

April 19, 2022

Questions & Answers

| Questions | Answers |
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| Blockchain architecture for climate GHG reduction 1. A blockchain is an option that is going to take some time to adopt. I would really be grateful for a discussion on the adoption of Carbon Credits for Indigenous communities at a level for high volume adoption of Knowledge Keepers, Leaders, administrations, orgs and economic development groups. IMHO, that path will allow for the greater impact of decentralized (Chain) systems. | Very happy to discuss the prospective roles of blockchain platforms to enable carbon projects and positive community and ecological outcomes on the land. I think that in one sense, blockchain based tools will take some time to become commonplace, but this will come sooner than most think. Our work at www.blockchainforclimate.org is focused on enabling the operationalization of the Paris Agreement carbon markets this has near-term and long-term manifestations. But there are other projects that have already purchased and tokenized 20 million tonnes of quality carbon offsets since its launch 6 months ago. So, it's happening. I think the approach and direction of using blockchain to empower and lift up the key roles in Indigenous communities is absolutely the right direction and can be very powerful synergies with the energy and direction of the blockchain community. |
| Question for Warren Greeves. A Hyperledger Blockchain for percurrent. I see some overlap with CC's with the same system. Is your ministry considering adopting digital | Warren Greeves, BC The Government of British Columbia is open to considering any opportunity to improve the B.C. Offset Program, and this includes keeping pace with emerging technological solutions |

architecture?

that could improve the integrity and marketability of BC offset

units. However, we are still trying to understand how adopting such technologies may impact our ability to trade across markets in light of the nascent reporting and tracking requirements of the developing international voluntary and compliance markets.

<u>First Nations with existing Carbon Offsets</u> Projects

3. Are there any of those First Nations online today to let us know their experience and whether this project is fair and profitable?

Patricia Rojas - BCAFN

The only completed First Nations-led carbon offset projects in BC are:

- a) Coastal First Nations (CFN) presented the *Great Bear Rainforest Carbon Offset Project* at the session. You can find this presentation at the 30:30 minutes in the recording, which is available on the BCAFN website. Information about this project can also be found on the <u>CFN website</u>.
- b) The Squamish Nation with the project <u>Cheakamus</u> <u>Community Forest.</u>

Forestry Practices in the Great Bear Rainforest Carbon Project

4. Forestry economic opportunities while signed into a carbon offsetting agreement - are you still able to harvest timber- and under management regimes with the government(S)?

5. For the Great Bear Group, for your fully protected areas, does that still allow for fuel management harvesting to reduce fire risk or to remove forest health issues (i.e. beetle damage) or are you at a "No Harvest Situation"?

David Oxley, CFN

Carbon Projects can include forestry operations. Our Nations all have forestry companies but the Annual Allowable Cut is much reduced and not met each year. Activities to support the health of the forest can occur. Also, there are buffer pools (insurance) of tonnes to address any reversals within the project area.

Natural disasters and other events that threaten a carbon offset project

6. When signed onto a carbon offsetting agreement and the trees are damaged from natural disasters, fire, flood, etc. what happens in these cases?

Michelle Connolly and Joseph Pallant, Ecotrust Canada

Forest projects usually have an 'insurance pool' or 'buffer pool' of credits to account for when things like fires or insect outbreaks happen. Often the project plan includes the expectation that this kind of thing will happen.

Every nature-based offset project has to model the risk to damage to the forest, and the release of stored carbon. This then drives the amount of carbon offsets that have to be set aside as a "buffer" - unsold offsets that will be released in the case of damage and carbon release from the forest. So to answer your question, all projects predict and prepare for some amount of carbon loss. This buffer can be from 10-50% of the total carbon benefit. Beyond this, some standards will "pool" buffers across all projects, so that there's even a greater "self-

| | | insurance" to ensure that the offset projects are never claiming more credit than has been achieved and secured on the landscape. |
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| | | Patricia Rojas, BCAFN |
| | | Additional information about buffer pools can be found on pages 20-21 ("Reversals, permanence, leakage and buffer pools") in the BCAFN First Nation Carbon Discussion Paper. |
| | Our nation is currently in reconciliation talks with the BC Government, what would you suggest to help and position our Nation to get involved in Carbon Credits in the near future? | Live answer at 1:22:10 of the <u>recording</u> – Warren Greeves, BC and David Oxley CFN |
| | | Live answer at 1:25:30 of the <u>recording</u> - Williams David, AFN |
| 8. | This report from the FNEMC feels relevant (Indigenous Sovereignty. Consent for Mining on Indigenous Lands) - it is perhaps more radical in interpreting DRIPA and suggests that First Nations exercise self-determination and designate a Chief Mining Officer. The equivalent could be First Nations in BC simply declaring their intention to manage carbon and exerting carbon rights. Is this an approach that could be advanced? | |
| 9. | BC's pathway to a carbon project | Warren Greeves, BC |
| | looks good however FLNRORD has no system that is currently up and running to fit with the current tenure system for overlapping rights. Has there been any recent progress in this area? | As mentioned in the webinar, guidance on initiating forest carbon offset projects on Crown land is forthcoming. |
| 10. | I missed the acronym for ABSA/ABA | Patricia Rojas, BCAFN |
| | what does it translate to? | ABSA: Atmospheric Benefit Sharing Agreement. |
| | | IABA: Indigenous Atmospheric Benefit Agreement. |
| | | - Information about ABSAs/IABAs including First Nations that have an ABSA/IABAs with BC are in this <u>link</u> . |

 The <u>BCAFN First Nation Carbon Discussion Paper</u>, in the section "Tenure and Atmospheric Benefits" (page 8) also provide an analysis about ABSAs.

There are other actors, such as the tourism sector, interested in collaborating with First Nations communities in the development of carbon offsets.

11. How do we work with indigenous communities when it's hard to communicate with the community leaders?

Comments from participants in the chat:

"building trust with community leaders takes time"

"I agree but that does require some communication"

Food security and carbon offsets

12. Are there carbon off-sets for communities developing their own food security sources vs on-going long-distance purchases?

David Oxley, CFN

Carbon revenues are directed by the communities involved. A community could choose to allocate revenue to develop local food security sources.

Warren Greeves, BC

A number of carbon offset schemes exist in the agricultural sector. Some examples include Rabobank [link], the Australian Carbon Farming Initiative [link], and emission offset projects in the agricultural sector in Alberta [link]. Currently, B.C. does not have approved protocols in the agricultural sector, but with the Offset Protocol Policy [link], the province is establishing criteria that would lead to the prioritization of future protocols and eligible activities under the B.C. Offset Program.

Wetlands and estuary environments and carbon offsets projects

13. What about wetlands or estuary environments and protecting their values? Would these fall under blue carbon?

Denby MacDonnell, Ecotrust Canada

In BC there aren't offset protocols available for wetlands/estuary protection. It may be worth looking into opportunities through the Nature Smart Climate Solutions Fund, which invests in conservation projects that achieve a carbon benefit. https://www.canada.ca/en/environment-climate-change/services/environmental-funding/programs/nature-smart-climate-solutions-fund.html

Carbon markets

14. Follow up on when carbon credits are the property of the BC government or sold to offset companies. How do you control the sale of these credits?

From the Resilience and Clean Government Branch in the Climate Action Secretariat (Ministry of Environment and Climate Change Strategy)

 Since 2009, the BC Government purchased carbon offsets through an open, competitive process as part of its legislative commitment to public sector carbon neutrality. Projects meeting the criteria of the open, competitive process were invited to negotiate multi-year offset

- purchase agreements. These agreements set the price and volume of offsets, along with other terms and conditions.
- In accordance with legislation, the BC Government may only apply the purchased offsets to meeting public sector carbon neutrality as per the *Climate Change Accountability Act*. In order to achieve carbon neutrality, the offsets must be retired on the BC Carbon Registry.
- The Pacific Carbon Trust, a former Crown Corporation, purchased and sold carbon offsets from 2009-2013 under the previous offset legislation called the Emission Offset Regulation. That legislation was repealed when the new offset regulatory framework came into effect in 2016 with the enactment of the *Greenhouse Gas Industrial Reporting* and Control Act (GGIRCA).
- Currently, you can see all of the projects, holdings and retirements on the BC Carbon Registry: https://carbonregistry.gov.bc.ca/br-reg/public/bc/index.jsp
- The BC Government does not have visibility or control of other entities' purchases, sales or re-sales of offsets.

Patricia Rojas, BCAFN

Additional information about carbon markets can be found on pages 11-15 in the BCAFN First Nation Carbon Discussion Paper.

15. What kind of access rights do the "buyers" of carbon offset projects have for the 100 years?

Warren Greeves, BC

Buyers do not have any rights to the project site when they purchase carbon credits; but they do have the right to a credit that represents a real, additional, permanent, verifiable, and unique carbon credit.

The 100-year length of time becomes important when considering the 100-year permanence period where proponents must demonstrate there are no impairments to forest carbon reservoirs. Under the B.C. Offset Program, the government guarantees the permanence of credits purchased. The Regulator oversees a managed "Contingency Account" or buffer pool (as described by Joseph Pallant in the webinar) to ensure the integrity of each credit. Where there are natural disturbance events (called reversals) that impact the forest, the Regulator retires an equivalent number of credits in the Contingency Account to represent the loss of carbon reservoirs. Proponents must report reversals during their crediting, as well as after during this 100-year monitoring period.

Other:

16. How does BCAFN, whose goal is partially to protect Mother Earth, rationalize projects and selling of carbon offsets that actually fund or

Live answer at 1:30:15 of the <u>recording</u> – David Oxley, CFN and Jaime Sanchez, BCAFN.

protect fossil fuel projects that are untenable, on a global scale, i.e., the LNG project that moves NG around the world where there are already concerted efforts to remove NG as a 'clean' fuel source due to methane emissions. 17. Where is carbon landing now that the Live answer at 1: 16.24 of the recording – Warren Greeves – ministry of forests has split up? Ministry of Environment and Climate Change We are currently moving through the David Oxley, CFN feasibility stage of a carbon project here Yes, we have been working with government agencies during in the southern interior with the the development of our Carbon Projects and continue to work Secwepemculecw Restoration and with them on a regular basis. Carbon Projects are complex and Stewardship Society. We live in a their management requires regular attention. We are also wildfire-prone area and are having to perhaps looking to expand into assisting other BC First Nations explore alternative carbon storage spaces with Carbon Projects. We would be happy to meet with you and other than just above ground biomass. see if we could be helpful. 18. I am kindly asking the community leaders and members here if they experience/advice have with approaching government agencies.

COMMENTS IN THE CHAT:

- The simplicity of the Cheakamus Project is the local buyer of the municipality. Local project local buyer is one solution to this issue.
- So much to learn but an exciting future for us all going forward creating a cleaner, sustainable economy.

LINKS SHARED IN THE CHAT:

- First Nation Carbon. BCAFN Discussion Paper. file:///C:/Users/Staff/Downloads/BCAFN-Carbon%20Offset%20Discussion%20Paper Feb%202022 %20Web 0-2.pdf
- Briefing Note on the First Nations Carbon. BCAFN Discussion Paper.

 file:///C:/Users/Staff/Downloads/Briefing%20Note%20on%20First%20Nations%20Carbon%20Disscusion%20Paper April%202022%20 0.pdf
- BCAFN submission on the draft BC Forest Carbon Protocol Version 2.0:
 https://www.bcafn.ca/sites/default/files/docs/reports-presentations/BCAFN%20FCOP 2021-06-18 FINAL.pdf
- BC Carbon Registry: https://carbonregistry.gov.bc.ca/br-reg/public/bc/index.jsp
- Blockchain for Climate Foundation. www.blockchainforclimate.org
- Indigenous, Innovation and Knowledge. www.indigeknow.com

- Nature Smart Climate Solutions Fund. https://www.canada.ca/en/environment-climate-change/services/environmental-funding/programs/nature-smart-climate-solutions-fund.html
- Innovatree. https://www.innovatreecarbongroup.com/