



Appendix 1: Forest Carbon Emission Offset Project Development Guidance

The Ministry of Forests, Lands and Natural Resource Operations (FLNRO) supports the use of forest carbon management options that satisfy the diverse values that British Columbians seek from their forests. The full suite of potential benefits needs to be assessed when considering a forest carbon management strategy, including options to enhance the carbon storage potential of forests and wood products, minimizing emissions from the forest land base; all while maintaining the socio-economic values provided by forestry and timber production as well as other ecological values such as biodiversity, water, fish and wildlife. Forest carbon management refers to practices that are aimed at increasing the carbon sinks or carbon storage capacity of forest ecosystems and forest product carbon pools and/ or reducing emissions associated with forest management activities which can result in an Atmospheric Benefit¹.

A forest carbon Emission Offset² project is one of the options available to explicitly manage for the carbon resource at a local or project level scale. However, in developing carbon emission offset projects the province must consider broader landscape level implications.

This policy guidance is applicable to all Forest Carbon Emission Offset Projects on provincial Crown forest land in British Columbia. The Competitiveness and Innovation Branch (CIB) is the policy lead within FLNRO. All projects must be coordinated through CIB and any decision making, including entering into any agreements with potential proponents, will need to be processed through CIB.

All forest carbon emission offset projects occurring on Crown forest land in British Columbia must be developed in accordance with:

- The Protocol for the Creation of Forest Carbon Offsets (FCOP) or a Director's protocol³, and
- Forest Carbon Emission Offset and Atmospheric Benefit Sharing Policy, and
- Any relevant legislation.

In addition, a proponent wishing to develop a Forest Carbon Emission Offset Project on Crown land requires:

- The authority to access Crown land (i.e. a tenure) for the purpose of developing a Forest Carbon Emission Offset Project, and
- Entitlement to the Atmospheric Benefits.

For a proponent to conduct any large-scale Improved Forest Management or Conservation-based Forest Carbon Emission Offset Projects, in addition to the above two points, the proponent must have:

- The ability to enter into government to government land use decision making on Crown land

¹ "Atmospheric Benefits" means reductions in atmospheric greenhouse gases caused by reduction or avoidance of greenhouse gas (GHG) emissions or increases in removals of GHGs from the atmosphere.

² "Emission Offset" means any tradable credit, offset or unit that represents an estimated Atmospheric Benefit from a GHG Reduction Project and is recognized by an Emission Offset Program and used to offset GHG Emissions from other sources.

³ "Director's protocol" as defined in the Greenhouse Gas Industrial Reporting and Control Act.



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The purpose of this document is to provide guidance to proponents of forest carbon emission offset projects and Ministry staff regarding the types of forest carbon emission offset projects and how to operationalize their development. Guidance includes the process for project development, roles and responsibilities and the process for assigning Atmospheric Benefits to project proponents.

1) Categories of Forest Carbon Emission Offset Projects

Opportunities to develop forest carbon emission offset projects vary according to the nature of the forests, ecosystems, natural disturbance regimes and existing land management practices.

There are two general categories of forest carbon emission offset projects:

a) Activity Based (Future Activity) Forest Carbon Emission Offset Projects:

- Are Greenhouse Gas Reduction (GHG) Projects⁴ where Atmospheric Benefits arise directly from the proponent carrying out a physical activity such as:
 - Afforestation and reforestation,
 - Forest and range rehabilitation,
 - Forest fertilization, spacing or thinning,
 - Forest fire or disease suppression; and,
 - Re-vegetation or rehabilitation of vegetation on land or foreshore,

after the execution of an Atmospheric Benefit Agreement⁵ relating to the project.

- Involve actively modifying current practices in order to reduce emissions and/or increase sequestration and can apply to virtually all regions and forest types across the province.
- Require a direct investment in order to store more carbon on the land base and
- Provide increased employment opportunities and result in an improved forest resource.

b) Non-Activity Based Projects:

- Do not involve a direct activity to improve the forest resource and do not make direct investments in order to store more carbon on the land base.
- Are typically conservation based projects that may include the co-management of other resource values.

⁴ “GHG Reduction Project” means a specific course of action or management that leads to a GHG emissions avoidance and measureable Atmospheric Benefits.

⁵ “Atmospheric Benefit Agreement” means an agreement between a proponent or other person and the government regarding the allocation of Atmospheric Benefit Rights.



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- Are projects that negatively impact forest sector employment, but in some cases provide environmental benefits that are potentially sound trade-offs for the loss of economic activity.
- May generate Atmospheric Benefits in some unique cases; however they are not widely applicable across all forest types and regions in the province (e.g. areas prone to frequent disturbance events).

2) Specific Forest Carbon Emission Offset Project Types

Based on the two broad categories of Forest Carbon Emission Offset Projects given above, proponents are able to generate emission offsets utilizing the following forest carbon emission offset project types.

a) Projects based on a Land Use Agreement (Non-Activity Based)

These projects are initiated by First Nations and can sometimes generate Atmospheric Benefits through the implementation of various land use objectives within a Nation's Traditional Territory (i.e. reduced harvest associated with culturally-significant areas, old-growth retention, conservancies, fisheries sensitive watersheds, upland streams, sensitive wildlife habitat and stand-level retention etc.). These objectives form the basis of the Land Use Agreement and once legalized through Ministerial Order requires that all industrial activities comply with these as well as any additional legislation within the project area.

b) Projects where the proponent has an area-based tenure (Forest Management Regime) (Activity and Non-Activity based)

Although these tenures are designed to produce a reliable supply of timber, there may be opportunities to generate Atmospheric Benefits as well. These projects involve a change to the existing management plan for the area that explicitly identifies and manages the carbon resource. The implementation of the project results in additional carbon sequestration and/or a reduction in greenhouse gas emissions from what would have occurred in the absence of the project. These projects may include, enhanced fibre utilization to avoid forestry related emissions and store more carbon in products, enhanced silviculture (such as fertilization, increased planting density, reforestation of areas without a legal reforestation obligation⁶, as well as forest and land management adaptations (such as increased rotation length, conservation of culturally-significant areas, sensitive wildlife habitat), that avoid forestry related emissions.

c) Projects focused on reforesting disturbed areas that do not have a legal reforestation obligation (Restoration of Damaged Stands) (Activity based)

These projects can generate Atmospheric Benefits by actively increasing the amount of CO₂ sequestered by forests (reforestation of disturbed areas, fertilizing, etc.) and through the

⁶ For example, stands impacted by wildfire and/or pest infestations like the mountain pine beetle



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reduction in emissions generated during forest operations (reduced slash burning). Since the project proponent may not have tenure to carry out this type of work on Crown land, a Master Licence of Occupation pursuant to the *Land Act* can be issued for the purpose of carrying out these activities.

3) Atmospheric Benefit Agreement (ABA)

- Addresses the "ownership" principle required to convert Atmospheric Benefits to serialized "offsets".
- Is negotiated after the project has been accepted and the quantum of Atmospheric Benefits arising from the project is clearly demonstrated via a project Feasibility Assessment.
- Identifies how Reversals⁷ will be addressed and excludes government's liability arising from Non-Intentional Reversals⁸.
- Considers the potential liability associated with Intentional Reversals⁹ and ensures a commensurate proportion of Atmospheric Benefits are retained by the Crown to mitigate it.
- Considers the impact of overlapping First Nations Traditional Territories on the allocation of available Atmospheric Benefits (e.g. Land Use Agreement projects where multiple First Nations traditional territories overlap the project area).
- Specifies who is responsible for project plan development, validation and verification.
- Identifies the proportion of Atmospheric Benefits available to the project proponents. This would include the project developer and the Crown, and in the case of a Land Use Agreement or non-activity based projects this could include retention of Atmospheric Benefits for other First Nations that have traditional territories overlapping the project area.

4) Requirements for Developing a Forest Carbon Emissions Offset Project:

1. Identify (local) opportunities for increasing sequestration and/or reducing emissions.
2. Identify the type of forest carbon project being sought and define project scope and project scale.
3. Demonstrate carbon benefit and cost feasibility (preliminary modelling or estimate based on project type project scope, project scale).
4. Scope out potential market(s) for offsets.

⁷ "Reversals" in relation to a Greenhouse Gas Reduction Project, means the release of carbon into the atmosphere, where such carbon has previously been sequestered in "Terrestrial Reservoirs".

⁸ "Non-Intentional Reversals" means a Reversal caused by factors not within the direct control of government, including trespass, or natural causes such as fire, wind, disease or drought.

⁹ "Intentional Reversal" means a Reversal caused by activities undertaken or authorized by government, or undertaken pursuant to a disposition of an interest in land by the government.



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Forest Carbon Emission Offset Project Type	Process for Developing the Project
Land Use Agreement (Non-Activity Based Project)	<ol style="list-style-type: none"> 1. First Nation has signed a Reconciliation Protocol (or similar) Agreement with the Province (MARR¹⁰ and FLNRO). 2. Agreement outlines a commitment to evaluate potential forest carbon emission offset opportunities. 3. First Nation, FLNRO and MARR collaboratively assess a suite of opportunities for increased sequestration and/or reduced emissions within a geographic area (usually a First Nation's Traditional Territory). 4. First Nation conducts a Feasibility Assessment (see Attachment A) based on the range of opportunities addressed in 3) above to determine if the project is viable. 5. If the feasibility assessment indicates a viable project exists, a project proposal is submitted to Competitiveness and Innovation Branch (FLNRO) and MARR. 6. Project reviewed and accepted/rejected jointly by FLNRO and MARR. 7. If the project is accepted, collaborative work is required (MARR and Regional FLNRO staff) to develop and legalize the Land Use Agreement. 8. First Nation is responsible for carrying out forest carbon budget modelling to access the baseline and project level carbon stocks. 9. Upon demonstrating the project feasibility, development and negotiation of an Atmospheric Benefit Agreement (ABA) between the First Nation and the Province (MARR and FLNRO) based on the results from 8) above. 10. ABA is signed by the First Nation, Minister of Aboriginal Relations and Reconciliation and Minister of Forests, Lands and Natural Resource Operations. 11. First Nation develops the project plan and coordinates validation. 12. First Nation coordinates project report verification. 13. Serialized emission offsets are issued.

¹⁰ Ministry of Aboriginal Relations and Reconciliation (MARR)



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Forest Management Regime (Activity and Non-Activity Based)	<ol style="list-style-type: none"> 1. Proponent has an existing area-based tenure (Tree Farm Licence, Community Forest Agreement, Woodlot, First Nations Woodlands Licence etc.). 2. Proponent assesses opportunities to develop a forest carbon emission offset project within the tenure area. 3. Proponent completes a Feasibility Assessment to determine the viability of the project (see Attachment A). 4. Proponent develops and submits an amended forest management plan based on the results from 2) and 3) above to the regionally designated statutory decision maker. 6. FLNRO regionally designated statutory decision maker approves the amended forest management plan. 7. Once the amended forest management plan (project) has been approved, the proponent is responsible for carrying out forest carbon budget modelling to access the baseline and project level carbon stocks. 8. Development and negotiation of an Atmospheric Benefit Agreement (ABA) based on the results from 7) above will be coordinated by the Competitiveness and Innovation Branch (FLNRO). 9. Once a final ABA has been negotiated, it is signed by the proponent and the Minister of Forests, Lands and Natural Resource Operations. 10. The proponent develops the project plan and coordinates validation. 11. The proponent coordinates project report verification. 12. Serialized emission offsets are issued.



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<p>Restoration of Damaged Stands (Activity-based Project)</p>	<ol style="list-style-type: none"> 1. Proponents may be selected through a competitive process (Request for Proposals) or through a First Nation/Government partnership. 2. First Nations who are interested should contact the Competitiveness and Innovation Branch (FLNRO). 3. Framework agreement developed by Competitiveness and Innovation Branch (including how Atmospheric Benefits are to be allocated). 4. Framework agreement signed by proponent and Minister of Forests, Lands and Natural Resource Operations. 5. Competitiveness and Innovation Branch recommends (to the regionally designated statutory decision maker) issuance of a Master Licence of Occupation to the proponent for the purpose of conducting a forest carbon project. 6. The proponent develops the project plan and coordinates validation. 7. Proponent and/or FLNR identify project areas. 8. Proponent completes project activities 9. Proponent coordinates project report verification. 10. Serialized emission offsets are issued.