

# PROJECT STATUS REPORT (PSR)

01/01/2022 - 06/30/2022 - PSR-09156

## PROJECT SUMMARY

Operation number

CH-T1217

Suboperation number

ATN/ME-17445-CH

Project Name

REDD Chain Project

Team Leader

Carolina Carrasco

Executing Agency

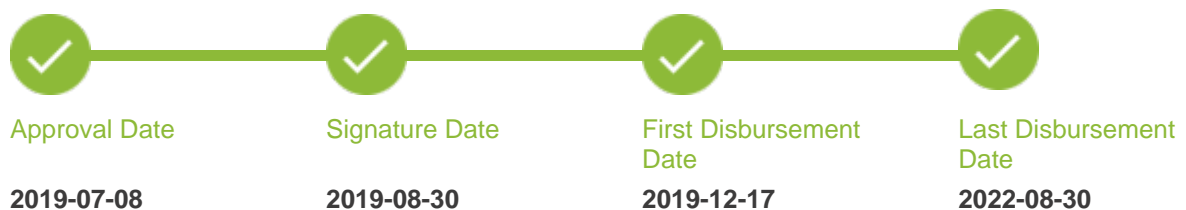
South Pole Carbon Asset Management Ltd.

Purpose

To pilot the use of exponential technologies in the monitoring and evaluation of forest ecosystems and land use in Chile, to support reporting against national commitments and results-based investment mechanisms, improve the effectiveness of Chile's



## Project cycle



## PSR SCORE



- 0 - 1 Red Flag
- 1 - 2 Yellow Flag
- 2 - 4 Green Flag

# LEARNINGS

## 1. Risk and Lessons

### 1.1. Risk

1.1.1. What do you think is the biggest risk that threatens the achievement of the project objectives?

The biggest risk that threatens the achievement of the project objectives is the acceptance of the technology developed in terms of expansion and scalability. Technologies such as MRV supported by AI require big amounts of infrastructure in terms storage, images from different sources to be processed and organized in such a way as to automate an accurate and reliable artificial intelligence model. For this reason, the business models than can support this project are focused on the governments and non-governments agencies that can invest and trust the continuous update of the data. They might be not interested in the use of this due to the expansion and the high cost of investment. Due to the project life cycle, that shares the market volatility in pandemic year, this might be a limitation and a threat to achieve it.

### 1.2. Greatest Achievement or Failure

1.2.1. What has been the greatest achievement or failure in the last semester that affected the implementation of the project?

The greatest Achievement of the project, was the capability of the develop an integration between a the development of the platform with AI algorithm and the data from different sources such as government data, satellite and the integrated module of drone data that was incorporated with the requirements of an strategic ally. The failure was that the platform was too focused on CONAF needs that was not aligned with the expansion and replication it self.

### 1.3. Findings and Lessons

1.3.1. What are the most useful findings and lessons from this project that when taken into consideration could improve the execution and results of existing projects and the design of similar projects in the future? A finding describes an action, circumstance or decision that was critical in determining the positive or negative evolution of the project (for example, switching from the development of a blockchain platform to a web-based shared database reduced the cost and time devoted to implementing the traceability capabilities required by the project). A lesson is a concrete, actionable proposal based on a finding that, in similar circumstances, would facilitate problem solving, risk mitigation, and the achievement of results (for example, Develop guidelines and criteria to identify candidates that could benefit from the implementation of a blockchain platform, and assess during the design if the selected project satisfies the criteria before committing to develop one).

The main findings can be centered in the flexibility and customization of this kind of projects. It always have to be focused on the customer needs, and some finding can be discover on the way. By adding new fixtures, aligned with the scope, can leverage the impact and the use of the outputs no linked the initial processes. Although, the main lesson, is the business model application, due to the atypical context of the pandemic, this type of projects have to follow more specific steps that can mitigate the potential restriction from stakeholders investments this can be solved by being more flexible and lengthen the market revenues by offering a cheaper service approach.

## 2. Scalability and replicability

### 2.1. Scalability Plan

2.1.1. Now that the Project is in the execution phase, have you developed any concrete plan or action that will allow it to reach a greater number of users/clients/beneficiaries (or broader environmental or resilience to climate change and natural disasters impacts) in the future?

From CONAF, this tool could make a considerable contribution to the work carried out in the framework of monitoring and follow-up of the country's forest resources, which could represent

an important advance in the performance of the Corporation in this area, seeking to contribute to the detection of deforestation and forest degradation events. Among the main functionalities useful is the work with tools for the analysis of information from images from unmanned aerial vehicles (UAVs, drones). CONAF has made progress in the development of computer tools that support the monitoring of the implementation of the National Strategy for Climate Change and Vegetation Resources, which also includes working with drone data. drone data, which can be linked with the Open Surface developments, representing an opportunity to work with the Surface, representing an opportunity for future collaborative work.

## 2.2. Costs and Partners to Scale

2.2.1. Now that the project is in the execution phase, do you know how much it costs to offer your product / service per user / client / beneficiary? Is this a factor that could affect reaching a greater number of users / clients / beneficiaries in the future? Has any public or private institution requested this information from you, looking for scaling or replicating the model / product / service?

There are several prices Product Versions : Open Surface Community , free, open source; Open Surface SaaS: from USD \$5.000 per/month p and organization and the last one is, Open Surface Integrated: from USD \$45.000 per month and organization.

## 2.3. Facilitating or Hindering Factors

2.3.1. Has any of these factors affected the number of users/clients/beneficiaries (more/fewer) reached by the project compared to what was originally planned (or environmental or resilience to climate change and natural disasters impacts)?

[Cost of the solution, Behavioral changes required by users/clients/beneficiaries, Market size that could be reached, Visibility for users/clients/beneficiaries of the advantages of the proposed solution]

## 2.4. Scalability Scope

2.4.1. How feasible it is that the organization could reach a number of users/clients/beneficiaries 5, 10 or 100 times the number originally planned in the project design, five years after the project ends?

[It could reach less than 5 times the number of users/clients/beneficiaries originally planned in the project design five years after its closure]

2.4.2. How likely is the organization to reach that number five years after the project ends?

[Probable (more than 50% but less than 90% chance)]

## 2.5. IDB Group business relation

2.5.1. Has a business relation been created with another part of the IDB Group different from IDB Lab?

There are some potential business relationship with CONAF and EBP

## 2.6. Replicability Partners

If Yes, Explain

No we are not aware

## 2.7. Replicability Scope

2.7.1. Number of users / clients / beneficiaries reached by entities that have fully or partially replicated / copied the business model / products / services implemented with the support of the project?

[Less than 2 times the number of users / clients / beneficiaries planned in the original project design]

## 2.8. Sustainability

2.8.1. How do you think the project will continue once the IDB Lab financing ends? Examples: it has identified external financing sources to continue operating, it has reached the breakeven point through the sale of services and products, it has obtained the support of public institutions or the private sector, it will adjust the business model to remain viable (via franchises, etc.)

The Platform will adapt to CONAF and EBP developments, because they have created a close relationship of the development. They knew the platform and their advantages. Although they have an initial information of maps from Chile.

### **3. Implementation**

#### **3.1. Facilitating or Hindering Factors**

3.1.1. What specific aspects have (positively or negatively) affected the implementation of the project the most?

[External shocks that affect the economy in general (natural disasters), Advantages or disadvantages of technology]

3.1.2. Explain in detail how these factors that you identified have made the implementation of the project easier or more difficult

The promising technology as corrected implemented in the pilot in Chile, due to the Pandemic, it was difficult to approach more stakeholders.

#### **3.2. Novel Technologies Factors**

3.2.1. If the project makes use of novel technologies or methodologies, what factors have facilitated or hindered the implementation of the technological solution initially proposed by the project?

[Previous experience of the executing agency / client with the technology, Interest from industry experts or academics outside the executing agency / client, Access to subject matter experts by executing agency/client]

### **4. Development Outcomes (Quantitative)**

4.0 Has your project contributed to any of the following indicators in the last 12 months (last year)?

[4.1. Number of companies benefited]

4.1. Number of companies with improved business performance or productivity

Total

2

4.1.4. Please select how the project is benefiting these companies

[Improved productivity or business performance (e.g. improved sales/reduced costs/improved profitability/return on capital/yields/labor productivity)]

#### **4.5. Data Source**

4.5.1. What kind of verification sources have you used to report the data you provided in this section? (Please select all that apply)

[Based on personal experience, Administrative information]

### **5. Development Outcomes (Qualitative)**

#### **5.1. Target population identified in the design**

Is the target population that was identified in the design being reached by the project? Select the target population actually reached by the project that was originally identified in the project design.

[SMEs]

#### **5.2. Population served NOT identified in the project design**

5.2.1. Select if there are Groups that were NOT originally identified in the project design but are being reached in the execution phase?

[None]

#### **5.3. Facilitating or Hindering Factors**

5.3.1. Factors that have affected (facilitated or hindered) reaching these groups, or the resilience/environmental impacts, in the numbers/dimensions that the project had originally planned.

[Quality of the product/service offered, Interest of clients/users/beneficiaries, Cost of offering product/service, Business model, Prices]

5.3.2. Explain in detail how these factors that you have identified have affected the ability of the project to reach the groups (achieve resilience/environmental impacts) in the numbers/dimensions originally expected

Me main factors that affected to reach those groups, were focused on create a platform for governments and private companies who wanted to to acquire specialized services fo digital MRV to improve their analysis and capabilities to identify the land use, forest as service. Eventhough, the platform has a high quality product service, the interest of clients was limited by their budget impact, due to the economical restictions, and the prices might be high as thought. For this reason, the main group to reach was the specialized companies for gonevrnments.

## INDICATORS





 Overachieved
  Achieved
  Pending
  In process
  Overdue

### C1: Component 1: Pilot of a forestry land-use monitoring system

**Weight:** 54%

**Qualification:** Satisfactory

100%



Indicators	Planned	Achieved	Status
<b>I1</b> # Data sets logged as entered into pipeline	3 ( 2023-07-30)	<b>3</b> ( 2020-12-31)	
<b>I2</b> Development of a web-based dashboard that most effectively supports CONAF staff	4 ( 2023-07-30)	<b>4</b> ( 2020-12-31)	
<b>I3</b> 1.3 [M2] Development of machine learning model(s) that can improve forest management capability	3 ( 2023-07-30)	<b>3</b> ( 2020-06-30)	
<b>I4</b> 1.4 [M3] Functioning forest management service that connects available data and machine learning outcomes to a web-based dashboard	1 ( 2023-07-30)	<b>1</b> ( 2020-12-31)	

### C2: Component II: Feasibility studies exploring potential future and/or phase 2 exte

**Weight:** 20%

**Qualification:** Unsatisfactory

100%

Indicators	Planned	Achieved	Status
<b>I1</b> 2.1 [M1] Strategy for feasibility assessment of the application of scalable technologies to advance biodiversity evaluation developed	1 ( 2023-07-30)	<b>1</b> ( 2020-12-31)	
<b>I2</b> 2.2 Key discussions and/or technology events on approaches for the future of biodiversity monitoring and evaluation using scalable technologies hosted	1 ( 2023-07-30)	<b>1</b> ( 2021-12-14)	
<b>I3</b> 2.3 Assessment of actionable steps for potential extensions to the project in the 4 feasibility areas (biodiversity, forest degradation, tree species mix	5 ( 2023-07-30)	<b>5</b> ( 2021-12-31)	

and wildfires) and for using the project's technology to unlock new resources via unit-based investme



### C3: Component III: Knowledge dissemination

**Weight:** 10%

**Qualification:** Unsatisfactory

66%		34%	
Indicators	Planned	Achieved	Status
I1 3.1 Information about the project, key methods and results made available via the web or in non-academic publications	8 ( 2023-07-30)	5 ( 2020-12-31)	
I2 3.2 Presentation of project and key methods and results, including potential tech demo, at a key climate-focused international event	1 ( 2023-07-30)	1 ( 2020-01-31)	
I3 3.3 [M4] Research papers submitted for peer review	3 ( 2023-07-30)	3 ( 2020-06-30)	

### C4: Component IV: Standards & certification

**Weight:** 6%

**Qualification:** Unsatisfactory

100%			
Indicators	Planned	Achieved	Status
I1 4.1 [M6] Requirements map (markets/policies/investor) developed to inform standards scheme assessment tool	0 ( 2019-08-30)	1 ( 2020-01-31)	
I2 4.2 Pilot testing of assessment tool	3 ( 2023-07-30)	3 ( 2020-12-31)	

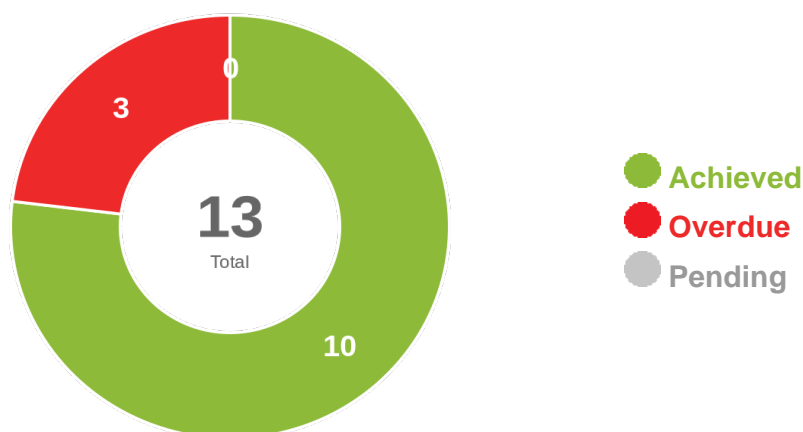
### C5: Component V: Pilot extensions

**Weight:** 9%

**Qualification:** Unsatisfactory

50%		50%	
Indicators	Planned	Achieved	Status
I1 5.1 [M5] Technical designs for extensions to the PPoC, measurement, data-gathering and results-based payment mechanisms to be tested in the field	3 ( 2023-07-30)	3 ( 2021-12-31)	
I2 5.2 [M7] Additional pilot extensions to the core project attracting funding	3 ( 2023-07-30)		

## MILESTONES



Milestones	Achieved Value	Due Date	Achieved Date	Status
*Condiciones previas	1	2020-02-26	2018-12-28	✓
*Strategy for feasibility assessment	1	2020-12-31	2020-02-14	✓
*Development of machine learning model(s)	1	2020-12-31	2019-12-31	✓
*Development of machine learning model(s))(s) that can improve	1	2021-06-30	2020-06-30	✓
*Development of machine learning model(s)	1	2021-12-31		✓
*Functioning forest management service	1	2021-12-31	2022-03-01	✓
*Research papers submitted for peer review	1	2021-04-30	2020-06-30	✓
*Research papers submitted for peer review	2	2021-10-31	2020-06-30	✓
*Technical designs for extensions to the PPoC	3	2021-12-31	2022-01-31	✓
*Requirements map (markets/Policies/investor)	3	2020-06-30	2020-01-31	✓
*Additional pilot extensions to the core project attracting funding	1	2022-03-31		⚠
*Additional pilot extensions to the core project attracting funding	1	2022-04-30		⚠
*Additional pilot extensions to the core project attracting funding	1	2022-06-30		⚠