## **ASES ON-CHAIN PROTOCOL**

# PROPOSED PROJECT ACTIVITY ALIGNMENT ASSESSMENT

Forest 4Future Lentillères LT-002-LEN-052023 Forest management Modality B





## ALIGNMENT ASSESSMENT FOR THE PROJECT SUBMITTED BY LIFE TERRA FOUNDATION, "FOREST 4FUTURE LENTILLÈRES", WITH AOCP IDENTIFIER LT-002-LEN-052023 LENTILLÈRES, ARDECHE.

### **CONTEXT**

As part of the process for the certification of nature-positive projects and the consequent issuance of Verified Nature-Positive Credits (VNPCs) under the ASES on-chain protocol, the Project developer "Life Terra Foundation" submitted the project Forest 4Future Lentillères" Lentillères, Ardeche, France. This Project activity is in the onboarding stage with the aOCP identification code LT-002-LEN-052023. Planting and soil works were conducted, between December 2022 and February 2023, in an area with no vegetation and high levels of soil erosion due to a clear-cut that started in December 2021. Since Project activities have been started before the start of the onboarding process, it participates as a project of Modality B. According to the aOCP rules and procedures, Modality B projects shall go through the following process in order to be registered:

- 1. Application via the Project Submission Form (PSF), done by Project proponent.
- 2. Documentation review and alignment assessment, done by aOCP Operations Team.
- 3. Payment of onboarding fee by the project proponent.
- 4. Project pre-registration, done by aOCP Operations Team.
- 5. On- site Validate of the implemented Project activities, done by aOCP Operations Team.
- 6. Elaboration of Baseline report, Monitoring plan, Contingent table of credits issuance, done by aOCP Operations Team.
- 7. Project proponent agreement.
- 8. Project Verification by an external, independent, 3<sup>rd</sup>-party Verifier, delivering a Project Verification Report.
- 9. Project registration letter and first credits issuance, done by aOCP Operations Team.

This report corresponds to step 2, alignment assessment. The methodology and data gathered on-site are presented here.

## **ALIGNMENT ASSESSMENT**

The aOCP is founded on robust principles aimed at ensuring that Project activities seeking registration and accreditation with Verified Nature Positive Credits (VNPCs) demonstrably and positively impact ecosystems in a real, measurable, permanent and additional manner, while avoiding any harm to ecosystems and/or society.

Conformity with the aOCP's principles, values, rules, and requirements is a fundamental prerequisite for participation in the program. This evaluation occurs during the onboarding phase, prior to the registration of Project activities. This mandate is stipulated in the aOCP Procedures document, which outlines all the stages a Project undergoes from its inception to the issuance, trading, and retirement of VNPCs.

A positive result of the alignment assessment with aOCP's principles, values, rules, and requirements confirms that the proposed Project activity:

- 1. Falls into one of the following project types:
  - a. Forest management, including ARR
  - b. Regenerative agriculture
  - c. Silvopastoral management
  - d. Urban forests / individual tree climate action
  - e. Biochar
- 2. Adheres to the environmental and social no-harm prerequisites,
- 3. Is anticipated to yield positive impacts on biodiversity,
- 4. The Project was developed less than 24 months ago;
- 5. Conforms to the additionality criteria for the requested VNPCs,
- 6. Possesses documentation substantiating land ownership or an agreement for the project's duration,
- 7. The Project area has not been degraded, deforested or burned in the last 24 months;

Certain circumstances may result in an unfavorable assessment and, if not rectified or clarified satisfactorily, could lead to the rejection of the Project activity's registration within the aOCP.

### These circumstances include:

- Non-compliance with aOCP's principles, values, rules, and requirements,
- Issuance of contradictory and/or false declarations by the Project proponent or Project developer,
- Diminished confidence in the Project activity's ability to yield anticipated ecosystem and/or social benefits due to an inadequate risk management plan, which encompasses a comprehensive assessment of internal, external, and natural risks, as well as risk mitigation and contingency planning.

According to the information provided by the Project proponent in the Project Submission Form (PSF), the proposed Project activity belongs to the aOCP category of *Forest management*. Project activities consist of the professional planting of the 1,078 trees from 30 species, from which 9.65% are *Quercus coccifera*, 8.81% are *Quercus ilex*, 7.42% are *Ficus carica*, 7.24% are *Ceratonia siliqua*, 5.94% are *Quercus suber* and 60.95% are distributed among the remaining 25 species. All species are native to the region and are adapted to the local conditions. The planting aims to restore vegetation cover, enhance biodiversity, prevent soil loss and increase water infiltration on a severely degraded terrain. The whole property covers 2.5, while the degraded area covers 1.04 ha. During the first stage of the restoration project, planting and soil works were implemented in 0.46 ha. Restoration activities on the rest of the degraded area will be done in a future phase. Project area and sampling points used for the present analysis are shown in figure 1.



Figure 1. Project area and sampling points used for the NDVI analysis.

## **M**ETHOD OF ANALYSIS

The proposed Project activity was assessed for its alignment with the aOCP rules and requirements, using the following checklist.

Alignment criteria	Yes	No
Does the project belong to one of the following types:	Υ	
Forest management, including ARR		
Regenerative agriculture		
Silvopastoral management		
Urban forests / individual climate action		
Biochar		
Does the project comply with the environmental and social no-harm requirement?	Υ	
Is the project expected to have positive impacts on biodiversity?	Υ	
If the project has already started, is it less than 5 years old?	Υ	
Do the requested VNPCs comply with the additionality criteria?	Υ	
Has documentation establishing land ownership or an agreement for the project's duration been provided?	Υ	
Have any trees or shrubs been cleared in the project area in the last 2 years?	Υ	

Historical land cover dynamics was analyzed using Google Earth high-resolution images as well as NDVI (Normalized Difference Vegetation Index) analysis. The NDVI is a widely used remote sensing metric that provides information about the density and health of vegetation in a specific area. It is calculated from the difference between near-infrared and red light reflectance from the Earth's surface.

When analyzing historic land cover, NDVI can be used to track changes in vegetation over time. By examining archived NDVI data, researchers can observe trends in vegetation density, identify shifts in land use patterns, and monitor the effects of factors like urbanization, deforestation, or natural disasters. Additionally, monthly rainfall is observed together with monthly NDVI to detect changes in vegetation associated with rainfall patterns.

## **RESULTS**

Satellite images (figure 2) show that vegetation was removed in a considerable area inside and outside the parcel, between August 2018 and June 2022, leaving soil completely exposed. NDVI analysis (figure 3) shows that yearly average values were stable, around 0.8, before November 2021. The decline in NDVI starting in December 2021, until 0.5 in January reflect the impact caused by deforestation. Furthermore, the small size of the boxes in the boxplot, in the months from May to November, alternated with long boxes from December-April, in 2019-2021, reflect the presence of deciduous trees (mainly sweet chestnut, *Castanea sativa*) that lose their leaves in winter, while evergreen trees kept high NDVI values all-year long. The species extracted for timber is Douglas pine (*Pseudotsuga menziesii*) an evergreen that, when removed, left the area subject to seasonal variations. A slight slow-down in NDVI drop is observed since the 1st quarter of 2023, when Project activities started. This becomes more evident if we look only at the area where trees were planted and soil works established (figure 4). NDVI dynamics in this area reflect the dominance of evergreen douglas pine, the impact of the clear-cut and of Project activities.



Figure 2. Google Earth images from 2018 and 2022.

NDVI TIMELINE IN "FOREST 4 FUTURE"" PROJECT AREA, LENTILLÈRES, FRANCE. N=100

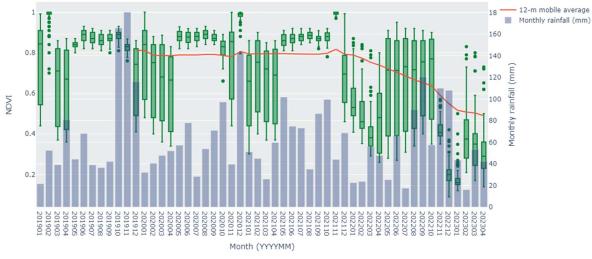
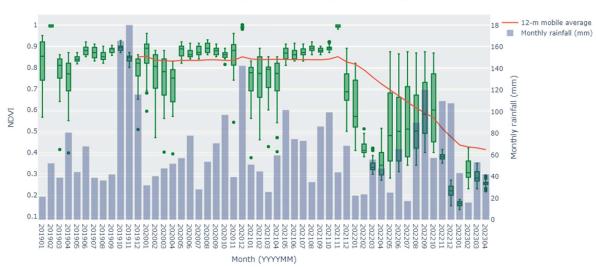


Figure 3. Monthly NDVI and rainfall since January 2019.



NDVI TIMELINE IN "FOREST 4 FUTURE" PLANTED PROJECT AREA, LENTILLÈRES, FRANCE. N=50

Figure 4. Monthly NDVI and rainfall in the, so far, restored area since January 2019.

The degradation severity in the Project area highlights the urgence of restoration activities that help to reestablish vegetation cover and protect soil from erosion. The Proposed project activities are, therefore, of paramount importance for the preservation and recovery of ecosystem services in the area. Furthermore, the project design, which includes ecological, the plantation of 30 species, will enhance biodiversity to levels higher than before, when the area was covered by *P. menziesii* for timber production. Additionally, by increasing vegetation cover in the Project area, rainfall water runoff and soil hydric erosion will decrease, and water infiltration into the underground will increase.

## **CONCLUSIONS**

- The Project area has experienced deforestation and soil degradation within the 12 months preceding the commencement of Project activities, which contravenes aOCP's rules and requirements. However, this event was unrelated to the Project developer and represents a usual practice in the region, where timber production and extraction by aggressive clearcuts have shaped the landscape and continue to contribute to the loss of ecosystem services. The Proposed project activity addresses the urgent need for restoration in this negligently managed area.
- The Project activities, consisting in the plantation of 30 native species, are aligned with the aOCP's principles and criteria. Furthermore, in addition to capturing carbon dioxide from the atmosphere, by increasing vegetation cover, the project is likely to positively impact biodiversity, protect the soil from erosion and sustain rainfall water infiltration.
- The Project activities have not caused net-harm to ecosystems or society, on the contrary, they are expected to create ecological benefits in an area where restoration is critical.
- The proposed Project activity is in alignment with aOCP rules and requirements and is therefore eligible for registration as a Modality B aOCP Project.