

TEMPLATE

KEY PROJECT INFORMATION & PROJECT DESIGN DOCUMENT (PDD)

PUBLICATION DATE **14.10.2020**

VERSION **v. 1.2**

RELATED SUPPORT

- TEMPLATE GUIDE Key Project Information & Project Design Document v.1.2

This document contains the following Sections

Key Project Information

0 – Description of project

● – Application of approved Gold Standard Methodology (ies) and/or demonstration of SDG Contributions

0 – Duration and crediting period

0 – Summary of Safeguarding Principles and Gender Sensitive Assessment

0 – Outcome of Stakeholder Consultations

Appendix 1 – Safeguarding Principles Assessment (mandatory)

0 – Contact information of Project participants (mandatory)

0 – LUF Additional Information (project specific)

0 – Summary of Approved Design Changes (project specific)

This template has been revised to aid a consistent interpretation and to better support project developers submitting documentation for certification. Please read the accompanying guide to understand how to complete this template accurately.

[TEMPLATE GUIDE Key Project Information & Project Design Document v.1.2](#)

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KEY PROJECT INFORMATION

GS ID of Project	GS12096
Title of Project	Irokko GHG Compensation project through ARR
Time of First Submission Date	
Date of Design Certification	
Version number of the PDD	1.0
Completion date of version	
Project Developer	Irokko
Project Representative	Saliou DIALLO
Project Participants and any communities involved	Maxime COTNOIR SARGIM
Host Country (ies)	Canada
Activity Requirements applied	<input type="checkbox"/> Community Services Activities <input type="checkbox"/> Renewable Energy Activities <input checked="" type="checkbox"/> Land Use and Forestry Activities/Risks & Capacities <input type="checkbox"/> N/A
Scale of the project activity	<input checked="" type="checkbox"/> Micro scale <input type="checkbox"/> Small Scale <input type="checkbox"/> Large Scale
Other Requirements applied	
Methodology (ies) applied and version number	Gold Standard Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology Version 1 – Published July 2017
Product Requirements applied	<input checked="" type="checkbox"/> GHG Emissions Reduction & Sequestration

	<input type="checkbox"/> Renewable Energy Label <input type="checkbox"/> N/A
Project Cycle:	<input checked="" type="checkbox"/> Regular <input type="checkbox"/> Retroactive

Land-use & Forest Key Project Information¹

(delete below table if N/A)

Scope:	<input checked="" type="checkbox"/> Forestry <input type="checkbox"/> Agriculture
Silvicultural system:	<input checked="" type="checkbox"/> Conservation (no use of timber) <input type="checkbox"/> Selective Harvesting <input type="checkbox"/> Rotation Forestry
Project Area (ha):	14 ha
Eligible Area (ha):	14 ha
10% Set Aside Conservation area (ha):	Not applicable as this is a micro scale project. Nevertheless, 100% of planting will be conservation plantation with native species and does not involve harvesting.
Evidence that Project Area Boundary is clearly distinguishable in the field:	Plots will be delineated with colored ribbons
Planting Area	14 ha

¹ Please refer to 0 for detailed information on LUF projects

How many Modelling Units (MUs) are included in the eligible area:	3	
	MU001	Black spruce
	MU002	White spruce
	MU003	Red maple /Sugar Maple
Summary of New Areas added (copy and insert as needed):		
Size (ha):	N/A	
Date Added	N/A	

Table 1 – Estimated Sustainable Development Contributions

13 Climate Action (mandatory)	Emissions reductions	Tonnes of greenhouse gas emissions avoided or removed"	
SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Target 15.2	Increased number of individual landowners and cooperatives willing to support Irokko movement through tree planting Increase number of trees to be planted	A new plot incorporated into the project every 3 years	
SDG 5 (Gender) Achieve gender equality and empower all women and girls and SDG 10 (Reduce Inequalities	Make more accessible to women technologies to reduce their GES emissions Elimination of barriers to participation such as	at least 35% of Irokko app users are women At least 25% of the managers and employees are women	

	inclusion of women, disable persons	
SDG 8 : Decent work	Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all	The average hourly earnings of employees, by sex, age, occupation, and persons with disabilities are the same
SDG 11 Make cities and human settlements inclusive, safe, resilient, and sustainable	Creating green and biodiverse recreational public spaces for all	A minimum of 1 urban afforestation project every 5 years
SDG 12 Ensure sustainable consumption and production patterns	More corporate offset their carbon footprint through nature based solutions	1 new company offsets its emissions every 3 years.

SECTION A. DESCRIPTION OF PROJECT

A.1 Purpose and general description of project

>>

The purpose of the project is to re-establish long-lived forest species on land historically cleared for agriculture to increase biodiversity and ecosystem effectiveness which, in the absence of the project, would continue to exist below its current ecological potential.

Irokko will ensure long-term land use change through the afforestation of the project areas that meet the eligibility criteria outlined below.

The project will increase the biomass carrying capacity of project areas by restoring them to original high biomass content forest conditions. The project will remove carbon dioxide (CO₂) from the atmosphere through the growth of softwood and Harwood.

Each project area to be added in future will be subject to a 70-year period of growth and to a 50-year crediting period for which the total emission reduction and sequestration will be quantified.

During subsequent financing periods, additional project areas will be added following the new area certification rules and shall contribute to the total sequestered tCO₂eq.

The current project is on Maxime Cotnoir property.

Mr. Cotnoir acquire right on 14 ha of land from Mr. Mario COTNOIR with the objective of managing the land for biodiversity, climate, and community benefits.

Prior to the project, the property was originally used for cattle grazing by a subsistence farm decades ago. Since the 80s, the fields have been unused, but still maintained.

The project aims to achieve net carbon sequestration through afforestation and reforestation over time with the aim to achieve an exceptional level of biodiversity enhancement through the creation of connectivity with regionally significant national parks with fully functional natural ecosystems and critical habitat for key endangered species and to promote ecotourism for community benefits.

The project will achieve a significant level of water benefits that improve water quality, quantity, timing of flows, and important aquatic habitat improvements over the baseline's conditions through the retention and management of riparian habitat, watershed-level forests and ecosystems, and road and access management.

The project area has no communities within or directly dependent on the project area, however the project achieves net socioeconomic benefits for nearby local communities through limited ecosystem services provisioning, recreational opportunities, and improving community wildland amenity values. The management of the property for these purposes does not generate material levels of net revenue, and the sale of carbon offsets and other ecosystem services benefits are critical to funding significant ongoing reforestation program with maintenance cost and land ownership fees.

A.1.1. Eligibility of the project under Gold Standard

>>A territory of at least 1 ha covered with a minimum of 25 % by tree crowns is considered a forest by the Canadian government.

The land owns by M. Cotnoir and submitted for this project was originally deforested for agricultural purposes in the 80s. Numerous sources prove that eligible planting areas were not deforested in the last 10 years and no other plantation attempts have been made since then.

In the context of a well-developed country like Canada, who has taken the turn of industrial agriculture, small scale agriculture is not as important as it was 50 years ago, and local population food security is not dependent upon cropland availability.

Nowadays many smaller landowners can't compete with large scale agriculture and much land is abandoned and left for financial speculation or other purposes.

No agricultural or Silvo pasture activities will occur on the sites, which will all be maintained forested.

For all the province of Quebec, no species is listed as critically endangered on the IUCN Red List of Threatened Species. Only 5 species are considered endangered. Two of them are marine species so obviously they don't occur on the current project terrestrial sites.

Efforts will be made to protect endangered species (as of IUCN Red List of Threatened Species) but also the species at risk pointed out by Agency in charge of national park. Information will be given to every member of the project on these species and the actions to do to protect them and their habitat.

The tree species selected for planting are native to Canada. Mainly softwood species are planted for various reasons:

- 1- The availability of native hardwood saplings is limited in Quebec, the few plants available were all planted in Terrebonne, because the owner specifically requested hardwood species. if you want to found hardwood, you hat to reserve it at least 2 years before.
- 2- The cost of softwood plants is much lower than the one of hardwoods, which created a major incentive in favor of softwood. Although no rigorous cost-benefit analysis was conducted, the substantial difference in cost between softwood and hardwood suggest that the use of softwood optimize the cost-benefit ratio in term of CO2 fixation.
- 3- Vulnerability to grazing: Hardwood plants, especially noble species such as Oaks, Black Cherry, and Sugar Maple, are particularly vulnerable to white-tailed deer and snowshoe hare grazing. Although no rigorous comparative studies could be found in the literature, we assume that softwood species are in general much less susceptible to grazing as they are less nutritive than hardwoods, the latter will therefore generally be preferred if available.

It is also documented that the abundance of softwoods has been reduced by human activities during the last 200 years.

Waste management: In the province of Québec, tree seedlings are received in reusable plastic recipients for which a deposit must be paid beforehand and is reimbursed when recipients are returned. Waste produced by tree planters and other workers will be taken away by the workers themselves, so that the plantation sites remain totally free of any waste.

The project follows the Canada legal, environmental, ecological, and social regulations.

A.1.2. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

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>> The project area is a private fee simple property. An annual fee of 318,31 US\$ is paid. Irokko will ensure that these land fees are paid regularly and on time throughout the entire crediting period.

Property title documents are properly registered and publicly available through the relevant Land Title Office in Quebec. Moreover, all title documents and related plans will be uploaded on Gold Standard SharePoint for review during the preliminary review and validation/verification. The project area does not contain or involve any areas not owned privately by Irokko through its partner (Maxime Cotnoir) and managed by SARGIM.

To show legal ownership of products generated by the project and legal rights to alter use of resources required to service the project, a signed document is shown in Annex 1. This document proves that Irokko has been granted the right to plant on these lands and claims carbon credits, and that the owners are informed that the afforestation project has a GHG reduction purpose.

The property agreement mentions that "The immovable and all other property currently donated as well as those acquired in reuse and the fruits and income derived therefrom will be unseizable for any debt whatsoever of the donee unless he agrees to make them seizable in whole or in part". This release from seizure is granted for a period of thirty (30) years. » In other words, the land cannot be seized for the next 30 years. But no

matter, considering the low cost of these taxes, they will always be paid annually on due date.

At the date of the project start, the planted area was not forested, as shown with google earth images from 2012 until 2022. These images confirm what was observed on the field. The project area is in herbaceous state with a total of 14 ha eligible planting area.



Figure 1 :Field observations confirming herbaceous state of project area



Figure 2 : Google earth image view

Title and ownership documentation are available for review. There are no title or rights disputes on Maxime Cotnoir land.

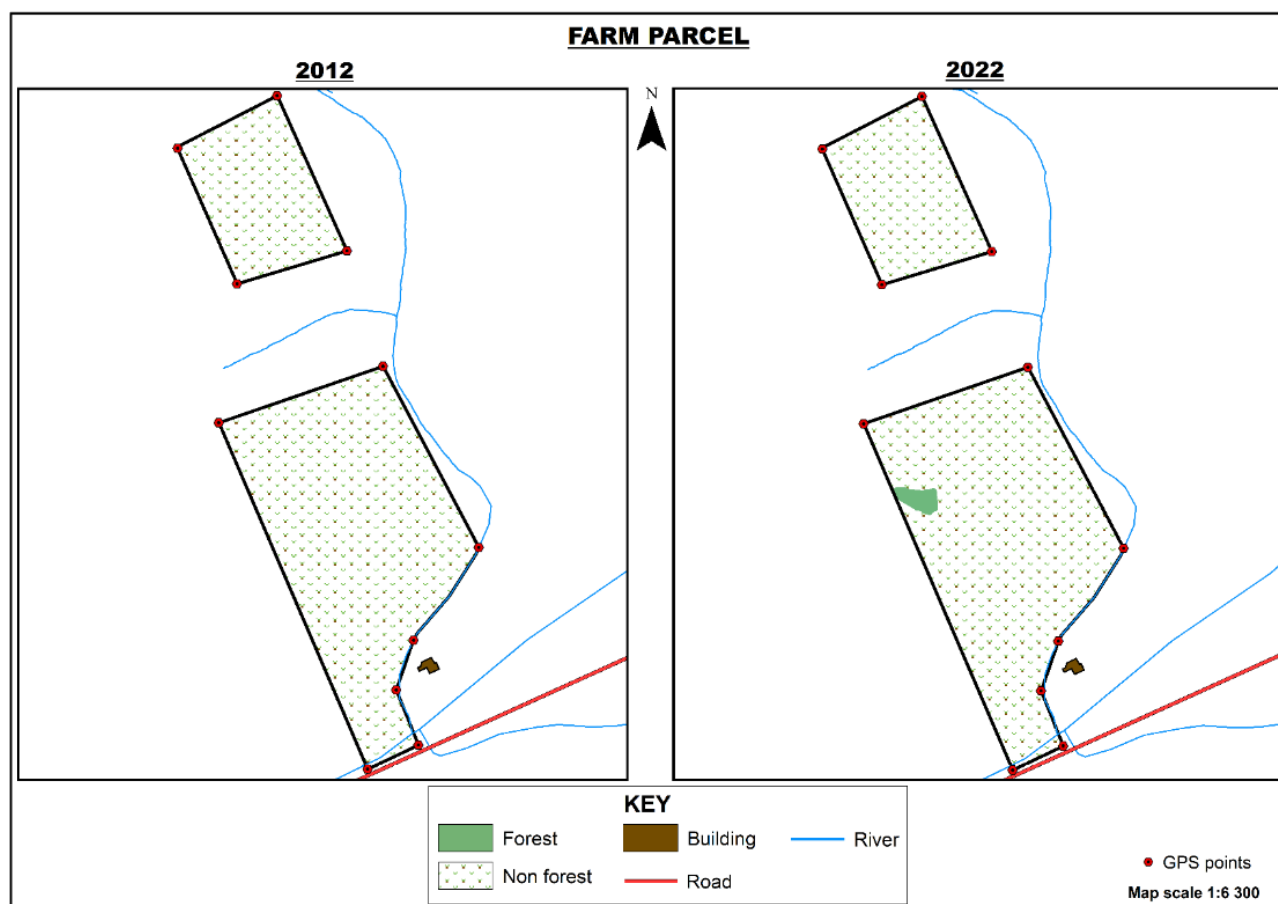


Figure 3: Historical land use Analysis and determination of eligible non forest area²

Quebec has robust and enforced laws and regulations, with strong private property protections overall. This includes a timber stamping/marketing and scaling reporting system that makes timber theft difficult and rare. In addition, active provincial wildlife poaching monitoring, reporting, and enforcement systems are in place. Timber theft and wildlife poaching are rare in Quebec., and provincial police, forestry, and wildlife enforcement resources are available if any events do occur. There is very low risk of illegal activities materially affecting project carbon stocks or biodiversity.

There are no ongoing conflicts related to rights, lands, territories, or resources related to the project area.

² Considering that the surface area identified as forest for 2022 is 0.17ha, we might not call it forest following the Canadian definition of forest therefore, all land area is considered eligible area for planting.

A.2 Location of project

>> Canada:

- **Address** : Rue 335 boulevard Perron Ouest, G0C 2B0
- **City** : New Richmond,
- **Province:** Québec
- **GPS:** 48.180741, -65.888694

The location of the project activity is in the Canton de Hope in Quebec (Project region).

A.3 Technologies and/or measures

>> The project scenario includes normal forestry project activities such as preparing the sites, planting, taking care of the forest and protecting it over the years.

Planting will start in the autumn of the year 2024 on all eligible planting areas over a total of 14 ha. Species planted will include softwood and hardwood native species, as found in the surrounding natural forest stands.

Table 2 below specifies species to be planted and recommended planting densities and spacing.

Hardwood species consist in red maple (*Acer rubrum* L.), and yellow birch (*Betula papyrifera* Marsh.), whereas softwood species comprise White spruce (*Picea glauca* (Moench) Voss), black spruce (*Picea mariana* (Mill.) B.S.P.), jack pine (*Pinus banksiana* Lamb.), balsam fir (*Abies balsamea* (L.) Mill.), Tamarack (*Larix laricina* (Du Roi) K.Koch)), Boxelder (*Acer negundo* L.), Silver maple (*Acer saccharinum* L.), and Eastern white cedar (*Thuja occidentalis* L.).

To ensure the success of the project, we had to accept a trade-off by planting more softwood species than was expected in this bioclimatic zone. Nevertheless, the outcome of tree plantations is mixed, with diversified native species with respect to regional biodiversity, and they are also robust and resilient to any natural disturbance. These trees will live for a minimum of 70 years.

No silvicultural system is needed in the project except for operations needed to maintain the plantation healthy. Unhealthy trees could be cut only in the event of a disturbance (fire, outbreak, sickness, etc.) that would put at risk the health of the components of the ecosystem. No ploughing is involved in the project.

No harvest whatsoever is involved in the project nor was it included in the owners' objectives.

Irrigation	No irrigation network is needed in this region to sustain a forested cover.
Drainage	The project will not generate further carbon emission through soil drainage, including digging and digging
Ploughing	The open grasslands used for afforestation did not need any site preparation other than mowing prior to tree planting. Seedling will be tall enough to get through the weed layer so that no maintenance work will be needed, other than replacement of dead saplings.
Forest harvesting operations	No forest harvesting operations are planned in the project area.

In agreement with landowner, Maxime Cotnoir, it is clearly identified that the owner must protect and preserve the planting site.

- He will undertake to protect the site and contact officials when forest disturbance or potential risks of damaging the trees is observed. (Temperature extremes, insects, harmful human activities, etc.).
- Undertakes to preserve the site and tree populations, all in a context of sustainable development and conservation. No forest harvesting activity for any potential revenue will take place on the plantation sites.
- A forest management plan will be developed with the support of the project partner (SARGIM) to sets out the objective, strategy, and action plan for the landowner to be able to fully meet its commitments to the Gold Standard for Global Goals.

The forest management plan will contain the following explanations.

- A maintenance strategy of planting area
- A strategy to protect planting areas

With the establishment and respect of those strategies, it will result in a more sustainable forest than if the project had not taken place.

The borders of the project area, planting area (eligible and non-eligible), management units will be clearly defined and visible in the field with poles of different colors.

For the ordering of seedling, it is hard to determine precisely where tree seeds have been produced, although the Quebec ministry of natural resources and wildlife has an information page on that matter in its website <http://www.mrnf.gouv.qc.ca/forets/semences/semences-forestieres-sources.jsp>).

Seeds are issued in a majority from SARGIM tree seed orchards. Their supplier is "Centre de semences forestières de Berthier situated at 1690 Grande Côte, Berthierville (QC) J0K 1A0.

Birds are the taxonomical group that has been the most extensively studied group in urban/suburban fragmented matrices. It is a good indicator species in large part because of their fast response to habitat changes. It's been shown that woodlot isolation in the landscape matrix plays an important role in determining the occupancy and abundance of birds by restricting movement between patches and disrupting population structures and dynamics. Open areas create high-risk zones for predation of forest birds and are only crossed reluctantly. Forest birds' willingness to cross gaps decreased from fall to late winter, which suggests that open areas may be even more detrimental as an isolation factor. As they grow older, planted areas should be used by a succession of bird species, and eventually by closed canopy specialists which are usually the most sensitive species to fragmentation. Examples of such species in the project area are the Ovenbird, the Black-throated, the Blue Warbler, the Wood Thrush, the White-breasted Nuthatch, and the Pileated Woodpecker. The gain in species richness per increase in forest cover is especially high when forest cover is relatively low like in the urban/suburban matrix, which is the case for the current sites.

Table 2 : Schedule of planting as per SARGIM workplan principles

Name: French Latin English	Density	Planting in 2023	Planting in 2024	Planting in 2025	Planting in 2026	Planting in 2027	
Épinette blanche (picea glauca) White spruce	2000 seedling/ ha		10.79 ha				
Epinette noire (picea mariana) Black spruce	2000 seedling/ ha		3.101 ha				
Érable rouge (acer rubrum) Red maple Ou Érable à sucre (acer saccharinum)	2000 seedling/ ha		0.107 ha				

Chaque projet de plantation est évalué selon les caractéristiques des potentiels terrains et n'auront donc pas nécessairement les mêmes espèces et les mêmes proportions.

For new areas to be added in the future, each planting site will be assessed according to the characteristics of the potential land and will therefore not necessarily have the same species and the same proportions.

A.4 Scale of the project

>>Micro scale

The project proponent Irokko plans to add more areas in the next few years.

A.5 Funding sources of project

>>. Irokko receives funding from:

- The people who calculate and compensate their carbon footprint through Irokko's mobile app
- Companies and organizations which need to compensate their carbon footprint
- Governments and banks that support the development of Irokko's carbon software solutions (Desjardins Bank and the government of Quebec).
- A Declaration of Non-Use of Official Development Assistance by the Project Owner of [Irokko] has been signed by C.E.O confirming that no financing provided in connection with this project has come from or will come from ODA.

SECTION B. APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS

B.1. Reference of approved methodology (ies)

>> The methodology selected for this project is the Gold Standard *Afforestation/Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology* Version 1.0 (2017).

LAND USE & FORESTS ACTIVITY REQUIREMENTS Version 1.2.1 Published April 2020

Irokko will also use the *GHG Emissions Reductions & Sequestration Product Requirements* Version 2.0.

B.2. Applicability of methodology (ies)

>> Irokko's project meets the applicability conditions of the chosen methodology. First, the project will do plantations on lands that are not forests and wetlands. For the soil, Irokko will not drain or irrigate organic soils, and the perturbation will be maintained under 10% of the certified area. We also engage in having a baseline scenario for

the project area. The additional GS criteria mandated on use of UNFCCC methodologies were not applicable to this project as describe below:

The planted area is not a wetland³, as proven by soil maps display in the Applicability template.

Permafrost occurs when the ground remains at or below a temperature of 0°C for a minimum period of two years. Due to its location in southern Canada, the project area is not permafrost soils, which are found at much higher latitudes, as proven by the permafrost map⁴.

No biomass whatsoever will be extracted from the plantation sites. The plantations are to be left intact by landowners, as stated in the signed agreements. Between Irokko and landowner Maxime Cotnoir.

No genetically modified species will be planted. Native species will be selected in nurseries that are dedicated to grow native trees that serve the reforestation of timbered on public and private lands. The Quebec government doesn't allow the use of genetically modified species outside closely monitored scientific experiments.

This forest carbon project is designed to be compliant with Canadian and Quebec laws⁵ in both the baseline and forest carbon project scenarios. The carbon project is focused on Afforestation & reforestation with the aim to create forest ecosystems and habitat on private lands, and is inherently compliant with provincial, federal, and international laws and regulations that are targeted at regulating development and non-conservation land use.

³ <https://storymaps.arcgis.com/stories/2f377c64d2cf4d5c87e33c8bf5f06b2c>

⁴ <https://open.canada.ca/data/en/dataset/d1e2048b-ccff-5852-aaa5-b861bd55c36>

⁵ <https://www.legisquebec.gouv.qc.ca/fr/document/lc/a-18>.

B.3. Project boundary

>>

Baseline scenario	Gra	CO ₂	Yes	The carbon content of grassland and barren land is included in calculation.
	ssla			
	nd			
	Barr	CH ₄	No	No land use in the area, no other GHG emissions
	en			
	land	N ₂ O	No	Although there is a potential for N ₂ O emissions from urine deposition from livestock and Wildlife, it was conservatively excluded from baseline since connectivity with national park and domestic livestock's is very low in the area.
		...		
	Soil	CO ₂	No	The SOC is not expected to decrease or increase in the baseline scenario
		CH ₄		
		N ₂ O		
Project scenario		...		
		
		...		
		...		
	Tre	CO ₂	Yes	Carbon fixed in woody biomass is calculated for accreditation
	e			
	bio	CH ₄	No	Tree-planting has a negligible direct effect on this GHG
	mas			
	s	N ₂ O	No	Tree-planting has a negligible direct effect on this GHG
		...		
	Soil	CO ₂	Optional	The carbon content is not expected to increase as part of the carbon sequestration activities but if robust evidence is available prior to verification to show a significant increase thus to project intervention, this will be accounted for. (403_V1.0_0.7_LUF_AR-Methodology_Soil-Carbon-Tool.xlsm)
		CH ₄	No	N/A
		N ₂ O	No	N/A
		...		
	N ₂ O	CO ₂	No	Fertilizer application has a negligible direct effect on this GHG
	ferti			
	lizer	CH ₄	No	Fertilizer application has a negligible direct effect on this GHG

	N ₂ O	Yes	The release of this GHG from fertilizer applications is material and is not covered by VER accreditation by the project
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B.4. Establishment and description of baseline scenario

>> The project area is unproductive sites unable to be regenerated naturally.

In short, the sites prior to the reforestation would have been unable to generate as much CO₂ compared to this actual afforestation and reforestation project.

In the case of the scenario without the project implementation, the lands would have been covered by shrubs or invaded by semi-ligneous species.

Some sites had trees but not enough to ensure the regeneration. None of the sites would have had a productive forest.

B.5. Demonstration of additionality

Use this table for Automatic Additionality Only – delete if N/A

Specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable).	Additionality was established using the A/R CDM 'Combined tool to identify the baseline scenario, and demonstrate additionality as per GS4GG LAND USE & FORESTS ACTIVITY REQUIREMENTS Version 1.2.1, Paragraph 3.1.16(a)
Describe how the proposed project meets the criteria for deemed additionality.	Additionality criteria's assessed by (1) using alternative land use

	scenarios and (2) barrier analysis to establish that the pre-project scenario is the baseline scenario and (3) common practice analysis to be sure that the project activity is not the common practice for similar land in the region.
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Financial Land Use Scenarios

The Continuation of Pre-project Land use has been selected as the baseline scenario. The pre project land use scenario is described as:

Grassland remaining grassland with ingress and Natural succession. Landowners have described no intention of investing into their lands for the purpose of agriculture, nor have the means to re-establish forest conditions on their properties.

Common Practice and Justification

Rationale for Selecting the continuation of pre-project land use is based on the financial and prevailing practice within the area. Increasingly, land within the project region enters in a "limbo" where it is no longer productive agriculture land and would require an investment for the land to be workable. Thus, land that is not completely cleared, or contains forest, creeks or is uneven in distribution is not considered a candidate land for being returned to agriculture. However, many landowners have a reluctance to reforest the property as they may have long family histories ties to the land. The result of these alternative land uses is a perpetual state of limbo, where land is not worked, but few landowners can justify the investment to replant, as that is costly.

Irokko business models is to converts non forest lands to forest high in biodiversity, which in the absence of the project would continue to remain below its ecological potential. For the reasons stated above, the proponent believes the afforestation and reforestation of lands, which meet these criteria, is truly additional.

Ex-ante and Ex-post tCO₂e sequestered from the atmosphere are necessary to ensure adequate project funding throughout the crediting beyond. The project will quantify the sequestration using the best available information and knowledge on the mean annual increment to date.

The duration of this project is in permanence for 70 years with a 50-year crediting period. It is believed that 100-year longevity provides significant levels of permanence for the removal of carbon from the atmosphere.

B.5.1 Prior Consideration

>> N/A as the project is regular

B.5.2 Ongoing Financial Need

>> N/A as the project is regular

B.6. Sustainable Development Goals (SDG) outcomes

Relevant Target/Indicator for each of the three SDGs

Sustainable Development Goals Targeted	Most relevant SDG Target	SDG Impact
		Indicator (Proposed or SDG Indicator)
13 Climate Action (mandatory)	Carbon Emissions Reductions - By creating xx ha of inland temperate rainforest, the project will reduce carbon emissions and sequester carbon by xxxx tCO2e over 50 years.	13.2
SDG 15	Number of landowners and cooperatives	15.6
SDG 5	Increase the number of Women using Iroko application	5.5
SDG 11	Creating green and biodiverse recreational public spaces for all	
SDG 12	Irokko App. Offsetting functions are used by companies to mitigate their carbon footprint	

B.6.1 Explanation of methodological choices/approaches for estimating the SDG Impact

>> #SDG 5: Gender Equality

The first target parameter measured under gender equality is the percentage (%) of women assigned to leadership positions in forestry cooperatives, unions, and cooperative-run businesses.

SDG 5 - Methodological steps for estimating SDG impact

A register of forestry cooperatives, unions, companies and landowners associated with Irokko will be maintained on an annual basis.

Irokko will carry out annual monitoring for jobs and volunteer positions of the registered forestry cooperatives and unions. The employment data will include age, sex, job type, job level, salary or wage, and years of employment.

The results of the monitoring will then be analysed to calculate the proportion of females using the Irokko App. of the total workforce employed by the registered forestry cooperatives, unions and cooperative-run businesses. The following equation will be used to determine the proportion of females using the Irokko App.:

% Female Irokko users =(No.Female employees)/(Total employed in Cooperatives, Unions and Cooperative Run Businesses)

This process will be conducted prior to project commencement to calculate the baseline and at least every 5 years to monitor progress towards the target and determine whether adjustment of the target is necessary.

The target at the end of the crediting period is to have at least 50% of Irokko App. Users that are females and 25% are managers.

SDG 8: Decent Work & Economic Growth

The target parameter is the number of jobs created because of the operation and management of the forestry cooperatives, unions, and cooperative-run businesses as a result of the project.

SDG 8 - Methodological steps for estimating SDG impact

A register of forestry cooperatives, unions and cooperative-run businesses associated Irokko project area will be maintained on an annual basis.

Irokko will carry out an annual monitoring for jobs and volunteer positions of the registered forestry cooperatives, unions, and cooperative-run businesses. The employment data will include age, sex, job type, job level, salary or wage and years of employment.

The results of the monitoring data will then be analysed to calculate the number of men and women, young people, and persons with disabilities employed/ volunteering due to the implementation of the project.

This process will be conducted prior to project commencement to calculate the baseline and then on an annual basis to monitor progress towards the target and determine whether adjustment of the target is necessary.

The target at the end of the first 5 years of the project is to have at least xxxxx employment opportunities created by the registered forestry cooperatives, unions and cooperative-run businesses. The target will be revised at the end of 5 years and may

be adjusted if the target has been met and determine if a new target can be developed and met before the end of the crediting period.

SDG 13: Climate Action

The proposed reforestation project is a mechanism for increasing the uptake of atmospheric CO₂ through vegetation establishment. The suggested way of measuring the contribution of the project to this SDG and specific target is estimating the amount of CO₂ removed by the project activities. The methodology used for its estimation is presented in the Gold Standard Afforestation/ Reforestation (A/R) GHG Emissions Reduction & Sequestration Methodology. The following methodology will be applied to estimate the contribution of the project to this SDG.

SDG 13 - Methodological steps for estimating SDG impact

Calculation of CO₂ certificates

$$[\text{CO}_2] \text{ certificates} = [\text{CO}_2] \text{ sequestration} - \text{Baseline} - \text{Leakage} - \text{Other emissions}$$

Where,

$[\text{CO}_2] \text{ sequestration}$ = Yearly carbon sequestration (tCO₂-e) from above ground, below ground biomass.

Baseline = above ground, below ground and soil carbon stock (tCO₂-e) prior to project commencement from above ground, below ground biomass. Only deducted in the first year.

Leakage = carbon emissions (tCO₂-e) that occur due to shift of activities from inside of the project area to the outside of a project area. Only deducted in the first year. For the current project area, there is no shift of activities due to the project; the lands weren't used for agricultural purposes neither for wood industry, therefore leakage is estimated to zero.

Other emissions = 0 as the site preparation will generate none-significant amount of GHG (less 5%)⁶ and no fertilizer will be used.

#SDG 15: Life on Land

⁶ According to 403_V1.0_LUF_AR-Methodology-GHGs-emission-reduction-and-Sequestration-Methodology, Significant is defined to be more than 5% of the 'long-term CO₂-Fixation' - see 'CO₂-Fixation'.

The targeted indicator for this SDG is the number of cooperatives, landowners joining the Irokko tree planting movement and the number of trees planted

SDG 15 - Methodological steps for estimating SDG impact

SARGIM annual activity report will be maintained and Irokko staffs will be able to retrieve the number of cooperatives and the tree planting achieved.

#SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable

SDG 11 - Methodological steps for estimating SDG impact

Irokko will conduct a census of urban afforestation project annually.

SDG 12: Ensure sustainable consumption and production patterns

The targeted indicator for this SDG is the number of companies offsetting their emissions through carbon credits purchase through Irokko App.

SDG 12 - Methodological steps for estimating SDG impact

Irokko carbon stocks sales ledger will be maintained throughout the entire crediting period and names of buyers will be reported at each verification period.

B.6.2 Data and parameters fixed ex ante

Copy the table for each piece of data and parameter; use headings to group parameter tables by SDG

SDG 5: Gender equality

There are no fixed parameters for the indicator chosen for this SDG.

SDG 8: Decent work and economic growth

There are no fixed parameters for the indicator chosen for this SDG.

SDG 11: Make cities and human settlements inclusive, safe, resilient, and sustainable

There are no fixed parameters for the indicator chosen for this SDG.

SDG 12: Ensure sustainable consumption and production patterns

There are no fixed parameters for the indicator chosen for this SDG.

SDG 15: Ensure sustainable consumption and production patterns

There are no fixed parameters for the indicator chosen for this SDG.

SDG 13: Climate action

Data and parameters applicable to baseline (CO₂ fixation):

Data/parameter	Baseline non-tree biomass per ha
Unit	tCO ₂ e/ha
Description	The Baseline non-tree biomass per ha is the estimation of 'non-tree' biomass that is present in the eligible planting area just prior to the planting start date.
Source of data	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4, Chapter 6, Table 3.4.2 and 3.4.3 Available online at Microsoft Word - 04_1_V4_Ch4_Forestland_Part1_final_v2.doc (iges.or.jp)
Value(s) applied	1.8 tdm/ha
Choice of data or Measurement methods and procedures	The defined baseline scenario is the continuation of the land-use prior to the implementation of the project activity, i.e., agriculture and grassland. For agriculture and grassland only one stratum, namely the conservative one (grassland), in baseline is assigned, hence a conservative carbon stock will be used.
Purpose of data	Calculation of Baseline emissions and Ex-ante emission reduction/removals
Additional comment	N/A

B.6.3 Ex ante estimation of SDG Impact

>>

B.6.4 Summary of ex ante estimates of each SDG Impact

SDG 13

Year	Baseline estimate	Project estimate	Net benefit
------	-------------------	------------------	-------------

Year 0	185	0	-185
Year 1		173.01	134.713
Year 2		346.024	269.426
Year 3		519.036	404.139
Year 4		692.048	538.852
Year 5		865.0601	673.566
.....			
Year 50		8651	6736
Total			
Total number of crediting years	50		
Annual average over the crediting period on 14 ha		173.01	134.713

SDG 5

Table 3 : . SDG 5 outcome – the number of women using Irokko App.

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0		
Year 2			
Year 2			
Year 4			
Year 5			
⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮
Year 50	0		
Total			

Table 4 : SDG 5 outcome – the number of women managers using Irokko App.

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0		
Year 2			
Year 2			
Year 4			
Year 5			
⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮
Year 50			

SDG 8

Table 5 : SDG 8 outcome – the number of decent Jobs created

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0		
Year 2			
Year 2			
Year 4			
Year 5			
⋮			
⋮			
Year 50			
Total			

SDG 11

Table 6 : SDG 11 outcome – Number of Urban afforestation project

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0		
Year 2			
Year 2			
Year 4			
Year 5			
...			
...			
Year 50			
Total			

SDG 12

Table 7 : Number of companies offsetting their emissions through Irokko App.

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0		
Year 2			
Year 2			
Year 4			
Year 5			
⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮
Year 50	0		
Total			

SDG 15.

Table 8 : SDG 15 outcome – the number of plots Joining the Irokko tree planting movement

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0		
Year 2			
Year 2			
Year 4			
Year 5			
⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮
Year 50	0		
Total			

B.7. Monitoring plan

B.7.1 Data and parameters to be monitored

Project contribution to SDG 5, 8, 11, 12, and 15 will be based on self-defined measure for tracking a benefit as the indicators does not align with official SDG indicator. Therefore, self-monitoring by Iroko C.E.O and staff will be applied based on record checking and feedback gathering from relevant stakeholders to confirm the impacts achieve. The self-monitoring technique and feedback gathering will include:

- Photographs during field checks
- Questionnaire for feedback gathering
- Reports contents scrutiny
- Satellite images

Given that there is no value(s) applied at this stage as the project proponent “Irokko” is seeking “listing status” to secure funding to develop standard operating procedures and evidence storage repository for specific data source, measurement methods, and data, copies of QA/QC procedures. Nevertheless, all this will be developed and made available to the auditor in charge of project validation prior to project registration.

In any case after project is listed, the monitoring plan shall undertake all relevant data/parameter necessary for estimating/calculating the project GHG emissions and removals of this proposed project.

The GHG information system consist in the Irokko Survey where obtain, record and compile the parameters data for the monitoring plan in the project activity.

The implementation and execution of the proposed project will be directly managed by Irokko staff from the research (Universite Laval and Universite Quebec) and development sector including cooperative. It will be implemented with prior agreement between the responsible technical team and stakeholders.

A work plan incorporating the project theory of change will be developed and periodically revisited as part of adaptive management principle to assess the achievement of stated carbon performance, focused on managing the budget in a way that maintains the financial health of the project. The organizational structure, responsibilities and competencies of the team that will be carrying out monitoring activities are described in figure 4.

Name	Role function	Responsibilities
Saliou Diallo –Engineer	C.E.O Irokko Project Developer	Project design supervision and offset market development Local reconnaissance of new areas for implementation of project activities

SARGIM support team	Field operation coordination	Sampling, monitoring execution and stakeholder training
To be hired prior before project validation	Data Analyst	Quality assurance of operation, Compiling, storing, and analyzing data for GHG reports

Figure 4 : Description of Irokko monitoring team

The implemented quality assurance/quality control (QA/QC) ensures that the project activities regarding GHG removals are measured and monitored precisely, credibly, verifiably, and transparently to reach target precision levels. This involves the handle of the non-conformances within the project boundary such as sample sizes, sample site location, sampling, stratification, measurement, data analysis, data maintenance, and storing using the Irokko Survey protocol. The activities to be considered in our survey will cover the following procedures:

1. Collecting reliable field measurements and verifying methods used to collect field data, according to the USDA Manual for quality assurance of analysis;
2. Verifying data entry and analysis techniques; and
3. Data maintenance and storing using our implemented Irokko survey.

Irokko will assign staff members responsible for the initial training of rural producers to verify consistency of record procedures as the project expand.

Usually, the input data for recording activities are recorded by hand per farmer in printed sheets and a digital control with the monitoring team based on the input data from farmers and often visits for validation.

Field team will be responsible of conducting the surveys to the involved rural producers and of physical field by field inspection to verify and confirm the rural producers' practices being committed on each stratum. Sub 51 technical staff will verifies/ cross-checks data and assists the rural producers to fill the forms. At the same time rural producers will be assisted in gaining capacity to collect and register parameters such as yield and productivity.

In this first instance, rural producers involved in the project activities will be random interviewed periodically throughout the project's lifetime based on a structured questionnaire.

The goal of the above steps is to solve potential non-conformances that would disturb the SOC stocks precision levels.

Irokko believes that with the mentioned procedures above embodies an even policy with internal auditing and QA/QC for oversight and GHG accountability of the project activities.

(Copy the table for each piece of data and parameter; use headings to group parameter tables by SDG)

SDG 13

Data / Parameter	Tonne's greenhouse gases sequestered
Unit	Tonnes CO ₂ -e
Description	The total amount of greenhouse gases sequestered during the project period
Source of data	Forest Inventory
Value(s) applied	N/A
Measurement methods and procedures	Tonnes CO ₂ -e will be estimated by measuring the DBH of trees which will be measured using a measuring tape or callipers in each forest inventory plot
Monitoring frequency	Every 5 years
QA/QC procedures	See B.7.3 Other elements of the monitoring plan
Purpose of data	To calculate carbon sequestration across the project areas
Additional comment	NA

SDG 5

Data / Parameter	Number of Women using Irokko App.
Unit	%
Description	<p>This indicator refers to the proportion of females in the total number of persons using Irokko App. It includes the share of females.</p> <p>The calculation provides information on whether women are more represented amongst the Irokko App. User community</p>
Source of data	Annual forestry cooperative monitoring data
Value(s) applied	N/A
Measurement methods and procedures	Head count
Monitoring frequency	Annual
QA/QC procedures	Forestry cooperative data will be reviewed by Irokko staff for transcription and consistency errors.
Purpose of data	To estimate the proportion of women in leadership positions on an annual basis.
Additional comment	

SDG 8

Data / Parameter	Number of jobs created
Unit	Numeric
Description	Number of jobs created by the registered forestry cooperatives, unions and cooperative-run businesses broken down by age, sex and job type
Source of data	Annual forestry cooperative monitoring data
Value(s) applied	N/A

Measurement methods and procedures	Head count
Monitoring frequency	Annual
QA/QC procedures	Forestry cooperative data will be reviewed by Irokko staff for transcription and consistency errors.
Purpose of data	To estimate the number of jobs created by the project
Additional comment	

SDG 11

Data / Parameter	The number of urban afforestation project.
Unit	Numeric
Description	Creating green and biodiverse recreational public spaces for all
Source of data	Irokko annual report
Value(s) applied	N/A
Measurement methods and procedures	
Monitoring frequency	Annual
QA/QC procedures	
Purpose of data	
Additional comment	

SDG 12

Data / Parameter	The number of companies offsetting their emissions through carbon credits purchase through Irokko App.
Unit	Numeric
Description	More corporate offset their carbon footprint through nature based solutions
Source of data	Irokko tree planting ledgers
Value(s) applied	N/A
Measurement methods and procedures	
Monitoring frequency	

QA/QC procedures	
Purpose of data	
Additional comment	

SDG 15

Data / Parameter	Number of landowners and cooperatives
Unit	Numeric
Description	Refers to the increment in above and below ground biomass stock in reporting period through new area certification. Growing size of the project will be against the number of landowners and cooperatives joining the Irokko tree planting movement.
Source of data	Irokko Ledgers
Value(s) applied	N/A
Measurement methods and procedures	GPS is using to collect the coordinate and GIS software use to generate the surface area
Monitoring frequency	Every 5 years
QA/QC procedures	See B.7.3 Other elements of the monitoring plan.
Purpose of data	To estimate the project contribution to SDG 15
Additional comment	

B.7.2 Sampling plan

>>No Sampling plan is required for SDG 5, 8, 11, 12, and 15 as a 100% survey is the recommended best practice to measure the impact.

It is equally not applicable for SDG 13 at this stage of project preliminary review, as the project is still seeking approval to be listed under–Gold Standard for Global goals.

B.7.3 Other elements of monitoring plan

>>

The following equipment's are needed for an efficient and effective monitoring for the duration of the crediting period: DBH tape and clinometer for measuring tree height, a DBH, a GPS for mapping plots boundaries and camera for capturing plots conditions prior to planting start and subsequent maintenance visits in the plots.

Given the 70 years operational lifetime of the project, unexpected even could arise. Irokko and project participants will develop additional mitigation and enhancement measure monitored and reported according to GS reporting schedule. The monitoring might require a new type of equipment that is not yet known at the time of project design.

SECTION C. DURATION AND CREDITING PERIOD

C.1. Duration of project

C.1.1 Start date of project

>> 1st September 2024

C.1.2 Expected operational lifetime of project

>> 31st December 2093 (70 years)

C.2. Crediting period of project

C.2.1 Start date of crediting period

>> 1st September 2024

C.2.2 Total length of crediting period

>> 50 years

SECTION D. SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT

D.1 Safeguarding Principles that will be monitored

A completed Safeguarding Principles Assessment is in [Appendix 1](#), ongoing monitoring is summarized below.

Principles	Mitigation Measures added to the Monitoring Plan
Principle x.y	
The planting area is located around urban Or semi urban zone	80% of Safeguards principles are not relevant and 20% of those relevant do not require monitoring. Project proponent will stay vigilant to implement remedy on any unforeseen issue that may be reported.

D.2. Assessment that project complies with GS4GG Gender Sensitive requirements

Question 1 - Explain how the project reflects the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	Gender issues are well legislated in Canada, proponents, partners and contractor will comply with this requirement during the entire crediting period
Question 2 - Explain how the project aligns with existing country policies, strategies, and best practices	Gender issues are well legislated in Canada, proponents, partners, and contractor will comply with this requirement during the entire crediting period
Question 3 - Is an Expert required for the Gender Safeguarding Principles & Requirements?	Gender issues are well legislated in Canada, proponents, partners, and contractor will comply with this requirement during the entire crediting period
Question 4 - Is an Expert required to assist with Gender issues at the Stakeholder Consultation?	Gender issues are well legislated in Canada, proponents, partners and contractor will comply with this requirement during the entire crediting period

SECTION E. SUMMARY OF LOCAL STAKEHOLDER CONSULTATION

The below is a summary of the 2 step GS4GG Consultation for monitoring purposes. Please refer to the separate Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round.

The current project area sits within an economically developed and wealthy geography in Quebec, where the socio-economic conditions in the general region around the project area are stable and diversified, with very well-developed infrastructure linking an integrated economy throughout the southeastern B.C. region and generally across the province and Canada. Internet and phone access are nearly ubiquitous and highly used across the region. There are no communities, indigenous people, or other public communities or ongoing public use for income, livelihood, or critical cultural values by any people living or dependent on resources within the project area that would be affected by project activities. There are no stakeholders whose livelihoods are directly affected by the project in the project area that require a specific or complex stakeholder

consultation or involvement process. Irokko has, however, endeavored to communicate information related to the property acquisition and various project and property activities and impacts with a wider range of interested stakeholders in the local community who may be indirectly impacted by the project or who are generally interested in the property area, project afforestation and reforestation interventions, and/or Irokko GHG compensation initiatives and impacts in the area. It should be noted, however, that although the local community are certainly interested in reforestation activities, there is a limited “attention span” in these modern communities for lengthy or constant communication from Irokko or in relation to the project. Therefore, Irokko takes a strategic approach to communicate by providing information via the website and social media for any interested stakeholder to access on a continuous basis, and then more targeted outreach to meet with specific groups on ‘as-needed’ or ‘as-requested’ basis, while limiting more general community outreach and public meetings to specific opportunities when they can garner optimal interest and attention on a periodic basis.

Although there are no stakeholders directly residing on the project area, these local community communication processes will allow Irokko to identify “interested stakeholders” and groups potentially interested in specific elements of the reforestation and afforestation activities, while also allowing any other interested persons to communicate directly with Irokko as needed.

E.1 Summary of stakeholder mitigation measures

>> The project relates to a private acquisition of a fee-simple property with no people living on or relying upon the project area for their livelihood. Hence, no direct consultation process was necessary. However, Irokko undertook an extensive outreach and public/interested stakeholder communication process in the local communities in the months leading up to and after the conclusion of carbon rights transfer from Maxime Cotnoir and Irokko (i.e., the project starts date).

Irokko directly contacts key stakeholders by phone and share project non-technical summary (French version) by email with notice of potential contact by the project proponent or during a site visit as appropriate during validation and verification.

E.2 Final continuous input / grievance mechanism

Irokko is a highly accessible organization and maintains multiple venues for contacting it, including:

- Offices with knowledgeable staff across the region in 155 Boulevard Charest Est Bureau H-190, C.P 12 G1K3G6, Quebec, Canada
- Listed phone numbers for each site (phone book and website)
- Irokko's website including address, phone number and email contact info for his office

Website: <https://irokkoapp.com/>

Phone number : +1 (418) 564-6940

Email : saliou.diallo@irokkoapp.com

When Irokko receives an expressed concern from a stakeholder or interested stakeholder, Irokko deals with it in the most appropriate manner. If the concern is addressed to Irokko in writing, he will typically respond in writing as soon as possible.

In the more common instances in which Irokko receive a phone call or in-person visit, concerns or comments are addressed in person.

Regardless of which form of contact has been used, Irokko has proven his ability to satisfactorily address outstanding concerns in this manner since 2017.

If a concern were to be elevated, Irokko would engage a third-party mediator if warranted or if, in certain instances, Irokko is contractually obligated to do so.

Irokko has a formal process to receive communications from interested stakeholders at project area and office, which are documented as received.

Any significant or unresolved issues are maintained on records and follow-up plans developed as necessary.

Irokko National Office is the final authority for responding to any issues related to the current project.

The current project is still at the inception stage. Irokko is unaware of any unresolved complaints or conflict material to the design of the project. In general, local community members and interested stakeholders will contact local Irokko persons for information or concerns via phone, email, or social media.

Stakeholder Access to Project Documentation and updates are made available electronically via the Irokko webpage and social media as needed.

Interested stakeholders are generally directed to the project database, which it is permanently stored and available to any interested stakeholder.

Irokko provides links and updates for stakeholders via the Irokko website and social media accounts. Project documentation is also made available to interested stakeholders by Irokko staff by request (this is not common). Generally, Irokko function within the modern electronic world where web and social media contact are the preferred communication methods for local communities and stakeholders.

Method	Include all details of Chosen Method (s) so that they may be understood and, where relevant, used by readers.
Continuous Input / Grievance Expression Process Book (mandatory)	<p>Since the impact is limited to the plot of the landowners, no official Input / Grievance Expression Process Book is necessary. Nevertheless, the arbitration⁷ process in force in Canada will be used in case any dispute arises during the project crediting period</p> <p>A web page have also been developped to record ongoing grievances that may arise at :</p> <p>https://irokkoapp.com/fr/registre-des-plaintes/</p>
GS Contact (mandatory)	help@goldstandard.org

⁷ <https://www.quebec.ca/justice-et-etat-civil/modes-prevention-reglement-differends/arbitrage>

Other

APPENDIX 1 - SAFEGUARDING PRINCIPLES ASSESSMENT

Complete the Assessment below and copy all Mitigation Measures for each Principle into [SECTION D](#) above. Please refer to the instructions in the [Guide to Completing](#) this Form.

Assessment Questions/ Requirements	Justification of Relevance (Yes/potentially/no)	How Project will achieve Requirements through design, management or risk mitigation.	Mitigation Measures added to the Monitoring Plan (if required)
Principle 1. Human Rights			
<ol style="list-style-type: none"> 1. The Project Developer and the Project shall respect internationally proclaimed human rights and shall not be complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights 2. The Project shall not discriminate with regards to participation and inclusion 	No	<p>Due to the small size of this project, Irokko has not hired any employee, but instead decided to direct its business model towards the hiring of subcontractors.</p> <p>It is important to specify that it is impossible to plant trees in Canada between October 15 and May 15 because of the temperatures and winter conditions. Therefore, all the jobs related to tree planting are seasonal.</p>	
Principle 2. Gender Equality			

<ol style="list-style-type: none"> 1. The Project shall not directly or indirectly lead to/contribute to adverse impacts on gender equality and/or the situation of women 2. Projects shall apply the principles of non-discrimination, equal treatment, and equal pay for equal work 3. The Project shall refer to the country's national gender strategy or equivalent national commitment to aid in assessing gender risks 4. (where required) Summary of opinions and recommendations of an Expert Stakeholder(s) 	No	The project owner is already sensitive to gender issue and plan to monitor SDG 5 to ensure increase in women using the Irokko App.	
Principle 3. Community Health, Safety and Working Conditions			
<ol style="list-style-type: none"> 1. The Project shall avoid community exposure to increased health risks and shall not adversely affect the health of the 	No	No community was identified in the project area that can be affected by the project activities.	

workers and the community			
Principle 4.1 Sites of Cultural and Historical Heritage			
Does the Project Area include sites, structures, or objects with historical, cultural, artistic, traditional, or religious values or intangible forms of culture?	No	Property is a private land	
>>			
Principle 4.2 Forced Eviction and Displacement			
Does the Project require or cause the physical or economic relocation of peoples (temporary or permanent, full, or partial)?	No	Property is a private land	
>>			
Principle 4.3 Land Tenure and Other Rights			
a. Does the Project require any change, or have any uncertainties related to land tenure arrangements and/or access rights, usage rights or land ownership? b. For Projects involving land use tenure, are there any	No	Property is a private land	

uncertainties with regards to land tenure, access rights, usage rights or land ownership?			
>>			
Principle 4.4 - Indigenous people			
Are indigenous peoples present in or within the area of influence of the Project and/or is the Project located on land/territory claimed by indigenous peoples?	No	Property is a private land	
>>			
Principle 5. Corruption			
1. The Project shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt Projects	No	Property is a private land	
Principle 6.1 Labour Rights			
1. The Project Developer shall ensure that all employment is in compliance with national labour occupational	Yes		

<p>health and safety laws and with the principles and standards embodied in the ILO fundamental conventions</p> <p>2. Workers shall be able to establish and join labour organisations</p> <p>3. Working agreements with all individual workers shall be documented and implemented and include:</p> <ul style="list-style-type: none"> a) Working hours (must not exceed 48 hours per week on a regular basis), AND b) Duties and tasks, AND c) Remuneration (must include provision for payment of overtime), AND d) Modalities on health insurance, AND e) Modalities on termination of the contract with provision 			
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<p>for voluntary resignation by employee, AND</p> <p>f) Provision for annual leave of not less than 10 days per year, not including sick and casual leave.</p> <p>4. No child labour is allowed (Exceptions for children working on their families' property requires an Expert Stakeholder opinion)</p> <p>5. The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures</p>			
Principle 6.2 Negative Economic Consequences			
<p>1. Does the project cause negative economic consequences during</p>	No		

and after project implementation?			
>>			
Principle 7.1 Emissions			
Will the Project increase greenhouse gas emissions over the Baseline Scenario?	No		
>>			
Principle 7.2 Energy Supply			
Will the Project use energy from a local grid or power supply (i.e., not connected to a national or regional grid) or fuel resource (such as wood, biomass) that provides for other local users?	No		
>>			
Principle 8.1 Impact on Natural Water Patterns/Flows			
Will the Project affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential,	No	15 metres buffer will be strictly respected by SARGIM during planting	

lack of aquatic connectivity or water scarcity?			
>>			
Principle 8.2 Erosion and/or Water Body Instability			
a. Could the Project directly or indirectly cause additional erosion and/or water body instability or disrupt the natural pattern of erosion?			
b. Is the Project's area of influence susceptible to excessive erosion and/or water body instability?			
>>			
Principle 9.1 Landscape Modification and Soil			
Does the Project involve the use of land and soil for production of crops or other products?	No		
>>			
Principle 9.2 Vulnerability to Natural Disaster			
Will the Project be susceptible to or lead to increased vulnerability to wind,	No		

earthquakes, subsidence, landslides, erosion, flooding, drought or other extreme climatic conditions?			
>>			
Principle 9.3 Genetic Resources			
Could the Project be negatively impacted by or involve genetically modified organisms or GMOs (e.g., contamination, collection and/or harvesting, commercial development, or take place in facilities or farms that include GMOs in their processes and production)?	No		
>>			
Principle 9.4 Release of pollutants			
Could the Project potentially result in the release of pollutants to the environment?	No		
>>			
Principle 9.5 Hazardous and Non-hazardous Waste			
Will the Project involve the manufacture, trade, release, and/ or use of hazardous and	No		

non-hazardous chemicals and/or materials?			
>>			
Principle 9.6 Pesticides & Fertilisers			
Will the Project involve the application of pesticides and/or fertilisers?	No		
>>			
Principle 9.7 Harvesting of Forests			
Will the Project involve the harvesting of forests?	No	Agreement between Landowners and Irokko explicitly exclude harvesting beyond the crediting period up to 70 years	
>>			
Principle 9.8 Food			
Does the Project modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	No	Property is a private land	
>>			
Principle 9.9 Animal husbandry			

Will the Project involve animal husbandry?	No		
>>			
Principle 9.10 High Conservation Value Areas and Critical Habitats			
Does the Project physically affect or alter largely intact or High Conservation Value (HCV) ecosystems, critical habitats, landscapes, key biodiversity areas or sites identified?	No	Property is a private land	
>>			
Principle 9.11 Endangered Species			
a. Are there any endangered species identified as potentially being present within the Project boundary (including those that may route through the area)?	No	Property is a private land	
b. Does the Project potentially impact other areas where endangered species may be present through transboundary affects?			
>>			

APPENDIX 2- CONTACT INFORMATION OF PROJECT PARTICIPANTS

Organization name	IROKKO INC.,
Registration number with relevant authority	RLRQ, c. S-31.1
Street/P.O. Box	RC1-155, boulevard
Building	G1K 3G6
City	Québec (Québec) G1K 3G6
State/Region	Québec (Québec
Postcode	Bureau H-190, C.P 1
Country	Canada
Telephone	+1 (418) 564-6940
E-mail	saliou.diallo@irokkoapp.com
Website	https://irokkoapp.com/
Contact person	Saliou Diallo
Title	C.E.O
Salutation	Mr.
Last name	Saliou
Middle name	Diallo
First name	
Department	
Mobile	+1 (418) 564-6940
Direct tel.	+1 (418) 564-6940
Personal e-mail	diallos.saliou23@gmail.com

APPENDIX 3- LUF ADDITIONAL INFORMATION

Risk of change to the Project Area during Project Certification Period:	There is a very low risk of change to the Project Area. It and the project area is not suitable for any other agricultural use. Hydro-Québec may occupy a portion for the purpose of installing water pots and equipment necessary for connections and in accordance with the conditions of electricity service approved by l'Energie.
Risk of change to the Project activities during Project Certification Period:	<p>There is a very low risk of change to the Project activities.</p> <p>There is a medium risk of the project areas to change and the project activities to change during the crediting period. If the project expand, some owners might want to rethink their land use. Some conservation areas; if that happens, an equivalent area of the project into a conservation area. A potential risk is a change in the land use from conservation to rotation forestry for partial areas but this is not a risk for the project.</p> <p>The landowner is bound by contract to protect the forest for a minimum of 70 years. Detailed information is in the contract. The Irokko is available on the Sustain-Cert SharePoint.</p>
Land-use history and status of Project Area:	<p>The land is covered by shrubs or invaded by semi-ligneous shrubs. Some portions have trees but not enough to ensure the regeneration. None of the sites are productive forest.</p> <p>There is no shift of activities due to the project; the land is used for agricultural purposes neither for wood industry.</p>
Socio-Economic history:	<p>Inside the planting area is an abandoned field. It has not been used for years.</p> <p>The community involvement is limited since the project is in remote lands.</p>
Forest management applied (past and future)	<p>This area has never been forested.</p> <p>This is a conservation project, so future forest management will be limited to thinning as necessary to maintain tree health for the next 70 years.</p> <p>One or two release cutting will be done over the years to the trees.</p>
Forest characteristics (including main tree species planted)	<p>The species planted are native species to the region with good capabilities.</p> <p>Softwood and hardwoods will be planted. There will be a mix of species in the area to lower the risk of pests, snow, and wind damage. There will also be mixed in the area to create visual diversity, but this is not a requirement.</p>

	also have great capability to support each other when it comes to health.
Main social impacts (risks and benefits)	<p>The main social risk is if trees disperse their seeds over the area of Maxime Cotnoir. It is mitigated by annual monitoring and a 15 - 50 meters buffer belt around them.</p> <p>Social benefits of the project are the increased employment opportunities for training and skills development in a new reforestation industry in the Municipality of Canton de Jura created for the time of the site preparation, planting, and maintenance.</p>
Main environmental impacts (risks and benefits)	<p>The nature of the project requires no specific authorization under law. The project helps to promote indigenous biodiversity (migratory corridors for fauna such as birds as well as helping to have a better soil erosion and no biological agents used).</p> <p>Environmental benefits of the project:</p> <ol style="list-style-type: none"> 1. It will sequester atmospheric carbon in trees and soil, contributing to the mitigation of climate change. 2. It will stop land degradation. 3. It will increase tree canopy cover as a part of the development goals. 4. Bird species in the area are vanishing. The forest provides a habitat. 5. Increased biodiversity in eroded areas. <p>Irokko has identified potential environmental risks associated with the project and undertaken the appropriate mitigating actions: The risk of pollution from fertilizers is mitigated by their management then only at the tree establishment phase</p> <ol style="list-style-type: none"> 1. The risk of damage to remnant native vegetation is mitigated by excluding part of it from eligible area. 2. All sources of waste are identified, and measures are taken for waste collection and spill management.
Financial structure	<p>The project is owned by the company Irokko.</p> <p>All project activities are funded by revenue from Irokko ApS.</p>
Infrastructure (roads/houses etc):	<p>There is one old road in the area given access to the project area. We do not plan to build employees camp in the project area.</p>
Water bodies:	<p>Streams and wetlands are not part of the eligible area.</p>
Sites with special significance for indigenous people and local communities - resulting from the Stakeholder Consultation:	<p>N/A</p>

Where indigenous people and local communities are situated:	N/A
Where indigenous people and local communities have legal rights, customary rights, or sites with special cultural, ecological, economic, religious, or spiritual significance:	N/A

APPENDIX 4-SUMMARY OF APPROVED DESIGN CHANGES

Please refer to Design Change [Requirements](#) for more information on procedures governing Design Changes

Revision History

Version	Date	Remarks
1.2	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Inclusion criteria table added Gender sensitive requirements added Prior consideration (1 yr rule) and Ongoing Financial Need added Safeguard Principles Assessment as annex and a new section to include applicable safeguards for clarity Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on Stakeholder Consultation information required Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.1	24 August 2017	Updated to include section A.8 on 'gender sensitive' requirements
1.0	10 July 2017	Initial adoption