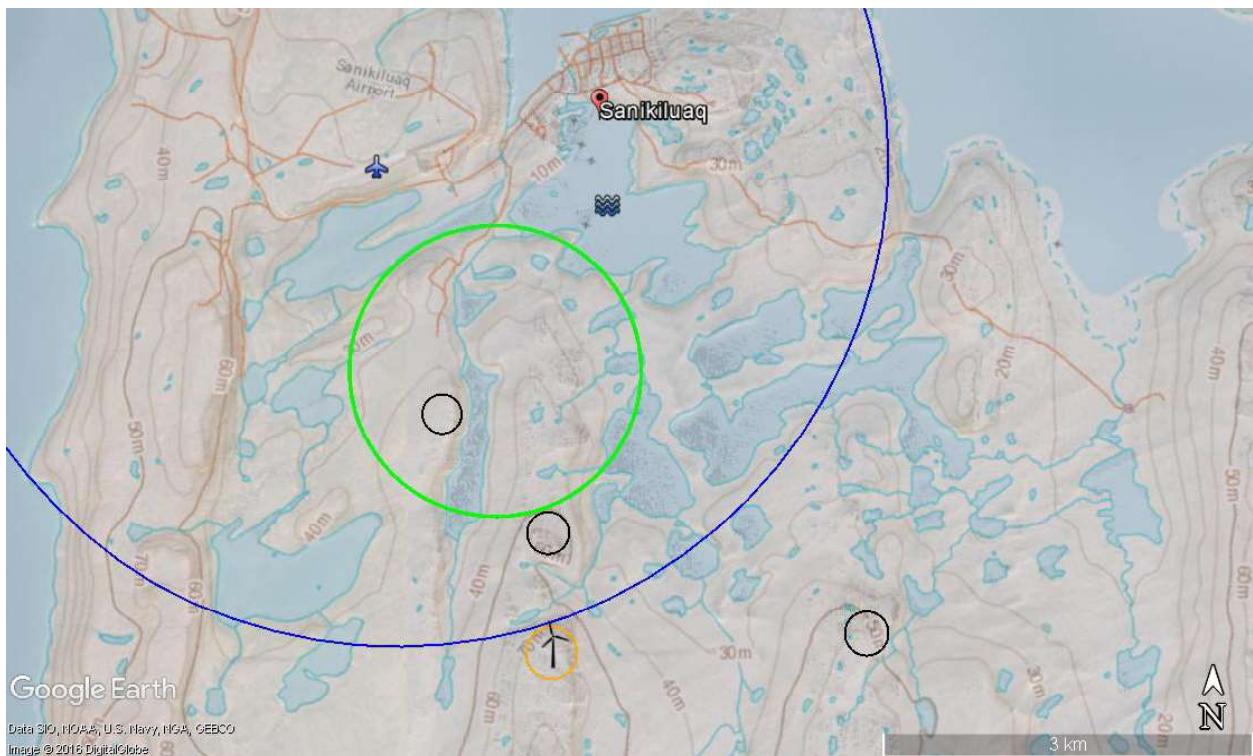
Hunters and Trappers Association (HTA) was consulted and they recommended 3 locations:



Transport Canada has restrictions for certain developments within 4 km of airport (blue circle):



Best site-orange circle (just south of HTA and community recommended areas, high elevation, outside airport 4 km radius):



Next Step:

End of March:

- QBDC and SDC to host Council and community engagement sessions to have a Q & A period, and to talk about opportunities for clean energy.
- Install weather station at approved site.

Question:

Does council approve the orange site to install a temporary (minimum one year) weather station? QBDC and SDC are happy address any questions at the March 23rd council meeting.

March 23rd 2017 Council Meeting Transcript: QBDC meeting with Council regarding Sanikilaq Wind Resource Project

The meeting commenced around 1:30 pm and ended around 2:45 pm

Mayor gave the opening remarks.

Regrets that the deputy mayor could not attend.

Introductions of Council Members

Introductions of visitors with QBDC

- Sheldon Nimchuk (SN)
- Johnny Koloala
- Shaun Sharp
- Erin Mentink

SN:

- Provided background on the site selection process (meeting in Nov with community, HTA, etc)
- In reality, it will be 3-4 years until a wind turbine is installed.
- Slideshow presentation.
- At this stage we are just gathering site specific wind data to determine if the site is good.
- April will start the next stage and really start the community engagement process on clean energy. We will also focus on engaging the students at the high school.
- We will begin the environmental studies and bird studies. We will hire local people to help with the study
- We will also start doing some of the engineering studies.
- At this meeting we would like to get an idea of what the councillors like the next phase to be.
- If the project were to succeed it will likely be another 3 years in the future before the first turbine.
- We need to get support from QEC/GN
- We would like to come in several times next year regarding the revenues from the project and how those can go back into the community.
- QC has the same desire to work with other communities in Qikiqtani region

- Floor open for questions, comments, concerns, clarifications

Q: The tower, will is only be one tower? What size? Will there be more towers put up due to community getting bigger?

A: For this phase there is only one tower. With the information gained from this tower it will inform how much power can be gained from the wind. Based on preliminary studies there may be 3-4 wind turbines in the future and that could increase. But for this phase, there is only one tower and in 3-4 years there may be 3-4 turbines.

Q: Things are getting more expensive. Diesel gets more expensive. With wind turbines we'll see how they'll help. Anything erected on land must think about migratory animals. You mentioned about migratory ducks-their areas can be ruined. With the tower we will know if it will affect these animals.

A: yes, this is a long-term project. These studies/engagements will happen next year to make sure everyone is comfortable with the idea.

Q: Diesel engines that we are using-will they always be available? I remember one turbine when I was in Quebec, when no wind=no power.

A: QEC needs to approve and determine how wind and diesel will work together-so when there is no wind there will be diesel power. But with the wind there will be less diesel used. It is extremely important to ensure there is always power. Part of this study will look at battery storage therefore diesel, wind, battery all work together.

Q: In November, I wasn't here for the meeting. What about the turbines during stormy days will they freeze? Or will frost affect them?

A: There are different mechanisms to defrost the blades and safety factors if the wind is too strong the blades turn off. The study will look at if heating the blades is required. As we do studies we can talk about the options with the community that might be the right turbine for the community.

Q: What was read this morning-who is involved in this? QC and who else?

A: QC through QBDC saw the opportunity for wind potential and made applications for funding. When SDC and SDA are in existence they will work with the community

POWER OUTAGE

The community is in the process of creating SDC and SDA. So when this becomes formal in the future there is an opportunity to work with SDC and SDA then. To come back next year (April-march) we will look at future ownership model with the community. The community must benefit from the clean energy.



For council's information; A similar project in Iqaluit is happening. We are looking to install the tower soon. There is a long-term desire to work with all communities to start a clean energy ownership model if they desire. QIA and NTI are very supportive of the efforts of QBDC and clean energy. The federal government has a new budget and they have assigned funds for northern and remote communities for clean energy and to reduce reliance on diesel. Our belief is Inuit should own these utilities (not non-NU companies) and to make sure there is maximum benefit to the communities. We are also working with our president to discuss with the QEC minister/board to be able to offer QEC and GN help to fund and get investment necessary to move project forward in the future.

Q: You are here because of these guidelines (*briefing providing to council on project*). It says QBDC to work with SDC-who would be under SDC?

A: The funders of this project wanted to ensure we were working with the community to increase capacity and increase jobs so QBDC heard there may be a formal creation of SDC-so we identified we would work with them when it is formalized. Right now we are working with the council.

Q: Do you have SDC representatives here?

A: Not at the moment. JP is here to erect the tower. Our hope and belief is to get additional funding to work with the community to move the project forward. Because it is just the beginning of the project there are opportunities to be creative to develop an approach of how to work with the community.

Q: You were here in November, I wasn't here, that's the main reason I ask.

A: For the benefit of the councilors, last April our board gave approval to create QBDC-we have a mandate to focus on 13 communities in our region to create economic development opportunities through investment, and partnerships. We are working with the GN and Feds to create a new model of delivery since what's been happening since NU creation. This is the result of what was heard on the tour of the communities. It is a good idea to create QBDC to find new approaches to economic development. I just wanted to give the council the background.

We are all excited about clean energy projects in our region. I would like to thank council for their time. Part of the requirement for NPC and NIRB is we need council support of the first phase and a motion #. This will allow us to make formal applications for funding for the next phase which will be in depth community engagement. We very much thank council for that consideration. Please enjoy the shrimp we brought for your community gathering in April.



March 23rd, 2017 Sanikiluaq Community Information Session (Wind Resource Study) Meeting Transcript

Opening Prayer (Moses **** -QC Board member, Sanikiluaq Elder)

Question (before meeting started): Why do we have to sign in?

Answer: As part of the NPC/NIRB project screening process they request details on the public consultation process including meeting minutes and names of participants.

Sheldon Nimchuk (QBDC) - SN

- Welcomed and thanked everyone for coming to the information session.
- Quick overview of the site selection process with input from the community members, HTA, council.
- Overview of the next steps for this phase (wind monitoring tower only, continued dialogue with Hamlet on clean energy)
- Powerpoint presentation
- Based on last visit and all the good information from the community we would like to put the tower in the location identified to start measuring data for 1-2 years.
- In addition to measuring data we would like to seek more money from the federal government to begin real conversation with the community regarding clean energy
- Ideas to use funding:
 - Begin communicating and dialogue with community about what clean energy products would mean.
 - Conduct studies to better understand the risk to migratory birds
 - Preliminary Engineering to better understand cost of project
- From QC's perspective, have discussions with the community to own the turbines and sell energy to QEC
- QEC legislation is only entity allowed to sell energy
- There have been public announcements from GN that they have challenges financing these projects because of all the other priorities required from the government.
- The federal government has indicated they have significant money available for clean energy in the north to reduce reliance on diesel

- As a regional development corporation, we can access this funding and would like to start working with all communities to see if clean energy projects are desired. QC would be an effective partner with the GN working towards the opportunities
- The first stage is to have conversations with the communities and government to present an option for the government to consider
- QBDC is doing a similar initiative in Iqaluit as well and will be installing a wind monitoring tower soon.
- There is no guarantee this will become a project but we believe it has potential to help reduce reliance on diesel
- As a regional development corporation, we hope to have similar opportunities in all communities.

Opened the floor for questions/comments/concerns/additional information

Q: The Community, HTO and Hamlet discussed the location. I saw NIRB had a public comment period but I don't know if there were any concerns from the public comment period. This is the first stage-it may be appropriate to include how much it will cost, who will maintain it, any cost to the public, how it will work.

A: At this stage, HTA and Hamlet have input for the location of the tower.

- Ownership, jobs, costs of the project will be thought about during the next stage of the project. The next phase will be led by QBDC and in the future, we will work with the community to figure out all of these things. We will also work with the GN and QEC. QBDC will bring the expertise to have this information developed and will share this with the community. This will include employment opportunities both during the construction phase and long term careers with the project.
- We want to take this opportunity to work with the community over the next few years so ultimately Sanikiluaq benefits (not only with jobs but in ownership stake) if GN/QEC sees value of development corporations taking the lead to work with communities.
- There are many questions that will need to be answered and this is the beginning of having that conversation so we can share and make decisions together.
- Does that respond to your question?

A: yes

Q: Once the tower is in place, it will start collecting data. How do you monitor the data? Is it uploaded daily or stored onsite?

A: Data will be collected every 3 weeks via satellite communication. It is possible to collect the data everyday via satellite but this is more expensive. So every 3 weeks we will collect and process the data and will share this with the community (maybe monthly if possible)

QEC is also providing information from the diesel generating stations so we can correlate when wind is happening and when there is the most demand on diesel generators. With battery storage, can balance most efficient use of generators in a manner that can accept most or all energy from wind.

Q: To make it viable, what is the minimum required wind and is there such a thing as too much wind?

A: We look for wind speeds of at least an average of 6 m/s (~22km/hr). The airport weather station says there is an average wind in that area around 7.5 m/s so that is good. With max wind speeds, there may be times when it is too windy and there will be mechanisms that will shut the turbines down at that time.

Q: You mentioned you have stat from the airport-why collect data again?

A: There are a couple of reasons:

- The data collected at the airport is only for a specific elevation, where the site is proposed, it's at a higher elevation and the tower is higher because we need to collect the data at the height of the wind turbine.
- One of the most important aspects of proving the technical capability of the wind resource at the specific site.
- Also, the banks and investors who invest in clean energy won't invest unless there is at least one year of site specific data.

So this effort is to verify what happens at that height and to have reliable data so investors will invest.

Q: There are wind turbines all over Canada and the world-have you looked at any studies of the effect of turbines on migratory birds?

A: We will do a site specific study next year but there is all kinds of information on risk to birds and we hope that by putting the tower up this year we can get more money to do these studies.

Q: To get back to the questions at the beginning of the meeting (re: the requirement to sign in). We are weary NIRB. NPC will use this information for their own purposes. We haven't heard much on who NIRB

is, if you could leave their info to us at the end of the meeting please. I understand it is federal funding for this project. Have the feds assigned anyone in particular to take part in the initiative?

A: We can give information on NIRB. The federal government does not assign people on the project. They provide the funding and we choose who we believe is best to do the project. Agencies of federal government have regulatory authority so we must meet all of these requirements and conditions.

Q: Who have you funding to do these studies?

A: QC provided cash so we can use this to leverage funding from the feds. The QC board has approved money for the next phase of the Sanikilaq project so we can get additional funding from the federal government and this will allow us to move the project forward.

Q: I wasn't asking about funding, I understand regarding the feds. Who authorized you to do this study?

A: Our Board/QC believe there is opportunity so we bring these ideas to the communities to see if they're interested in clean energy in effort to find new ways to create economic development for communities.

Q: I wasn't here in November when you came to the community. Are you the same people here as in November?

A: Yes

Q: The same question I asked earlier and regarding correspondence from you: "QBDC will work with SDC....." Was SDC to take part in this?

A: As we talked about with the council today-when this opportunity was being explored in July, the feds wanted their funding to help develop capacity at the local level so we made contact with SDC as there was an effort to make a local development corporation. So in our larger project-in our application we said we would help develop capacity at the local level. In November when we visited, we learned that there are on-going discussions regarding SDC and still more work to have SDC formalized. As community determines this over the next few months, QC is ready to work with whoever the community wants us to work with. As QC we are lead proponent.

Q: *In Inuktitut and not translated:* Participant read the pamphlet "Daryl phone #: 506-...." Who in SDC is the go to person to pursue this phase? It was replied there was no one to address but according to pamphlet, it says Daryl.

A: In November there was a question if SDC has an office in Sanikilaq. I don't want to speak on behalf of Daryl because he needs to speak to the community but this is an effort to move this project forward

as an economic development opportunity. A conversation with everyone will allow us to decide the best approach moving forward.

Q: Moses (QC Board member) speaks in Inuktitut- this was not translated.

Q: We don't know anything about SDC, they never say anything to the public, we don't know if they even exist or not.

A: We certainly understand the sensitivity with the community and SDC but as vice chair of our board said, from QC we are intending to help the community to make those decisions and partnerships in the future. This is just the very early stages so there is still time to develop those partnerships.

Q: That's the first time we heard he's the vice-chair

A: Moses (QC) speaks again, not translated

SN suggests to have a 10 minute break and return to the clean energy project after the break

Q: Yes we are happy there is SDC to help community move forward-what we don't like is how secretive it is and the name Daryl always coming up.

Break

SN: To inform everyone, I will write a letter to the Hamlet regarding QC's intention to work with the Hamlet on the wind project and the possibilities. We believe currently there is about \$1M/yr spent on energy and \$2M/yr to heating and every year this goes to the oil companies. The nice thing with clean energy is that each community has natural resources and possibly that \$3M can go to the community and Nunavut. For youth there are various opportunities for clean energy careers. We hope this study begins this opportunity. There's a lot of work and discussions to be had at this stage and we want to put up the tower so we can work with the community to get clean energy. We are excited about this potential and the Government of Canada believes in this potential and has recently allocated \$400 M to help communities like Sanikiluaq realize the benefits of natural resources to produce energy.

Q: That's what we want to plan for because when our power plant burned down we didn't have any other source of electricity. I was part of the QC Sr. people and they had meetings with the feds back then. When I talked about what our community needs I was told it was way too expensive (renewables) because there were only 900 people in Sanikiluaq compared to the millions in Canada. We are at a point where our power plants are aging and therefore we need other alternatives and that's pretty straight forward. Is the flag the area where the tower might be? On top of the hill beside the lake? We talked about this location in November.

Q: So what is the question at hand?



A: SDC aside, I'd like to ask the community if they believe clean energy has potential.

Q: Yes, it's a real good idea because wind is available. The site is a very good area. At this point we don't need that much discussion on the proposed location.

A: Thank you, that's why we are happy we came in November to talk to the Hamlet about the location.

Q: That's the area we felt was best.

Q: What is the next step? What is the next thing we will see in the community with this project?

A: The tower will be installed (3-4 local people are helping to put up the tower). By putting the tower up it will fulfill our obligation with the Government of Canada and look to get more funding starting April 1st to come back to have discussion on ownership, clean energy with a focused effort. We will also develop a business case and technical case based on computer modelling to share with the community. This will be the bases of the conversation moving forward as we verify wind in that location.

Q: When can we expect the next engagement -both council and community?

A: That will depend on when funding gets approved to get technical people in. I'm guessing maybe June. But I can come earlier as we get more information to speak to the community regarding the results of the data collection.

Q: make sure you come back to the community all the time to inform us what's going on.

A: Very good advice and fully understood. The other thing we want to do is to create a website so that every few weeks we can share the data with the community. Just yesterday we talked with the Energy Secretariat (with GN) to see if we can align objectives with them and funding so we can get to move discussions on clean energy forward with community. A lot of exciting things are happening. It will be at least 3-5 years before we would see any turbines installed (at best).

Q: You mentioned about website—that's no problem but there are elders that do not have access to computers so they'll miss out so there needs to be another way to share.

A: Thank you-we recognize this and will work with QIA to get the information to everyone.

Q: But at this point there is nobody that will do it.

A: This is the first phase therefore we will make sure the community is informed moving forward.

Q: They'll start on it after a few hours of sleep.

Q: If this tower with the propeller, will there be benefits?

A: This tower will only record information. The real benefits will be if it shows potential to generate energy.

Q: I am picturing all these wires everywhere to connect to the house to provide electricity.

Q: As a Sanikiluaq resident, we are coming to realize we do need clean energy options and we need someone in the community to help develop this. SDC is not agreed to by community therefore we need to decide who at the community level will be this person. If at first it fails, we will try again to prevail. I think we are done.

A: Thanks for coming out and sharing your thoughts.

A: Just one comment. You shared pamphlets with people is says QBDC and SDC-we don't know anything about SDC, nobody told us. Sheldon, you might know more since it is in the pamphlet. Can you tell us about them.

A: I know there are some discussions that need to happen between SDC and the community. At the time the pamphlet was produced it was thought the Hamlet agreed to SDC. The logo can be removed. Ultimately, QC wants to have dialogue with the Hamlet and have them make decisions.

Q: OK, yes we are happier now and understand.