PV NATURE

PROJECT IDEA NOTE

Bioestrela

Serra da Estrela

Public Facing

Published on: 07/05/2025

Developed by:

URZE – Associação Florestal da Encosta da Serra da Estrela

C Level Earth Limited

Contents

Overview

Project Title:	Bioestrela
Location:	Parishes: Valezim, Sandomil, Cativelos; Municipalities: Seia, Gouveia; District: Guarda; Country: Portugal
Project description:	Bioestrela presents a bold vision of ecological and cultural regeneration in the Serra de Estrela. We are developing collaborative, science-backed, and community-oriented solutions for restoring biodiversity, protecting natural resources and promoting sustainable land use practices, while considering economical viability. Building on the primary interventions of the AIGP (a government-backed initiative to address basic forest management), Bioestrela will implement truly regenerative solutions that deliver significant and measurable improvements to local ecosystems. The total potential area comprises 5,000 ha located within and close to Serra da Estrela (Portugal's largest Natural Park). The area has experienced extreme fires, which has been exacerbated due to climate change, monoculture planting, non-native species, and land abandonment. As a result, the soils are poor and becoming scarce due to erosion, leading to biodiversity loss and more land abandonment. The vision is of mountain land restored to a more natural, wild and biodiverse landscape within which people can thrive again. The mission is to bring back biodiversity, while creating new regenerative livelihoods that can attract populations back to the territory.
Project Area:	We are prioritising 3 government funded "AIGP" project areas: AIGP Malhão (1,060 ha), AIGP Socorro (2,017 ha) and AIGP Aljão (1,451 ha). Note: AIGPs are areas that have been identified for government-funded integrated landscape management to increase fire resilience. We will be using the AIGP base work as a platform to deliver Bioestrela as an additional programme with greater land regeneration. Working with local communities, we will develop an enhanced regeneration programme with the aim of creating a wild and biodiverse landscape where nature is valued and humans can thrive. The project area will ultimately be the 3 full AIGP areas but we are starting with pilots of intervention on 3 smaller regeneration hubs within these zones: - Valezim (18.52 HA) - Furtado (9.49 HA) - Aljão (71,90 HA) The rest of this document will therefore reference both the bigger project, and the initial regeneration hubs (or pilots).
Project Coordinator:	The project is being coordinated through a dedicated Bioestrela Project team (BEP) comprising of:

	URZE; key lead Beatriz Faria **URZE - Associação Florestal da Encosta da Serra da Estrela** Address: R. Cidade da Guarda. Ed. da Central de Camionagem - R/C. 6290-361 Gouveia, Portugal E-mail: urze.estrela@gmail.com | bfaria.urze@gmail.com Website: www.urze.org ReflorestarPT; Susana Guimarães **ASSOCIAÇÃO REFLORESTARPT - REGENERAÇÃO ECOLÓGICA E SOCIAL** Address: Avenida 25 de Abril n.º948, Costa Velha 4970-656 Soajo, Arcos de Valdevez, Portugal E-mail: info@reflorestar.pt | susana.reflorestarpt@gmail.com Website: reflorestar.pt C Level; Daren Howarth and Angela Newton **C LEVEL EARTH LIMITED** Address: C Level Earth Limited, Innovation Centre, Brighton, UK BN19SB E-mail: angela@clevel.co.uk | daren@clevel.co.uk Website: clevel.co.uk As the later sections of this document will show, the coordinating team comprises a range of different skills and will be coordinating across the project accordingly.
Project Participants:	There are around 600 landowners across the 3 full AIGP areas. These comprise local smallholders, Portuguese people who have moved away, common lands ('Baldios' and 'Coureleiros') and some 'estrangeiros' (foreign landowners). The 3 regeneration hubs (Valezim, Furtado and Aljão) comprise 7 individual landowners including a mix of local and non-local people, as well as a local community at Aljão. We therefore consider these areas to be excellent case studies for how to develop the wider Bioestrela project. In addition, there are local, regional and national associations who will be involved in the project, providing expertise, knowledge of the area, cultural heritage, etc.
Project Intervention(s):	**Restoration work:** This includes technical operations in the field such as forestry operations, the promotion of natural regeneration, planting of native species and support species, habitat restoration and the measurement and monitoring of biodiversity metrics. **Improved management:** This includes planning, management and community engagement interventions and education, which aim at improving land management in the project areas. This also includes the collaboration between AIGP and Bioestrela. Because Bioestrela is located in a Natural Park, the improved management is aligned with current management regulations for the area.

Expected Benefits:	While the AIGP work should help to deliver some fire resilience to the region, there is no capacity for land restoration and limited budgets will actually increase the risk of more monoculture planting. Bioestrela will be providing additional benefits by: ● Regeneration: Working to create a more natural, wild and biodiverse landscape where nature is valued and humans can thrive. ● Resilience: Restoring natural forest and land, which aids adaptation to global warming and creates new economic opportunities for people to live on the land ● Community Partnership: Engaging and working with local landowners, volunteers and community stakeholders to ensure a fully participatory and inspiring approach. Educational events will also be offered to the community as part of the engagement. ● Long-term Impact: Ensuring the restoration work achieves lasting ecological benefits, not just temporary fixes. ● Innovation: Revaluing Nature by developing an approach and technology that can demonstrate biodiversity improvements for the long term within the new framework of Plan Vivo Nature. ● Replicability: Working to create regenerative and viable approaches to the ecological restoration of this region, aiming to bring population back within a forest-based economy that can be replicated in the wider Serra da Estrela and other territories. Specific benefits include: - Halting soil erosion - Improved soil quality and fauna - Water protection (small water cycle) - Increased species richness and species abundance - Potential for harvesting and selling (at local markets, for example) berries, fruits and/or aromatic herbs, olive oil, pine nuts, strawberry tree (medronho), tea herbs from the bushes found/ grown in the forests. There are also people planning to use plants to produce essential oils and other organic cosmetic products). - Local honey production - Supporting the nascent eco-tourism industry within the wider project area. At present, mountain walking trails, BTT trails, eco accommodation and world class mountain river beaches are all within or on the doorstep of the Bioestrela project. - Plan Vivo Biodiversity Certificates will help incentivize the local communities and small holder stakeholders, ensuring they are paid for the ecosystem services they are helping to provide and nurture and supporting annual maintenance of the new forested areas. - This in turn helps to provide sources of employment to attract and retain younger members of the community in the locale.

Methodology Design:	Restoration certificates
PIN Version:	Public Facing
Date Approved:	30/04/2025

1 General Information

1.1 Project Rationale

The Serra da Estrela Natural Park is an area of important conservation value and comprises areas where RN2000 habitats have been identified (Furtado) and ecological corridors (Aljão). In addition to their intrinsic biological value, these natural habitats hold species that are best adapted to the conditions of the area and, thus, their survival should be an aim for intervention projects (*Rocha e Correia, 1994*).

However, the region is extremely prone to fires and is greatly impacted by soil degradation and reduced biodiversity. This is partly due to the prevalence of non-native species (mimosa), monocultures (pine) and rural abandonment. To shift this, we need to restore the land and increase its resilience, but also provide opportunity and incentives for people to actively manage and care for the land.

As the government implements a basic fire resilience programme (AIGP), our plan is to build on this baseline work and create enhanced planting schemes where biodiversity and communities are put at the heart of the land regeneration.

In addition to encouraging diverse planting mixes of native species, landowners will be supported with developing regenerative practices that support soil restoration, biodiversity and water protection. They will also be supported in identifying and creating regenerative ways to work with the land so that they can drive additional incomes.

Please refer to the Theory of Change diagram in the Annex as well as the table below.

Activities	**AIGP**	**Bioestrela**
Clearing of scrubland	x	X
Preparing the land for planting	x	X
Plantation of indigenous trees	x	X
Adding more variety of species to follow plant strata and ecological succession (additionality in plant diversity)		X
Educational benefits for the local and wider communities		X
Performing forest resilience operations	x	
Measurement of baseline biodiversity		X
Monitoring biodiversity uplift		X
Support the creation of economic activities related to the restoration and conservation of these areas		X
Engagement programme for ongoing interaction and support to connect local communities together		X

1.2 Project Interventions

Table 1 – Project Interventions

Intervention Type	Project Intervention	Expected Benefits
Improved management	**Integrated planning and management**	A cohesive approach for all project activities improves project efficiency. The proposed sustainable practices enhance habitat resilience, contributing to long-term biodiversity uplift and sustained ecosystem health.
Improved management	**Skills/ experience to develop project activities**	Combining experts and local capacity helps to foster a skilled workforce that is capable of ensuring the project has long-term impact. Being rooted in community work, it also leads to stronger local communities and long-term impact.
Improved management	**Mobilisation of participants/local community**	Community engagement promotes better land stewardship, which supports biodiversity long-term while strengthening environmental awareness within the larger community.
Improved management	**Compliance with regulations of Natural Park (ICNF)**	Because the project is located inside Serra da Estrela Natural Park (PNSE), all proposed interventions must be aligned with conservation regulations, protecting the natural and cultural heritage and enhancing ecological integrity. This compliance supports long-term biodiversity conservation, and lessens the risk of conflicts with the authorities.
Restoration	**Forestry operations (clearing scrubland, thinning trees, etc.)**	These activities increase fire resilience, habitat health and structure, while also reducing risks to nearby communities, improving community safety and supporting ecosystems.
Restoration	**Promotion of natural regeneration and plantation of new vegetation (trees, bushes, cover crops, pollinators species,etc)**	Promoting natural regeneration is letting the ecosystem recover naturally. The plantation of native species following natural succession and plant strata will aid the whole process, improving air quality, water infiltration, soil retention and also capturing carbon.
Restoration	**Habitat restoration for diverse ecosystems; measuring biodiversity uplift across all flora and fauna**	Restoring a variety of ecosystems and habitats supports a wider array of species (fauna and flora) and increases ecosystem resilience. By tracking biodiversity uplift we can assess the efficacy of our interventions, enhance scientific understanding and draw positive attention to these efforts, which might attract additional support and funding.

Improved management	Funding and the **coexistence of two projects in the area**	The collaboration and alignment between the two projects amplifies their impact and longevity, while providing socio-economic benefits and enhancing community wellbeing through resilient ecosystems.

1.3 Project Boundaries

The required maps can be found in Annex 1 – maps.

Table 3 Project Boundaries

Location:	Portugal, district of Guarda, municipalities of Seia and Gouveia, parishes of Valezim, Sandomil and Cativelos.
Geographic Coordinates:	The geographic coordinates of a central point of the project area are 40°21'37.36"N; 7°44'37.34"W.

Project Area(s):	The project region consists of 3 regeneration hubs comprising 100 ha. The first intervention phase amounts to 28 ha.
Project Region(s):	The total extent of the proposed project areas (AIGP Aljão, AIGP Malhão and AIGP Socorro) is about 4528 ha.
Protected Areas:	The Natural Park of Serra da Estrela is a Site of Conservation Interest. Two of the 3 regeneration hubs are located inside the boundaries of the Natural Park, in complementary protection areas.

1.4 Land and Management Rights

The land is owned by the smallholders/ landowners who comprise:

- Local smallholders and families who are private landowners, living on the land

- Private land owners who have moved away from the region but still own the land

- Local community groups (such as “Baldios” and “Coureleiros”) who collectively own plots of land, and have a nominated person (local president) to represent them in discussions

- ‘Estrangeiros’ (foreigners), people that come from other countries but have bought land privately and established roots in this area.

All of the land falls within the jurisdiction of the Natural Park, and therefore landowners must comply with ICNF conservation guidelines and rules to ensure the area is protected.

As part of the wider AIGP work, all landowners have been contacted and participants signed agreements for participating in the program.

All of the pilot areas in Bioestrela have the landowners identified (and landowner agreements have been signed). Bioestrela will then scale up by running behind the AIGP - thus ensuring that all landowners are identified and engaged accordingly.

2 Stakeholder Engagement

2.1 Stakeholder Identification

For the **Bioestrela project**, the stakeholder group comprises a number of different entities.

Primary Stakeholders

- Project participants i.e. the landowners themselves and the wider local communities (all of whom are outlined in section 2.3). At present, these communities are engaged with the land to different levels, but all are impacted by forest fires and the increasing soil degradation. Therefore, we see this project as delivering direct benefit to them, creating opportunities for improved soil fertility, diverse vegetation, regenerative farming, restoring a forest economy, as well as biodiversity certificates.

Local Stakeholders

- Third party businesses in the surrounding area will become important stakeholders as Bioestrela establishes. These businesses will provide markets for the natural products and goods being developed on the land (natural cosmetics, honey, medicinal herbs, etc.) including via the local Sandomil market. Eco-tourism and retreat opportunities will also grow in the area, supporting both education and employment. We have already identified some potential partners who would be interested in working with the local communities to develop tourist activities and we are in discussions about how project participants can help host volunteers and contractors working on these projects.
- We are liaising with some local young beekeepers to look at how we can collaborate in the Valezim regeneration hub. The aim is to provide access to land where beekeepers can support each other with maintenance - and support wider pollination across the pilot area.
- Local government bodies, such as the Juntas de Freguesia (parishes) of the region, will be engaged to support with information and resources, as well as to help us reach the wider population.

Secondary Stakeholders

- Various Local Associations (NGOs) and Cooperatives with whom we will be developing strategic partnerships. Ultimately, our aim is to bring benefits to the wider community in Serra da Estrela, by supporting the replication of Bioestrela in the wider territory.
- We are in contact with Portuguese university researchers to explore monitoring the biodiversity uplift, studying the socio-economic impact of the project and impacts of desertification and soils.
- The authorities with overall responsibility for land and/or aquatic management and resource use within the project region are ICNF (Instituto para a Conservação da Natureza e Florestas) and also APA (Agência Portuguesa do Ambiente).
- The central Portuguese government will be funding the baseline AIGP work, and will require regular updating on the project. They are not stakeholders in the Bioestrela uplift (as this work goes beyond the basic AIGP requirements) but we hope and anticipate that the success of Bioestrela will encourage the government to apply additional requirements on AIGPs to increase biodiversity and soil restoration, alongside fire resilience in their programmes. However, this is not likely to disincentive additional legislative requirements because the extent of the fire challenges across Portugal are so profound. In order to secure funding (e.g. from the EU) the government needs to demonstrate both good practice *and* implement appropriate legislation.

- Fundo Ambiental is the funding entity of the AIGP. The AIGP projects that URZE is responsible for have been approved.

2.2 Project Coordination and Management

The project coordination team (BEP; Bioestrela Project) comprises partners from URZE, ReflorestarPT and C Level.

The team at URZE is multidisciplinary and comprises forest technicians, an agronomist, a biologist, a topographer and an archaeologist. This ensures we have comprehensive insights into local flora, fauna, conservation sites and priority habitats, as well local land uses and cultural heritage.

ReflorestarPT brings expertise in agroforestry, syntropic approaches to ecological restoration and farming practices, successional forestry, biomimicry, permaculture, landscape architecture, project coordination, community engagement and event production on civic engagement, ecological education and awareness.

C Level has 25 years experience in orchestrating regenerative programmes offering services to businesses globally who wish to restore nature, remove carbon, and rebuild community by integrating inspiring regeneration projects into their business. C Level provides project orchestration and communications services to support the evolution of the best cultural and ecological regeneration projects.

We are also exploring broader partnerships to aid with different technologies, such as Gentian for satellite imagery and an economist with expertise in Forest economy and community-owned economical structures.

Table 4 Responsibility for Project Coordination and Management Functions

Project Coordination and Management Function	**Responsible Party/Parties**
Stakeholder engagement during project development and implementation	BEP team
Ensuring conformance with the Plan Vivo Biodiversity Standard (PV Nature) and compliance with applicable policies, laws and regulations	BEP team
Developing technical specifications, land management plans and project agreements with project participants	BEP team
Ensuring that the PDD is updated with any changes to the project	BEP team
Registration and recording of land management plans, project agreements, and sales agreements	BEP team, with Plan Vivo Nature sales agreements and management from C Level
Managing project finances and dispersal of income to project participants as described by the benefit sharing mechanism	C Level - project development phase;

	URZE - regarding certificates
Managing Plan Vivo Biodiversity Certificates in the Plan Vivo Registry	C Level
Preparing annual reports and coordinating validation and verification events	URZE with support from C Level
Securing certificate sales and other means of funding the project	C Level
Assisting Project Participants to secure any legal or regulatory permissions required to carry out the project	BEP team
Providing technical assistance and capacity building required for project participants to implement project interventions	BEP team
Monitoring progress indicators, socioeconomic indicators and climate indicators and providing ongoing support to project participants	URZE
Measurement, reporting and verification of biodiversity benefits	URZE

2.3 Project Participants

The project participants are landowners from the parishes in AIGP Malhão, AIGP Socorro and AIGP Aljão. Most reside in the same area as their owned land and so will be directly involved in the work. The following table provides a simple summary of the land areas. The phasing between interventions 1 and 2 is informed by proximity, (ensuring that adjacent mosaics are worked appropriately). All of the landowners will be directly involved in the plans (and associated benefits). Note that Aljão regeneration hub consists of land that belongs to a Beneficiary Association, with which URZE has signed a deal to be the managing entity on behalf of local people.
Note: landowners have been anonymised for GDPR purposes (L = landowner)

VALEZIM	L1	L2	L3	L4	L5	L6	L7
Land area for 1st intervention	0.75HA	0.89HA	2.15HA	1.53HA	0.21HA	n/a	n/a
Land area for 2nd intervention	2.08HA	7,59HA	1.91HA	0.28HA	n/a	1.11HA	0.73HA
Description	Mix of crop and forestry	Mix of overgrow n terraces, forestry	Mix of overgrown terraces, forestry	Steep forestry	Mainly crop and pastoral land	Forestry	Forestry

FURTADO	Landowner 1	Landowner 2
Land area for 1st	1.29 HA	n/a

intervention		
Land area for 2nd intervention	7.94 HA	0.27 HA
Description	Steep terrain with forestry and agricultural land	Steep terrain with olive groves and forestry

ALJÃO	ABPG (Associação de Beneficência Popular de Gouveia); coordinated by URZE on behalf of local community
Land area for 1st intervention	20HA
Land area for 2nd intervention	51.9 HA
Description	Mix of scrub and forestry, with option to implement some agroforestry and further support of community work by developing ecotourism solutions

2.4 Participatory Design

Participation in the **AIGP** programme was led by URZE and comprised public presentations and information to communities. URZE worked with landowners to understand requirements (within the scope of the designated AIGP budget and guidelines) with the focus on fire resilience, clearing scrubland, and promoting agriculture. It should be noted the approved plan is mandatory for landowners.

For **Bioestrela**, the programme is, by design, much more collaborative and participatory. In this scheme, participation is entirely voluntary (i.e. it is not a government mandate), and our comms strategy outlines the benefits on both an individual level (improved soil fertility and yield, direct commercial opportunities and the potential for the biodiversity certificates scheme) as well as the broader community impact. Landowners are encouraged to think in terms of long term ambitions for the land (i.e. themselves and their future generations) and to engage with restoration planning that optimise biodiversity and habitats as well as fire resilience. Landowners have been informed about their role to collaborate during the annual monitoring process as well.

To help illustrate the difference:

- Under AIGP, a landowner could opt for monoculture plantations of native species with fire resilience, thus complying with the government guidelines but not creating significant biodiversity impact.

- Under Bioestrela, the same landowner would work with us to develop a mixed planting scheme, delivering enhanced ecological benefits and growing premium products by adopting sustainable methods.

The process for the participatory design for Bioestrela is already underway.

- For the pilot sites, we identified several regions of mosaics which addressed core criteria; good mix of existing land use, good representation of ownership (local native, non-local native, *'estrangeiro' (*foreigners*)* and community owned parcels), good representation of different topographies, good mix of potential new uses - to showcase the variety of opportunities that Bioestrela brings.

- Through direct engagement with different landowners, we identified the areas within these mosaics that had the greatest community enthusiasm, but that also delivered against our mixed criteria. This helped shape the 3 pilot areas. It is worth noting that project participants across all of these schemes comprises a mix of people of different ages and backgrounds.

- We conducted 1:1 meetings with each landowner over the course of Spring and Summer 2024 and arranged group meetings, where landowners could meet both with our team and each other, to discuss ideas and questions, and develop a sense of belonging within the participants group. These meetings allowed the participants to share their views for their plots, and help us to better understand their goals and how they could benefit from help.

- In November 2024 we provided a Landowner Memorandum of Understanding, outlining how we plan to work with the landowners in the coming months. These outline our commitment to collaborative engagement and ask landowners to agree to practical matters (such as attending meetings, providing insights about their land and participating in video and photography documentation).

- As we move to Spring 2025, we will be arranging more 1:1 meetings with landowners in order to conduct the detailed planning. We will also be scheduling more group meetings where landowners can share their ideas more widely. We are also arranging site visits to other areas of interest within the region (such as good examples of regional regeneration, syntropic agroforestry) and arranging educational classes on particular areas of interest to offer to primary and secondary stakeholders).

- Other local NGO's to the Serra da Estrela are being contacted for views, solutions and suggestions that might be of use for sharing, and to support our ambitions of replicability through partnerships (i.e on farming and forest economy, social and cultural impact). Contact with several local organisations is already underway and will be developed during the first half of 2025, during the technical planning phase.

- As we plan the baseline monitoring, we will also be engaging and training the landowners in how they can help support this work (for example monitoring camera SD cards, supporting with simple counts).

- Once technical designs have been approved with individual landowners and funding secured, we will then be working with landowners to schedule and roll out the land improvements. The work will necessarily be phased in line with the AIGP implementation and the on-the-ground team will be in contact with landowners on a weekly basis.

- Educational events for the participants, open to the general public participation as well, will be developed for community engagement and to level up the community responsibility for the care and maintenance of the intervention areas.

- Guidance for ongoing maintenance will be provided (in line with some of the education work already outlined) and supported by the team (as investor funding will necessarily outline ongoing provision of services).

- Landowners will be encouraged to support biodiversity monitoring on simple activities such as photography and soil collection with training. Supervision and complex tasks will be undertaken by the team.

- Landowners will be invited to join the benefit sharing mechanism of PVNature, which will be managed and coordinated through URZE, ensuring direct, on-the-ground presence and contact for queries regarding the scheme and its monitoring.

It is worth clarifying that all efforts are being made to include everyone involved, regardless of the size of their property or their knowledge. The project coordinator will ensure equal opportunities, without discrimination based on gender, sexuality, ethnicity, caste, geographical isolation, wealth/poverty, age, ability, education level or land-ownership.

2.5 FPIC Process

2022 and 2023; the project was initially presented to landowners in the meetings as part of the Q&A sessions for AIGPs. This enabled initial discussion and assessment of enthusiasm

2024; individual visits to the landowners, plus group meetings with potential participants for the regeneration hubs. As part of the discussions, FPIC forms were given to potential participants to gather their interest and involvement with the project throughout all its stages.

As you can tell, the idea is to foster community engagement, a sense of belonging and a learning environment for everyone involved with the project. We have had multiple meetings with land owners (both individual and representatives of collective land ownership), representatives of the local community and other stakeholders. We know that engagement is dependent on frequent and in-face meetings, but also workshops and field visits, so participants feel involved and informed and have direct and regular contact with the team.

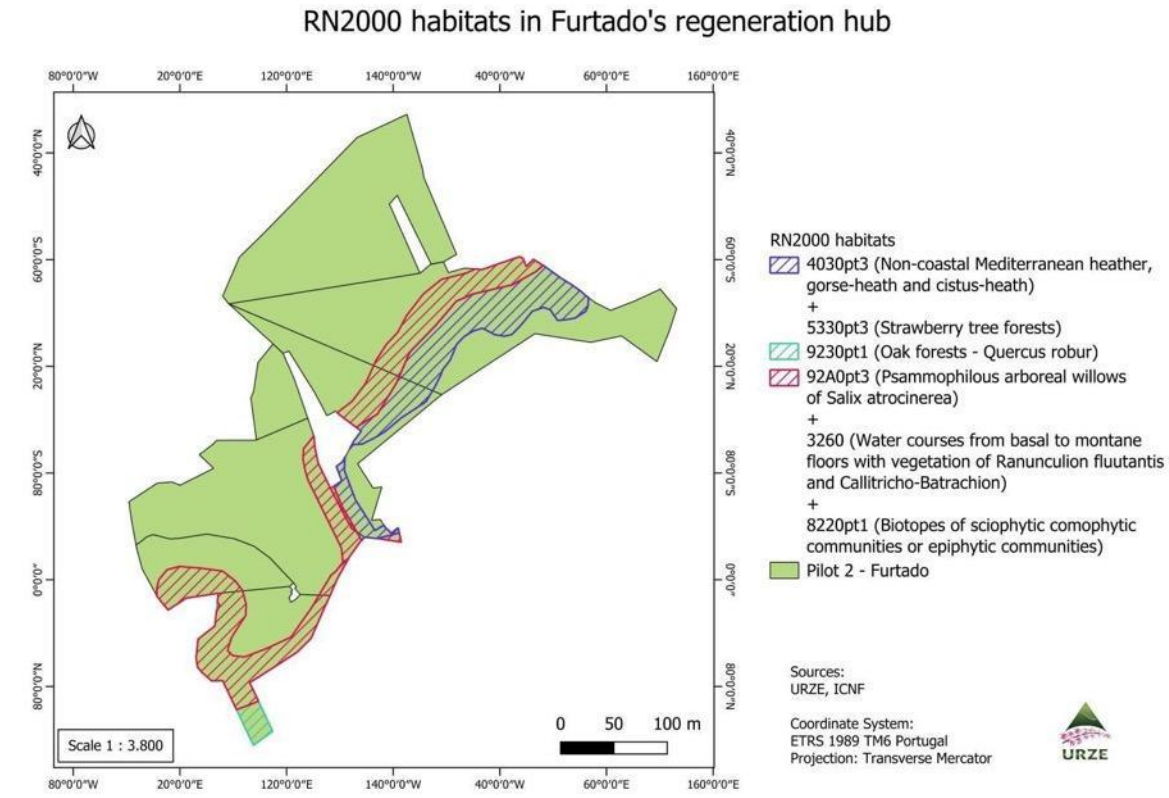
3 Project Design

3.1 Biodiversity Baseline

There have been some important RN2000 habitats classified in the project area, namely in the AIGP Malhão and Socorro and, more specifically, in Furtado's regeneration hub. Those habitats are: Non-coastal Mediterranean heather, gorse-heath and cistus-heath (4030pt3); Strawberry tree forests (5330pt3); Oak forests (*Quercus robur*) (9230pt1); Psammophilous arboreal willows of *Salix atrocinerea* (92A0pt3); Watercourses from basal to montane levels with vegetation of *Ranunculion fluitantis* and *Callitricho-Batrachion* (3260); and, Biotopes of sciophytic comophytic communities or epiphytic communities (8220pt1).

The species that have been sighted inside the project area limits are several bat species (*Rhinolophus euryale* (NT), *Rhinolophus hipposideros* (LC), *Rhinolophus ferrumequinum* (LC)*, Myotis myotis* (LC), *Myotis blythii* (LC)), otters (*Lutra lutra*), reptiles (*Chioglossa lusitanica* (NT), *Lacerta schreiberi* (NT)) and insects (*Euphydryas aurinia* (LC)). The flora species include western rustwort (*Marsupella profunda* (VU)). This information about fauna and flora species is regarding RN2000 sites and databases. Inside the brackets, the letters correspond to each species' conservation status, according to IUCN classification.

This map shows the habitat types mentioned above, in the regeneration hub of Furtado.



The following maps show where the species mentioned can be found inside the project area, according to the RN2000 data.

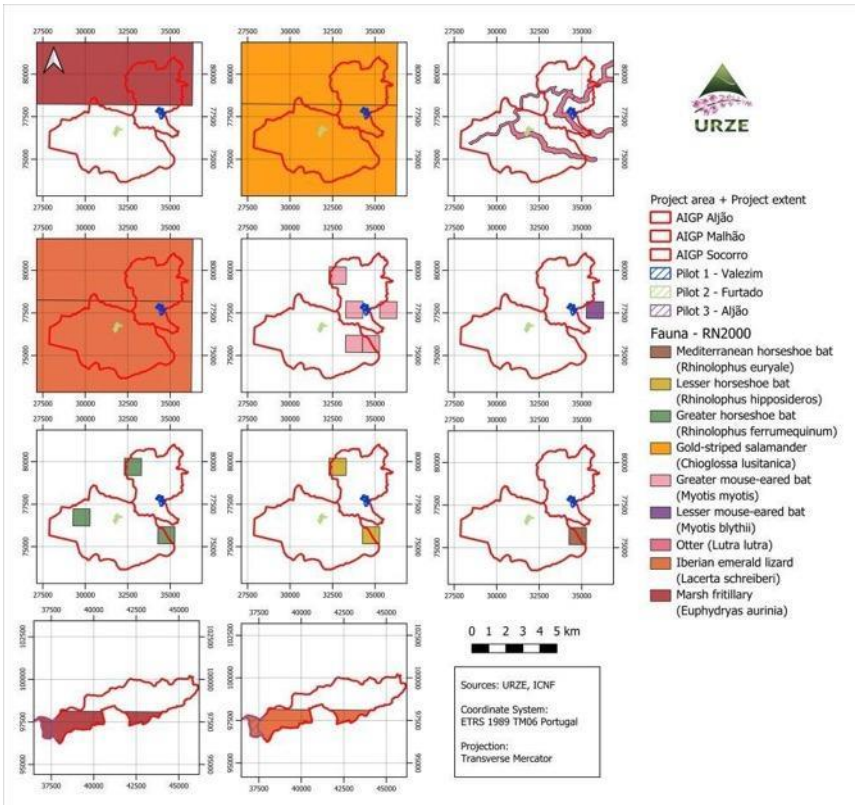


Figure 6 - Distribution of species with conservation status in the project area - fauna.

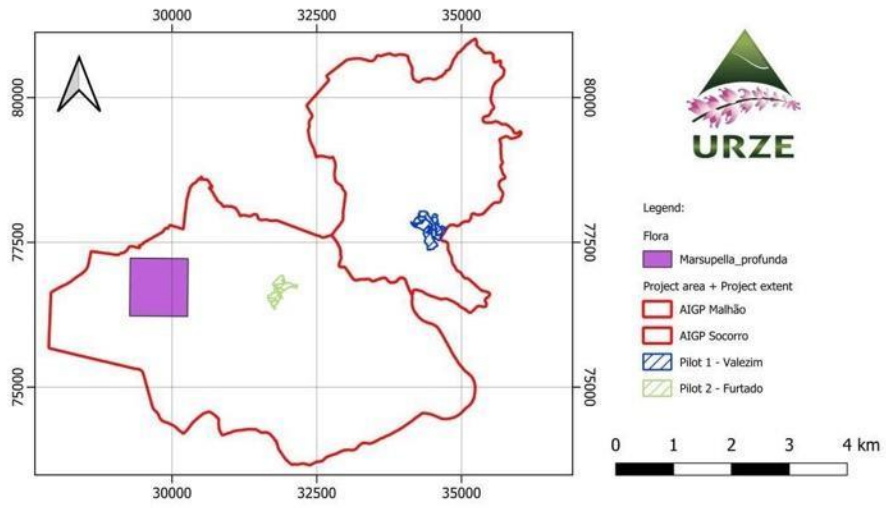


Figure 7 - Distribution of species with conservation status in the project area - flora (source: ICNF).

There are many other plant and animal species in the area of Serra da Estrela Natural Park (PNSE).

In the event of the project not taking place, the AIGP work will result in land clearing and some ongoing land management. This will reduce the risk of fires and should result in some modest soil improvement. However, the limited budget and limited planting schemes of AIGP mean that monoculture planting will continue and biodiversity uplift will be limited.

With Bioestrela, there will be significant plantations of additional native plants (trees and shrubs) to boost the ecosystems, creating more strata in the habitats, respecting plant succession and soil improvement over time, bringing more biodiversity to the project area. The monitoring of biodiversity would also not happen in a "non-project scenario" and this element is vital to studying the evolution of the habitat and nature restoration so that we can apply learnings elsewhere.

3.2 Socioeconomic Baseline

We expect that, for some participants, Bioestrela will provide a very significant uplift in their annual income, in some cases enabling them to viably and sustainably work with their land for nature and biodiversity uplift and protection. However, we are unable to access specific information on existing incomes etc.

The community life is heterogeneous and comprises people of different socioeconomic backgrounds including those who live off of the land, and those who have separate incomes. There will be direct beneficiaries, and wider beneficiaries in terms of local communities. About 54% of total participants are women, and 8% of total participants are under 19. This is an area characterised by an increasingly ageing population. The ageing index has the value of 361 elders for every 100 young people. Foreign residents in the area amount to 2.4% of the resident population. The average monthly salary is 915€, which is a little more than Portugal's minimum wage (820€). There is no information regarding the people employed in the biggest companies of the municipality. There were values in 2011, but the values are null for the census of 2022.

On the other hand, data from 2022 suggests that there were 514 people enrolled in the unemployment centre, 368 people working for local public administration. There are also 9292

people that receive pensions (due to old age, incapacity and for survival), 1,166 people that receive their retirement pension and 614 people that receive the RSI (Rendimento Social de Inserção) (subsidies for poor families).

(Sources: Fontes/Entidades: INE, ANSR/MAI, APA/MA, BP, CGA/MTSSS, DGAL, DGEEC/MEd - MCTES, DGEG/MEc, DGO/MF, DGPJ/MJ, DGS/MS, ERSAR, GEE/MEc, GEP/MTSSS, ICA/MC, ICA/SEC, IEFP/MTSSS, IGP, II/MTSSS, ISS/MTSSS, SEF/MAI, SGMAI, SIBS, S.A., © PORDATA - https://www.pordata.pt/municipios/quadro+resumo/seia-822764 ; https://www.pordata.pt/municipios)

Sandomil; **Valezim**; **Cativelos**

3.3 Environmental Baseline

The current climate conditions in the proposed project area are those typical of Mediterranean regions, with Atlantic influence. Characterised by hot and dry summers with cold and wet winters, most of the precipitation occurs during the wet seasons. The following maps show information about temperature, precipitation, and air humidity in the proposed project area (Figure 8). This information was collected from *Atlas do Ambiente*.

In Figure 9, we present graphs and maps, from *Portal do Clima*, that represent the expected mean temperature, precipitation and air humidity as predicted in the IPCC scenario RCP8.5 regarding the period between 2041 and 2070. We can expect temperatures to get higher, while air moisture seems to plateau and rainfall seems to decrease, over time. This might mean drier and hotter weather, short wet seasons, which might make droughts and the occurrence of wildfires more likely and more severe, impacting biodiversity, flora, fauna and inhabitants.

With recurrent forest fires, the carbon stocks decrease. However, not much has been done after the most recent fires that occurred in the study area (2017), and thus, the vegetation re-sprouted and regenerated, creating what is most common now - forests of pine trees, with high densities, low management. There are also exotic invasive species among the pine trees, for example, *Acacia dealbata*. Some people may cut some trees, either after a fire or after the rotation period, planting other trees in their place, usually. Provided this information, we can say that the carbon stocks are currently stable, but it always depends on the rotation (planting vs. cutting down trees) and the fire risk inherent to this region.

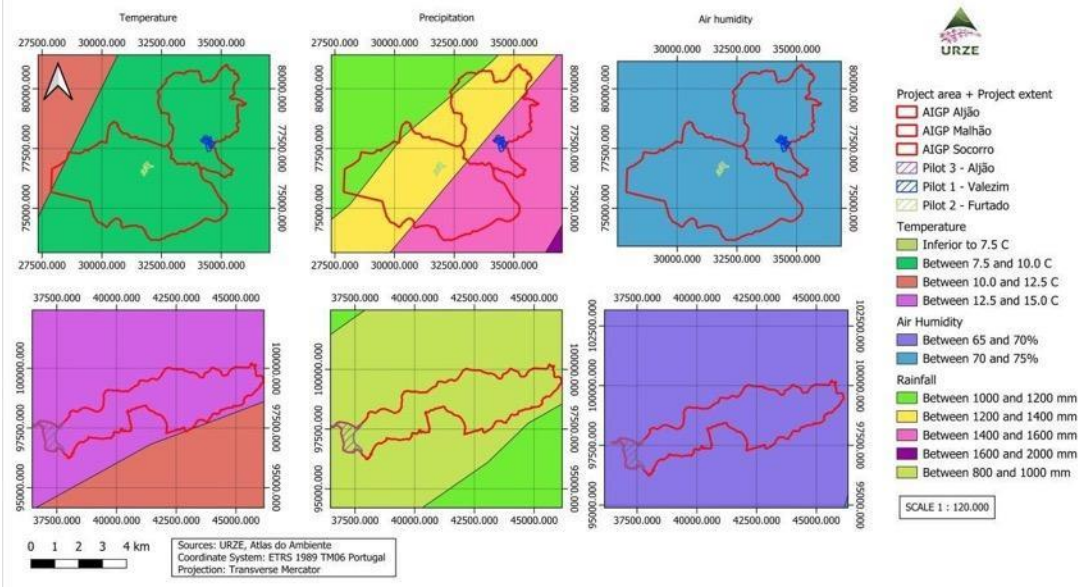


Figure 8 - Current temperature, precipitation and air humidity conditions in the proposed project area.

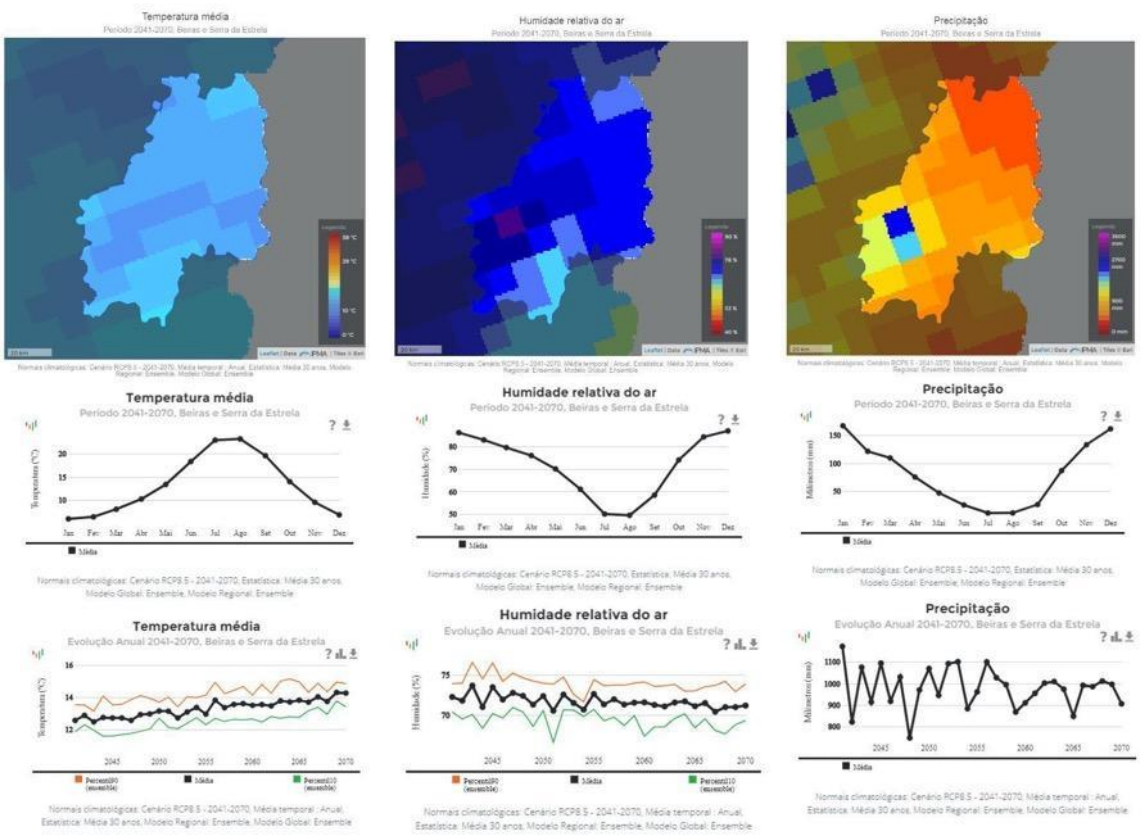


Figure 9 - Maps and graphs depicting the predicted evolution of (1)temperature, (2) air humidity and (3) precipitation in the district of Guarda, where the proposed project area is included (source: Portal do Clima (http://portaldoclima.pt/pt/)).

With global warming, we anticipate there will be lengthier drought periods and shorter periods of intense rainfall. This creates an environment that is hot and dry, making it more prone to the occurrence of forest fires.

Regarding the *ecosystem services* that are expected to be impacted by this project, we based ourselves on CICES (*The Common International Classification of Ecosystem Services*). The CICES structure consists of "Sections", "Divisions" and "Groups". There are provisioning services (both biotic and abiotic), regulation and maintenance services (both biotic and abiotic), and cultural services (both biotic and abiotic). This project is expected to have a positive impact on several ecosystem services. Some of them include: provisioning (biotic), regarding biomass and genetic material; provisioning (abiotic), regarding water; regulation and maintenance (biotic), regarding pest and disease control, regulation of soil quality, water and atmospheric conditions; cultural (biotic), regarding the physical, intellectual and spiritual interactions with the natural environment and other biotic characteristics that have a non-use value.

In the AIGP project there is a component for the remuneration of ecosystem services. However, it is rather limited and does not account for all the dimensions and the real complexity of the ecosystem services. In the AIGP, there is a table that establishes an amount of money per hectare per year to pay for ecosystem services. There is no measurement or monitoring required. This is because the values in the table were attributed and based on the land use types, so leafy tree forests (both existing and new forests) are worth more than, for example, agricultural land use (crops, olive orchards, vineyards, etc) or pasture land.

In the Bioestrela project, the scenario is completely different and the impact is broader and deeper. In this case, the remuneration of ecosystem services comes from the sale of biodiversity certificates, which require robust data and methodologies, frequent monitoring and an active work towards restoring and improving ecosystem services in the area.

Table 2 Initial Project Logic

	Description	**Assumptions/ Risks**
Outcomes – Intended overall project aim		
Biodiversity Benefit	Increased biodiversity due to the restoration of forest ecosystems, using native and support species, in respect of plants strata and successional forestry, which guarantees ecosystem health and resilience. Restoration efforts consist of clearing the overgrown scrubland and reducing the monoculture concentration, while promoting natural regeneration. Some native trees and shrubs will also be planted. Leafy trees are, generally, more resilient to forest fires. Some examples include: chestnut tree, strawberry tree, holm oak tree, cork oak tree, Pyrenean oak tree, Douglas fir, Olive, etc. More vegetation on the ground, such as soil covers, can provide shelter, breeding areas, food for animals, and attract pollinators. By planting trees but also shrubs in high density, we create an abundance and richness of species that will strengthen the health of the ecosystem and diversify income options for participants.	Every summer there is a risk of intense forest fires. Native forests and restored natural habitats are more resilient and will have a greater chance of survival and stronger recovery chances in case of this possible occurrence. Bioestrela designs will include additional firebreaks over the landscape and focus on waterline restoration and reinforcement. Fire breaks are strips of land that can either be totally cleared, where the law states so (i.e. close to roads and underneath power lines), but can also be strips of land where the vegetation doesn't grow very tall, like strawberry trees or stone pine trees. In addition to the Bioestrela designs helping to decrease the impact of wildfires (see previous points), the boosting of forest, agriculture and touristic value to the lands, helps to bring back more human presence and active land maintenance. These will also contribute to a higher level of protection from fires.
Socioeconomic Benefit	Stakeholders get an incentive to care for their land and the forest ecosystem, keeping it as natural and diverse as possible. Increase natural ecosystem resources (i.e. medicinal and aromatic plants, agroforestry products). Support the	During the pilot phase Bioestrela will focus on creating additional income opportunities through small businesses (natural cosmetics, medicinal plants, bee keeping, forest products) and tourism. It is worth noting that creating more diverse landscapes will also attract more tourists to visit and stay in this region,

	nascent eco tourism industry in the project valleys. This will help the permanence of the project as it increases the value of the area and its resources. It will attract more people and more participants as well, since the pilots in the regeneration hubs will serve as an example.	which could result in some gentrification and long term price rises. However, the focus is very much on supporting local communities to get benefit from the land, as such, they should benefit from the uptick in the local economy.
Environmental Benefit	Climate resilience with biodiverse forests. More trees will also help, in the long run, with water cycle and availability and climate regulation, two vital ecosystem services.	There is always the risk of catastrophic consequences from climate change, such as droughts, forest fires etc. However, with increased vegetation, abundant plantations and human presence, there will be more air humidity in the areas and more irrigation activity and water which help to increase resilience.
Outputs		
Output 1	Sustainable forestry practices adopted across the Bioestrela region, resulting in increased biodiversity, soil regeneration, water retention and fire resilience.	- Risk that some participants show resistance to the adoption of sustainable and organic practices, however we assume the educational workshops will change this. - Risk of little involvement of participants due to old age or not being around much. This should be reversed as a sense of community is established and people mutually support each other. - Risk of, even if all best practices are used, biodiversity uplift is not significant from a monitoring perspective. This is why we want to adopt a best practice approach using multiple different methods (not just digital), we will achieve a more rounded picture for communities, stakeholders and investors.
Output 2	Improved smallholder income from the biodiversity-centred forests.	- Assume biodiversity uplift certificates can be issued from year 2, but there is a risk these

		may not be able to be issued until year 5 due to delays in biodiversity increases getting truly established - Risk of small value for the certificates in the market, especially when compared with annual costs for monitoring and maintenance - We are therefore placing a strong emphasis on helping landowners identify ways to drive income benefits from their land, beyond just certificates - Risk of Project not being self-sufficient and we cannot secure alternative private funding
Output 3	Promote wider awareness of Plan Vivo and the importance of engaging local communities in caring for our planet, the forests, nature and biodiversity.	- There is a risk that certificates are not as financially captivating for landowners/ participants as the production forest (wood) market - Risk of fires completely destroying the forests (in and outside the project area), increased erosion, soil loss. However, Bioestrela's focus on diverse tree-covered habitats will contribute to more resilient ecosystems, regeneration of the soil, water and carbon retention, fire resilience and future income opportunities.
Output 4	Boosting ecosystem restoration and improving biodiversity leading to enhanced ecosystem services. Reduce risk of desertification.	- Risk of large forest fires, during the hot and dry summers. Such events can destroy the long-term hard work of the project in a short period of time. - By planting more trees and wider species diversity, aided by natural regeneration, we can restore the areas that were burned and are now composed mainly of scrubland. Managing these forests, and reducing fuel content, will prevent large uncontrollable fires from happening as frequently. This will have a wider

		snowball effect, leading to better air quality, soil conservation, creation of different habitats/niches, water and carbon retention, etc, which boost the area's ecosystem services over time.
Output 5	Cooperation of many private landowners with diverse land management objectives and how this project could be an exemplar for projects globally with similar conditions	Landowners may have evolving objectives for their land, but that is why the project has been designed to be so participatory and collaborative. Landowners are invited to think about their long term aspirations for the land and to co-design solutions that best serve their needs.

3.4 Proposed Biodiversity Monitoring

Table 5 Prospective Biodiversity Monitoring

Selected Biodiversity Monitoring Tool	**Target Groups(s) the Biodiversity Monitoring Tool will target**	**Reason why this tool has been selected**	**Monitoring activities. Detail project specific considerations for monitoring this target group.**
Required Target Groups			
Acoustic Monitoring	Birds	Portability, efficacy, data digitally recorded	Early in the morning for most species; Spring and Autumn.
	Bats	Portability, efficacy, data digitally recorded	Subject to more data exploration on existing records, dusk and seasons tbc
	Frogs	Portability, efficacy, data digitally recorded	Subject to more data exploration on existing records (timing tbc)
High Resolution Imagery, quadrant and transect methods*	Plants (herbaceous and woody plants <2m in height)	Ability to engage with participants, efficacy, data digitally recorded	Forest and scrubland are recurrently burned in the dry season therefore monitoring will need to be done throughout the year, if possible.
Additional Recommended Target Groups			
Tool 3 – High	Trees	Efficacy, data digitally	Trees are important in

resolution imagery and forest inventory*		recorded	steep slopes for soil retention and water infiltration. Track progress of natural regeneration and planted trees in the restoration of the habitats.
Tool 4 – Camera Trapping	Small terrestrial mammals	Portability, efficacy, data digitally recorded	The project area is renowned for numerous mammal species that make up much of the higher food chain and essential for a healthy ecosystem.
Tool 5 - Pitfall traps*	Ground dwelling insects	Ability to engage with participants, efficacy	Ground dwelling insects are a crucial metric for soils' biodiversity and health.
Tool 6 - Malaise traps*	Flying insects	Ability to engage with participants, efficacy	Because we are planting diverse species of bushes, this target group is key to understanding how project interventions are bringing food and shelter for these animals.
Tool 7 - Microbiology analysis*	Soil microbiology	Efficacy, relevance of data in measuring habitat health (through soil health)	Soil is the basis of life. A healthy soil, with a diverse and rich microbiota, organic matter and good water content is the best basis for vegetation to grow and for nature to thrive. Through the rigorous analysis of soil samples, we can effectively see the changes in soil health (and habitat health) throughout the project duration.

*Non-digital methodologies that do not contribute to PVBCs but will be useful in overall biodiversity monitoring.

3.5 Additionality[1]

It is important here to distinguish between AIGP and Bioestrela, and to show how it works:

[1] See Baseline Scenario and Additionality Assessment Tool

The primary role of the **AIGP** is to clear the land for fire resilience. While there is provision for *some* native species planting, the budget is constrained to a small mix of plants which will be added on a needs basis. Planting is focused on ensuring fire resilience, not increasing biodiversity, soil fertility or having community impact and social or economical benefit.

Landowners who sign up to **Bioestrela** will be consciously choosing to be part of a more participatory scheme, where we will work with the landowners to optimise the land and budget for regenerative purposes. This means additional attention to ensuring a wide mix of native species for planting and seeding, adopting regenerative forest management and farming practices, creating biodiversity habitats and support in developing economical opportunities, such as agroforestry or beekeeping, that allow people to stay in this landscape and revalue the forest through the optics of holistic forest management. The table on section 1.1 helps illustrate the different interventions and goals of both projects. It is envisaged that these landowners will enjoy benefits of both additional income from these business activities and, in the long-term, from biodiversity certificates which will act as incentives for regeneration and protection of forests.

Table 6 Initial Barrier Analysis

Project Intervention	**Main Barriers**	**Activities to Overcome Barriers**
Integrated planning and management	Financial/ Economic (Insufficient financial resources to develop the project)	Funding has been secured to develop the initial project planning and management. Fundraising activities will be developed to enable implementation, long-term project management, and ongoing community engagement. This will also be used to map out the integrated support system for managing transaction costs and payments for Ecosystem Services and the provision of PVBCs.
Skills/ experience to develop project activities	Technical (Communities without awareness or skills to initiate project development processes and activities)	Training will be undertaken by project coordinator staff and community field workers. Communities will be empowered with the technical tools and knowledge to adopt a more sustainable approach to land management.
Mobilisation of landowners/ participants	Social or cultural (poor organisation and mobilisation of local communities and groups)	Capacity development for community members will be supported by BEP. Strong partnerships with local NGOs will be developed in the planning phase to guarantee strong mobilisation and community involvement.

Compliance with regulations of Natural Park (ICNF)	Institutional/ political (some Project areas are within Natural Park and covered by conservation legislation)	Project funding will support project interventions and activities that support the effectiveness of the area's conservation laws.
Forestry operations (clearing scrubland, thinning trees, etc.)	Lack of workforce and awareness of the need to reduce non native species to build fire resilience	URZE will be working with local communities and engaging people about the importance of fire breaks, native planting and irrigation maintenance. The AIGP also means that additional funding to provide the requisite workforce to support communities will be available. NB: Where possible, people will be recruited from the immediate locales, but it should be noted that the ageing population means that it is not always possible to find the requisite workforce. Nevertheless, we are aiming for as much local employment as possible and when hiring from outside the region, to focus on young people, for social impact.
	(Ecological barriers) Natural events such as wildfires, unpredicted climatic conditions (e.g. heat waves), land pressures such as monoculture plantations.	Reducing the fuel content of the landscape reduces fire risk. The sustainable practices, focus on water cycles and continued management proposed for Bioestrela make the area more resilient to unpredicted climatic conditions and natural events.
Promotion of natural regeneration and plantation of new trees, bushes and soil cover crops	(Social barriers) Lack of participation and stakeholder engagement	Motivating stakeholders to be part of the project, through their valuable input and help in monitoring efforts. The tailored plans for the landowners plots' helps motivate and engage them throughout the whole project. Bioestrela is specifically aiming to create a sense of belonging in the community.
	(Ecological barriers) Natural events such as wildfires, unpredicted climatic conditions (e.g. heat waves), land pressures such as monoculture plantations.	Natural regeneration trees and other planted native species make the habitats more resilient to climate change and natural catastrophes. By closely working on the land with the communities,

		creating landscape-driven value chains, and attracting human presence, the strategy can be adaptive and more resilient to unpredicted climatic conditions and natural events.
Habitat restoration for diverse ecosystems; measuring biodiversity uplift across all flora and fauna	Monoculture farming (ecological barriers) and abandoned land (socio-economic barriers) have resulted in the current ecosystem challenges. The aim is to use agroforestry techniques to reverse these situations, while regenerating the soil and nature in general.	By proactively engaging landowners in this project, we will demonstrate the benefits to landowners in terms of soil fertility, improved yields and additional incomes (due to new business opportunities *and* the potential income from biodiversity credits). This engagement happens via group meetings, field trips, workshops and BE participation in local events.
Funding and the coexistence of two projects in the area	Overlap of AIGP and Bioestrela	Direct funding from AIGP goes to land management operations that are vital for the implementation of Bioestrela. Bioestrela's funding is towards the diversification of the landscape, more holistic ways of working the land, training, education and community engagement events.

Table 7 Threat Analysis

Major threat to biodiversity	**Main Barriers**	**Activities to mitigate threat**
Forest fires	- Limited firefighting resources and equipment - Insufficient fire prevention awareness among local communities	- Implement firebreaks and reforest areas prone to fires with fire-resistant species - Develop training programmes for local communities on fire prevention - Introduction of high value species as well as mosaics of high diversity, which help to slow down and change the fire pattern behaviour, making them less aggressive and easier to combat

Drought	- Over-reliance on water-intensive agricultural practices in surrounding areas - Lack of awareness that water is a limited natural resource - Monocultures	- Educate local farmers on sustainable, low-water-use agriculture practices (e.g. agroforestry, drip irrigation) - Regeneration design and planning follows the water cycle patterns, so Bioestrela's strategy will boost the local small water cycle in the atmosphere, contributing to a reduced drought risk
Soil loss (Erosion)	- Lack of knowledge on soil conservation techniques - Destruction of biomass/ forest residues via fire - Monocultures	- Replant /sow native vegetation, especially in areas with steep slopes or degraded soils. - Implement soil retention techniques like terracing, where possible, mulching and the use of ground cover plants. - Switch from fire-use (which caused around 50% of the fires in 2023) to other techniques such as composting or mulching. - Planting/sowing diverse plants consortia and educating on "chop and drop" benefits, soil production techniques and the small water cycle.

Expansion of invasive species	- Limited capacity to detect and, specially, to remove invasive species - Destruction of biomass/ forest residues via fire - Inadequate control measures or policies to manage invasive species	- Raise awareness and train local stakeholders in non native species identification and control techniques. - Reintroduce and protect native species to outcompete non natives. - Create value chains for the native plants and holistic forest management.
Monocultures	- Economic benefits from monoculture forests (for wood) - Lack of knowledge about biodiversity-friendly land management practices - Limited market access for sustainable, diverse crop systems	- Promote diversified practices, such as agroforestry and mixed forests. - Provide financial incentives (PVBCs) for landowners transitioning to sustainable practices. - Establish demonstration plots (pilots/ regeneration hubs) to showcase the benefits of biodiverse systems and forest value chains, educate local landowners, farmers and the broader community. - Create some examples of forest value chains within Bioestrela pilots to showcase alternatives to monocultures

3.6 Exclusion List

The project does not include any of the activities listed in the Plan Vivo Exclusion List.

3.7 Environmental and Social Screening

See Annex 4.

3.8 Stacking and Double Counting

There is no stacking, as we are not planning to generate carbon credits from the same project area.

There is also no risk of double counting because:

- Although the AIGP offers a basic payment for ecosystem services, this funding is for direct forestry operations and remedial integrated landscape management with a fixed table of values per area, with no monitoring or considered additionality.
- Bioestrela project has a much broader and deeper impact than AIGP and delivers measurable ecosystem services beyond the period of manual intervention. This approach has much more to do with the active restoration and enhancement of the ecosystem services provided by the habitats and ecosystems of the project regions. As such, robust measurement and monitoring are required in order to enable generation of biodiversity certificates, that are verifiable and auditable.

3.9 Relevant Legislation and Policies

Table 9 National Level Legislation, Policies and Instruments

	Yes/No/Unsure	**Details**
Does the country receive or plan to receive results-based biodiversity or climate finance through bilateral or multilateral programs?	Unsure	We are unaware of future government plans but there is no publicly disclosed plan at the moment
Are there any other relevant regulations, policies or instruments?	Yes	The AIGP instrument provides funding to start the clearance interventions in the field. In Portugal there are now laws and regulations regarding the carbon market. However, there is nothing, to our knowledge, regarding biodiversity certificates.

4 Governance and Administration

4.1 Governance Structure

The project governance is being led by the BEP team to ensure good visibility of activity for all stakeholders and landowners. While team members have specific areas of focus, the structure is designed to ensure everybody can support each other, with weekly meetings and documentation to track discussion and decision points. As C Level have responsibility for reporting back to the current project funder, they are leading on project documentation with input from all partners.

As covered earlier, project participants have been engaged firstly through the AIGP, and then through their interest in Bioestrela. Where people expressed an interest in Bioestrela, we followed up with 1-2-1 meetings and site visits, and then mapped logical mosaics of areas which provide a good mix of terrains, and concept testing. We will use the momentum of this first phase of Bioestrela, and the roll out of the AIGP, to engage future participants as we scale.

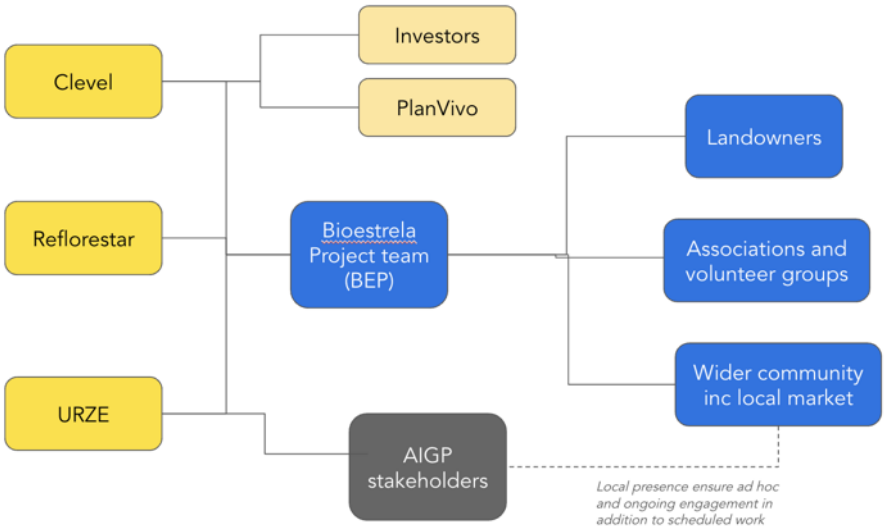
Other local stakeholders have been selected based on their skillsets, location and interest in regenerative projects.

Governance

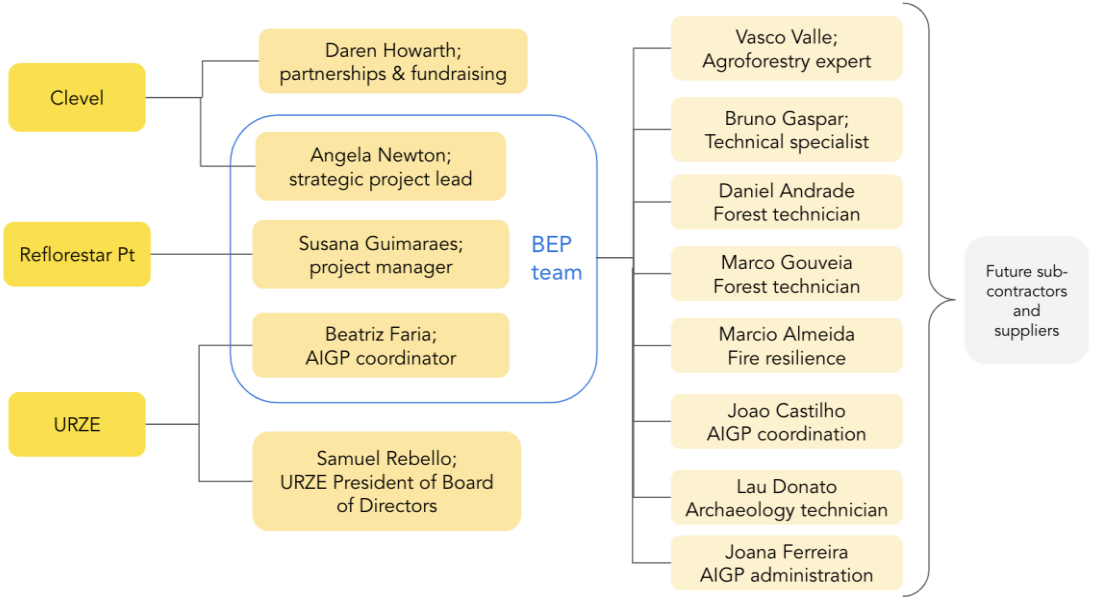
What	Who	How
Coordination of landowners, understanding requirements and needs for sites, technical planning, project work	BEP team	1-2-1 and group meetings on location. URZE is directly located in the region and can ensure regular check-ins alongside the wider BEP team scheduled visits. MoUs have been put in place with all landowners, and any disagreements or complaints will follow a documented process.
Coordination of other stakeholders	BEP team led by relevant individual (see right)	AIGP stakeholders, led by URZE - regular updates as per requirements Associations; led by Reflorestar, for technical expertise - ad hoc calls and scheduled site visits Local wider community (Sandomil market, beekeepers); URZE maintaining ongoing relations and updates locally Gentian; URZE and Reflorestar to set up meetings when PVNature biodiversity guidance is available Investor updates; quarterly led by C Level Plan Vivo; ongoing updates via Zoom and PIN/PDD
Biodiversity measuring	URZE	Will be coordinating with landowners to organise baseline measuring and to ascertain where and how landowners can be encouraged to support/participate (with supervision)

Biodiversity certificates	URZE	Managed by URZE, with dedicated resources for managing the coordination, transparency and governance of all certifications. This will form part of the bigger picture of reporting which we plan to deliver on the whole ecosystem regeneration for the area, including tracking the land use, ecological corridors, priority areas/ habitats and/or fauna/ flora species of special interest. Our plan is to use the regeneration of this area as an exemplar of what can be achieved in the region, and to develop a wider comms strategy to encourage scaling up of the Bioestrela initiative beyond these regions to other parts of Portugal and Europe.

Governance across stakeholder



Team structure



2.1 Legal and Regulatory Compliance

The Bioestrela project area is located inside the AIGP project, and will operate in full compliance with all national and international policies, laws and regulations.

The authorities with overall responsibility for land and/or aquatic management and resource use within the project region are ICNF (Instituto para a Conservação da Natureza e Florestas) and also APA (Agência Portuguesa do Ambiente).

We have contacted all the relevant authorities and we can confirm that the project will operate in full compliance with national and international policies, laws and regulations. All the licenses necessary for interventions that are dependent on the approval of the OIGP (Operações Integradas de Gestão da Paisagem), have been achieved.

2.2 Financial Plan

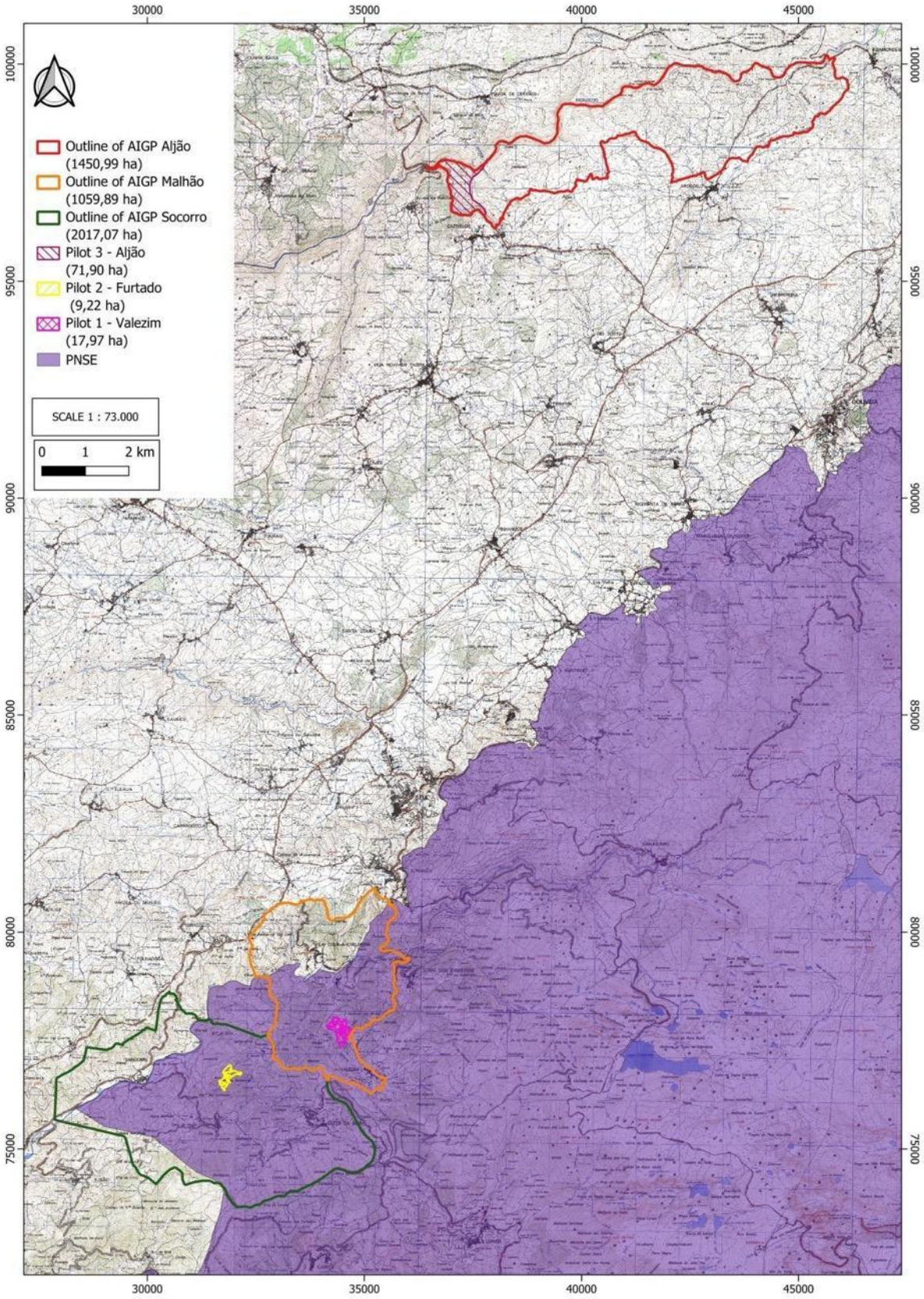
C Level has secured funding for Phase 2, detailed scoping phase of the project.

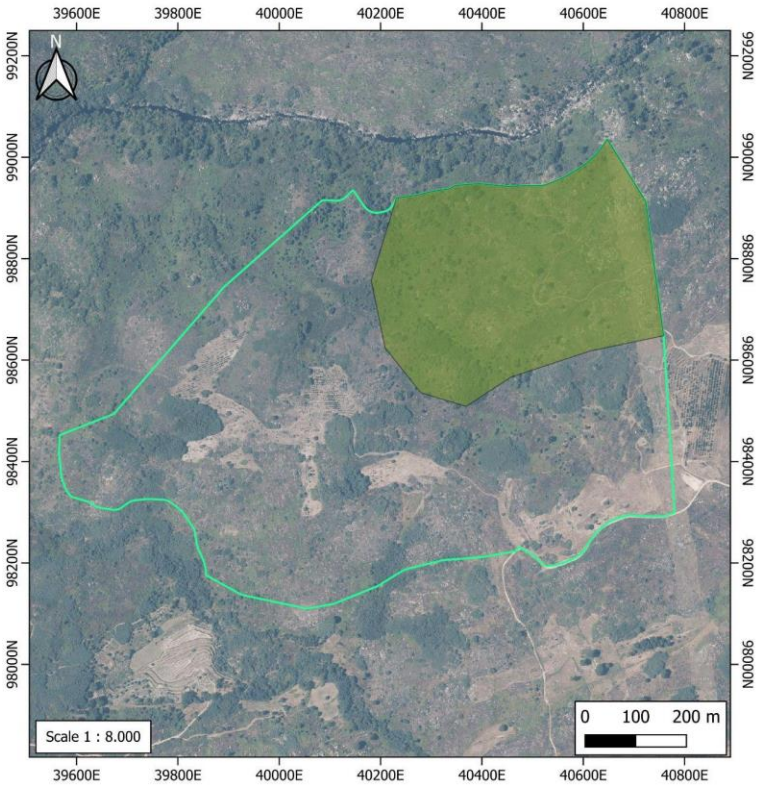
The detailed budget for the sites will be ready at the end of this phase and will comprise plans for each individual site (both interventions 1 and 2), as well as ongoing maintenance. Further budgeting for additional sites will be required as the project scales.

As the budget is secured, dedicated resourcing will be arranged to ensure fully transparent procedures for managing income and expenditure, both for URZE and C Level stakeholders, alongside Plan Vivo.

5 Annexes

Annex 1 – Project Boundaries and Habitat Types





Pilot 3 (Aljão) - 1st Intervention area

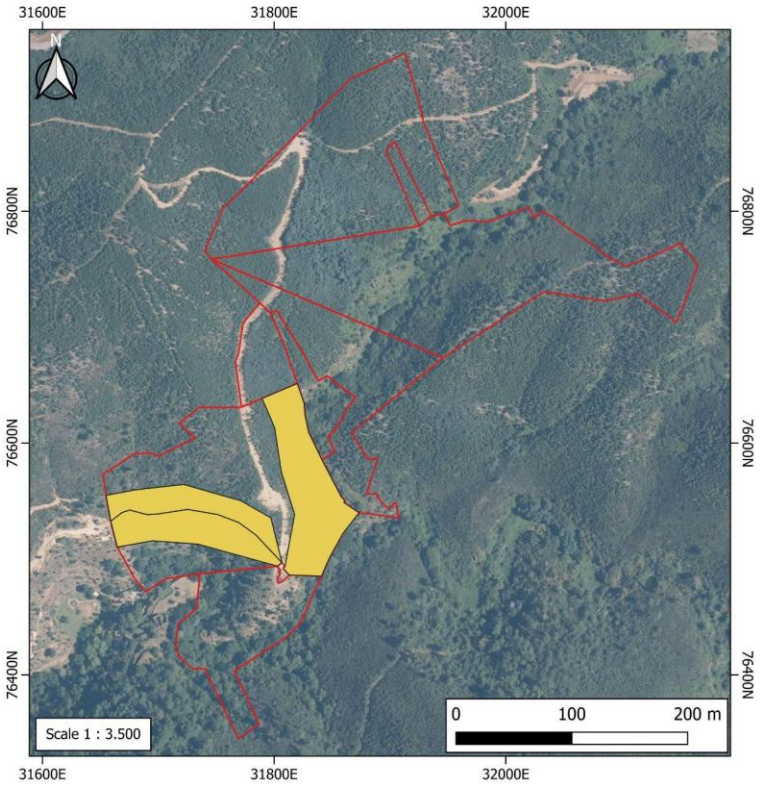
Pilot 3 - Aljão (71,90 ha)
1st Intervention area
Landowner 1 (20 ha)

Fontes:
URZE

Sistema de coordenadas:
ETRS 1989 TM6 Portugal
Projeção: Transverse Mercator

Date: janeiro 2025

URZE



Pilot 2 (Furtado) - 1st Intervention area

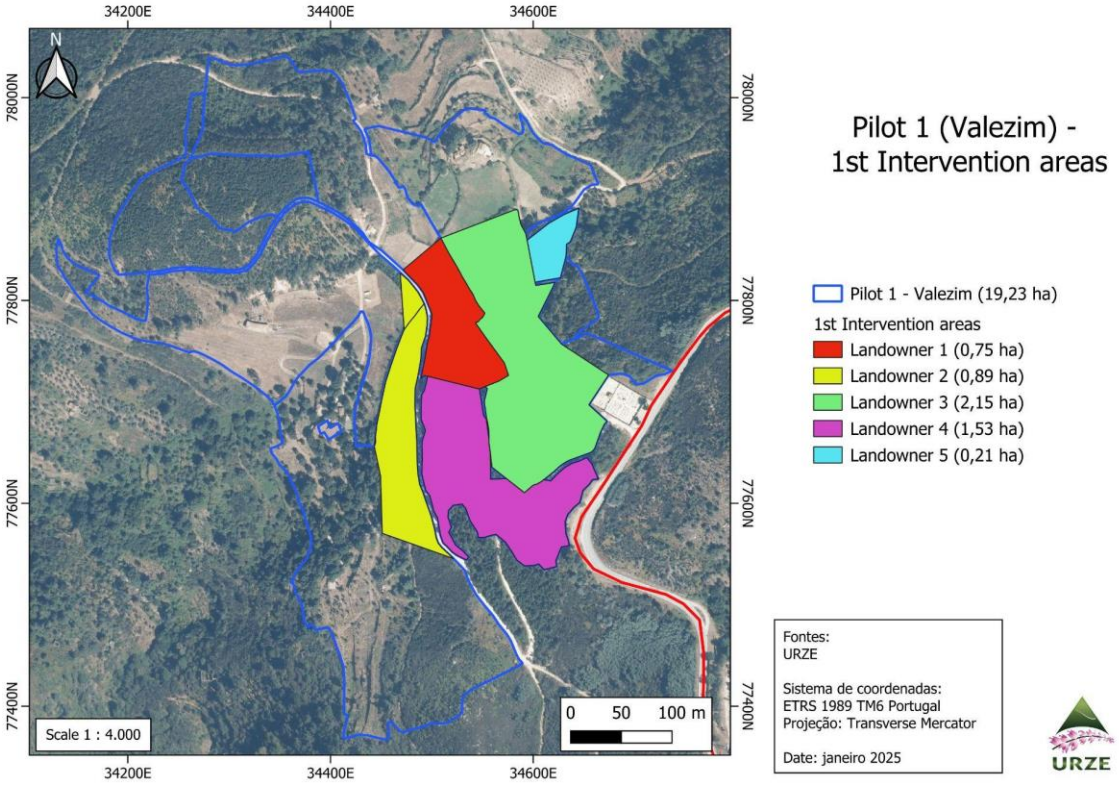
Pilot 2 - Furtado (9,5 ha)
1st Intervention area
Landowner 1 (1,29 ha)

Fontes:
URZE

Sistema de coordenadas:
ETRS 1989 TM6 Portugal
Projeção: Transverse Mercator

Date: janeiro 2025

URZE



Annex 2 – Registration Certificate

Provide a copy of the project coordinator registration certificate.

MINISTÉRIO DA JUSTIÇA
Registo Nacional de Pessoas Colectivas

PEDIDO DE CERTIFICADO DE ADMISSIBILIDADE DE FIRMA OU DENOMINAÇÃO

ANTES DE PREENCHER, LEIA TODO O IMPRESSO, BEM COMO AS INFORMAÇÕES ÚTEIS EM ANEXO

878905 24ABR1999 15:42:43 8100$ DFD DJAL
CA6000$+CP2000$+DE100$

1 | IDENTIFICAÇÃO DO REQUERENTE DE FIRMA OU DENOMINAÇÃO

Bilhete de identidade n.º ☐☐☐☐☐☐☐☐ NIPC n.º ☐☐☐☐☐☐☐☐☐

2 | FIRMA OU DENOMINAÇÃO PRETENDIDA POR ORDEM DECRESCENTE DE PREFERÊNCIA

1.ª "ESTRELA VERDE" - Associação Florestal da Encosta da Serra
2.ª "PRO FLORESTA" - Associação Florestal da Encosta da Serra da Estrela
3.ª "URZE" - Associação Florestal da Encosta da Serra da Estrela

3 | NATUREZA JURÍDICA DA ENTIDADE A CONSTITUIR OU ALTERAR (*)

Associação

4 | SEDE SOCIAL no concelho de

Gouveia

5 | OBJECTO SOCIAL

É uma Associação de Proprietários Florestais, que tem como objectivo promover a silvicultura e a prestação de assessoria técnica no âmbito florestal

(se a indicação do objecto social não couber neste espaço use folha anexa para o descrever)

6 | ASSINATURA E ENDEREÇO DA PESSOA QUE SUBSCREVE O PEDIDO

Local e data Gouveia, 13 de Abril de 1999
Endereço postal Av. Bombeiros Voluntários, nº 8 / Casa da Torre - 6290 Gouveia
Assinatura [signature] Telefone 038-42411

(*) No caso de se tratar de alteração de entidade já constituída deve preencher no verso a rubrica 7 - ALTERAÇÃO

CERTIFICADO DE ADMISSIBILIDADE DE FIRMA OU DENOMINAÇÃO

O Registo Nacional de Pessoas Colectivas certifica a admissibilidade da seguinte firma ou denominação

URZE – ASSOCIAÇÃO FLORESTAL DA ENCOSTA DA SERRA DA ESTRELA------

CONDIÇÕES DE VALIDADE

REVALIDAÇÕES (só válidas desde que autenticadas com o selo branco do Registo Nacional de Pessoas Colectivas):

Certificado revalidado por 180 dias (art. 53º, n.º 4, do DL 129/98, de 13 de Maio). Lisboa, O Director,	Certificado revalidado por 180 dias (art. 53º, n.º 4, do DL 129/98, de 13 de Maio). Lisboa, O Director,	Certificado revalidado por 180 dias (art. 53º, n.º 4, do DL 129/98, de 13 de Maio). Lisboa, O Director,

____ª Cartório Notarial de Escritura celebrada em ___/___/____ O (a) _____ (b) _____ (c) _____ (a) Cargo (b) Assinatura (c) Nome	Cons.ª do Reg. Com. de _____ Matrícula _____ em ___/___/____ O (a) _____ (b) _____ (c) _____ (a) Cargo (b) Assinatura (c) Nome

7 | ALTERAÇÃO

No caso de alteração de entidade já constituída indique, relativamente à alteração que se pretende:

☐ Firma ou denominação actual _____

☐ Sede actual no concelho de _____

☐ Objecto social actual _____

(se a indicação do objecto social actual não couber neste espaço use folha anexa para o descrever)

☐ Outras alterações _____

INSTRUÇÕES DE PREENCHIMENTO

1 | IDENTIFICAÇÃO DO REQUERENTE DE FIRMA OU DENOMINAÇÃO

Indique o nome de quem pretende requerer a **constituição** da sociedade (ou outro tipo de pessoa colectiva) e o respectivo número de bilhete de identidade, no caso de ser pessoa pessoa singular. No caso de o requerente ser uma pessoa colectiva, indique a sua denominação ou firma e o respectivo NIPC (número de identificação de pessoa colectiva). Se pretender **alterar** sociedade ou pessoa colectiva já existente, indique a respectiva firma e NIPC.

2 | FIRMA OU DENOMINAÇÃO PRETENDIDA POR ORDEM DECRESCENTE DE PREFERÊNCIA

Se não estiver familiarizado com as disposições legais que regem a composição das firmas ou denominações, deve consultar a parte II "INFORMAÇÕES ÚTEIS".

3 | NATUREZA JURÍDICA DA ENTIDADE A CONSTITUIR OU A ALTERAR

Indique a forma jurídica da pessoa colectiva que pretende constituir: sociedade por quotas, sociedade unipessoal por quotas, sociedade anónima, sociedade em nome colectivo, sociedade em comandita, sociedade civil sob forma comercial, associação, fundação, cooperativa, união/federação/confederação de cooperativas, estabelecimento individual de responsabilidade limitada, agrupamento complementar de empresas, agrupamento europeu de interesse económico, pessoa colectiva religiosa ou representação de pessoa colectiva estrangeira.

4 | SEDE SOCIAL

Deve indicar o concelho onde a entidade a constituir vai ter a sua sede ou para onde a vai mudar.

5 | OBJECTO SOCIAL

É obrigatória a indicação do objecto social (actividades exercidas ou a exercer pela pessoa colectiva em constituição ou alteração). Se não couber nas linhas reservadas para o efeito, use folha anexa para o descrever. Devem ser claramente indicadas as actividades a desenvolver.

6 | ASSINATURA E ENDEREÇO DA PESSOA QUE SUBSCREVE O PEDIDO

O pedido pode ser assinado pelo próprio interessado na constituição ou alteração da pessoa colectiva , ou por mandatário – advogado, solicitador ou agente da Propriedade Industrial – devendo neste caso apor o carimbo próprio.

7 | ALTERAÇÃO

No caso de pretender alterar uma pessoa colectiva já constituída preencha o n.º 7 no verso do impresso.

Annex 3 – Exclusion List

Activities	**Included in Project ('Yes' or 'No')**
Any project activities leading to or requiring the destruction [1] of critical habitat [2] or any forestry project which does not implement a plan for improvement and/or sustainable management.	No
Any activity which could be associated with the significant impairment of areas particularly worthy of protection of cultural heritage (without adequate compensation in accordance with international standards).	No
Trade in animals, plants or any natural products not complying with the provisions of the CITES/Washington convention [3].	No
Illegal, harvesting or trading in any wildlife resources.	No
Destructive fishing methods or drift net fishing with a net more than 2.5 km in length, explosives and/or poison.	No
Large-scale commercial logging operations for use in primary tropical moist forest.	No
Production or trade in wood or other forestry products other than from sustainably managed forests [4].	No
Exploitation of diamond mines and marketing of diamonds where the host country has not adhered to the Kimberley Process, and exploitation of other conflict minerals [5]	No
Activities involving harmful or exploitative forms of forced labour, [6] harmful child labour [7], modern slavery and human trafficking [8].	No
Projects that include involuntary physical displacement and/or forced eviction.	No
Production or activities that encroach on lands owned, or claimed or occupied by Indigenous Peoples, without full documented Free, Prior and Informed Consent (FPIC) of such peoples [9].	No
Harmful and unsafe production, use, sale or trade of pharmaceuticals, pesticides/herbicides, ozone layer depleting substances [10], and other toxic [11] or dangerous materials such as asbestos or products containing PCB's [12], wildlife or products regulated under CITES, including all products that are banned or are being progressively phased out internationally	No
Production or trade of arms, ammunition, weaponry, controversial weapons, or components thereof (e.g., nuclear weapons and radioactive ammunition, biological and chemical weapons of mass destruction, cluster bombs, anti -personnel mines, enriched uranium).	No
Procurement and use of firearms.	No

Provision of finances to military institutions involved in conservation or security activities.	No
Production or trade of strong alcohol intended for human consumption or other alcoholic beverages (excluding beer and wine).	No
Production or trade of tobacco and other drugs	No
Gambling, gaming establishments, casinos or any equivalent enterprises and undertaking [13].	No
Any trade related to pornography, prostitution or sexual exploitation of any form.	No
Production or trade in radioactive material. This does not apply to the procurement of medical equipment, quality control equipment or other application for which the radioactive source is insignificant and/or adequately shielded	No
Production or trade in unbound asbestos. This does not apply to the purchase or use of cement linings with bound asbestos and an asbestos content of less than 20%.	No
Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.	No
Transboundary trade in wastes, except for those accepted by the Basel Convention and its underlying regulations [14].	No
Any activity leading to an irreversible modification or significant displacement of an element of culturally critical heritage [15].	No
Production and distribution, or investment in, media that are racist, antidemocratic or that advocate discrimination against a part of the population.	No
Projects involving the planting or introduction of invasive species	No
Projects that increase the dependency of primary participants and other stakeholders on fossil fuels.	No

Notes:

[1] Destruction means (1) the elimination or severe reduction in the integrity of a habitat/area caused by a major and long-term/prolonged change in land-use or water resources or (2) the modification of a habitat such that this habitat's ability to fulfil its function/ role is lost.

[2] The term critical habitat encompasses natural and modified habitats that deserve particular attention. This term includes (1) spaces with high biodiversity value as defined in the IUCN's classification criteria, including, in particular, habitats required for the survival of endangered species as defined by the IUCN's red list of threatened species or by any national legislation; (2) spaces with a particular importance for endemic species or whose geographical range is limited; (3) critical sites for the survival of migratory species; (4) spaces welcoming a significant number

of individuals from congregatory species; (5) spaces presenting unique assemblages of species or containing species which are associated according to key evolution processes or which fulfil key ecosystem services; (6) and territories with socially, economically or culturally significant biodiversity for local communities. Primary forests or high conservation value forests must also be considered as critical habitats.

[3] https://cites.org/eng/disc/text.php

[4] Sustainably managed forests are forests managed in a way that balances ecological, economic and socio-cultural needs.

[5] Conflict minerals, including tin, tungsten, tantalum and gold, can be used to finance armed groups, fuel forced labour and other human rights abuses, and support corruption and money laundering. See the EU Regulation on conflict minerals: https://policy.trade.ec.europa.eu/development-and-sustainability/conflict-minerals-regulation/regulation-explained_en

[6] Forced labour means all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

[7] Harmful child labour means the employment of children that is economically exploitive, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral, or social development. Employees must be at least 14 years of age, as defined in the ILO's Declaration on the Fundamental Principles and Rights at Work (C138 – Minimum Age Convention, Article 2), unless local laws require compulsory school attendance or a minimum working age. In such circumstances, the highest age requirement must be used.

[8] Modern slavery is comprised two key components: forced labour and forced marriage. These refer to situations of exploitation that a person cannot leave or refuse due to threats, violence, deception or coercion. (https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---ipec/documents/publication/wcms_854733.pdf)

[9] https://www.fao.org/indigenous-peoples/our-pillars/fpic/en/

[10] Any chemical component which reacts with, and destroys, the stratospheric ozone layer leading to the formation of holes in this layer. The Montreal Protocol lists Ozone Depleting Substances (ODS), their reduction targets and deadlines for phasing them out.

[11] Including substances included under the Rotterdam Convention, Stockholm Convention and WHO "Pharmaceuticals: Restrictions in Use and Availability".

[12] PCBs (polychlorinated biphenyls) are a group of highly toxic chemical products that may be found in oil-filled electrical transformers, capacitors and switchgear dating from 1950 to 1985.

[13] Any direct financing of these projects or activities involving them (for example, a hotel including a casino). Urban improvement plans which could subsequently incorporate such projects are not affected.

[14] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their disposal (1989).

[15] "Critical cultural heritage" is considered as any heritage element recognised internationally or nationally as being of historical, social and/or cultural interest.

Annex 4 – Environmental and Social Screening

This section has been completed but redacted from the public facing PIN, it will now feed into the design of the PDD.

Guidance on use

Background

The questionnaire includes questions aligned with the Plan Vivo Biodiversity Standard (PV Nature) Environmental and Social Safeguards (Section 3.9, v1.0) and other Safeguard Provisions that are embedded in PV Nature (namely Stakeholder Engagement, Stakeholder Consultation, Free Prior and Informed Consent, Grievance Mechanism).
The questionnaire also draws from the Plan Vivo Environmental and Social Policy Framework (ESPF).
The questionnaire is structured around the IUCN ESMS Questionnaire, which itself is designed to be aligned with the IUCN ESMS (2016), and the World Bank Environmental and Social Framework (2017), including World Bank Standards 1-10.
The number of questions has been limited in this version of the questionnaire to ensure that it is practical and user-friendly.
The purpose of the questionnaire is to establish: 1) the project risk rating; 2) the significance of risks and impacts; 3) alignment with safeguard provisions; 4) the need for further E&S assessment during project design; 5) the likely safeguard plans that should be developed.
Due to the early stage in project design, the questionnaire is not designed to assess alignment with PV Nature requirements, but rather prompt projects as to what will be expected regarding those requirements that relate to E&S safeguards.
Any social and environmental risks must inform the design of the *Project*.

Requirement
As per PV Nature v1.0 every project must conduct a screening of environmental and social risks and impacts at the PIN stage of project design. The questionnaire and screening report are to be submitted alongside the PIN to the Plan Vivo Foundation.

Process for use of the E&S questionnaire
The Project Coordinator is to fill in the "Project coordinator response" section of the questionnaire. This is the column shaded light grey.
Once completed by the Project Coordinator, the Plan Vivo Foundation Project Officer and E&S reviewer is to fill in the "E&S reviewer comments" section of the questionnaire. This includes filling in the "E&S reviewer conclusions".
The screening report is then completed at the end by the Plan Vivo Foundation E&S reviewer, and the results are shared and discussed with the Project Coordinator.

Establishing significance of risks and impacts

Table 1 illustrates how risk significance can be established based on an estimate of likelihood of something happening, and the impact should it occur. This likelihood-magnitude matrix can be used by the Project Officer and the E&S reviewer to estimate the risk and impact significance of the E&S risk areas indicated in the E&S questionnaire **Section B**, below. Note that while the questionnaire focuses on key topics and issues that are common to natural resource management projects, the project coordinator should include other known E&S risks and impacts associated with the planned project.

Likelihood represents the possibility that a given risk event is expected to occur. The likelihood should be established using the following five ratings:

Very unlikely to occur (1)
Not expected to occur (2)
Likely – could occur (3)
Known to occur - almost certain (4)
Common occurrence (5)

Impact (or consequence) refers to the extent to which a risk event might negatively affect environmental or social receptors – see below criteria distinguishing five levels of impacts:

Severe (5)	Adverse impacts on people and/or environment of **very high magnitude**, including **very large scale** and/or spatial extent (large geographic area, large number of people, transboundary impacts), cumulative, **long-term (permanent and irreversible**); **receptors** are considered **highly sensitive**; examples are severe adverse impacts on areas with high biodiversity value; severe adverse impacts to lands, resources and territories of indigenous peoples; significant levels of displacement or resettlement with long-term consequences on peoples' livelihood; impacts give rise to severe and cumulative social conflicts with long-term consequences.
Major (4)	Adverse impacts on people and/or environment of **high magnitude**, including **large scale** and/or spatial extent (large geographic area, large number of people, transboundary impacts), of certain duration **but still reversible** if sufficient effort is provided for mitigation; receptors are considered sensitive; examples are adverse impacts on areas with high biodiversity value; adverse impacts to lands, resources and territories of indigenous peoples; significant levels of displacement or resettlement with temporary consequences on peoples' livelihood; impacts give rise to social conflicts which are expected to be of limited duration.
Medium (3)	Adverse impacts of **medium magnitude**, **limited in scale** (small area and low number of people affected), **limited in duration** (temporary), impacts are relatively predictable and can be avoided, managed and/or mitigated with known solutions and straight forward measures.
Minor (2)	Adverse impacts of **minor magnitude, very small scale** (e.g. very small, affected area, very low number of people affected) and only short duration, may be easily avoided, managed, mitigated.
Negligible (1)	Negligible or no adverse impacts on communities, individuals, and/or on the environment.

Table 1: Rating significance of a risk area (Source: IUCN ESMS questionnaire, 2020)

		Likelihood of occurrence				
		Very unlikely to occur (1)	*Not expected to occur (2)*	*Likely – could occur (3)*	*Known to occur - almost certain (4)*	*Common occurrence (5)*
Magnitude	*Severe (5)*	Moderate	Substantial	High	High	High
	Major (4)	Low	Moderate	Substantial	Substantial	High
	Medium (3)	Low	Moderate	Moderate	Moderate	Substantial
	Minor (2)	Low	Low	Moderate	Moderate	Moderate
	Negligible (1)	Low	Low	Low	Low	Low

Establishing project risk category

The project risk category will be determined based on an understanding of the types of potential E&S risks and impacts associated with the project, and the availability of appropriate and known mitigation measures. Most Plan Vivo projects are thought to be of either low or moderate risk. If high risk projects are identified, the E&S impact assessment would look to understand the alternative project designs available to reduce the potential risks and impacts.

Table 2: Rating significance of a risk area (Source: IUCN ESMS questionnaire, 2020)

Risk Category	Definition
Low	Insignificant or low potential environmental and social risks and impacts have been identified. No additional management measures are required; no Environmental and Social Management Plan (ESMP) section of the PDD required.
Moderate	Moderate and/or substantial potential adverse risks and impacts have been identified, in one or more risk areas. These risks and impacts can be mitigated through known mitigation measures, such as a Stakeholder Engagement Plan, livelihood restoration plan, or through the project's ESMP.
High	High risks and impacts that are potentially diverse and irreversible, and for which standard solutions are not sufficient to manage, and for which specialist safeguard plans and expertise is required.

Alignment with safeguard provisions

Section C of the questionnaire refers to PV Nature safeguard provisions which are integrated into the Standard. These include:

Stakeholder engagement and consultation

Free, Prior and Informed Consent

Grievance Redress Mechanism

The project coordinator will answer the questions related to these provisions, and clarify the project's intentions to meet these Standard requirements during the project design phase.

Environmental and Social Assessment

The E&S questionnaire should determine what E&S assessment is required during the project design phase (PDD development). For low and moderate risk projects, a tailored E&S assessment is required. For high-risk projects, an Environmental and Social Impact Assessment (ESIA) is required. The project

coordinator should consider in responses what further assessment of risks and impacts is required, and the E&S reviewer will comment on this and include a summary in the Screening Report section.

Safeguard Plans

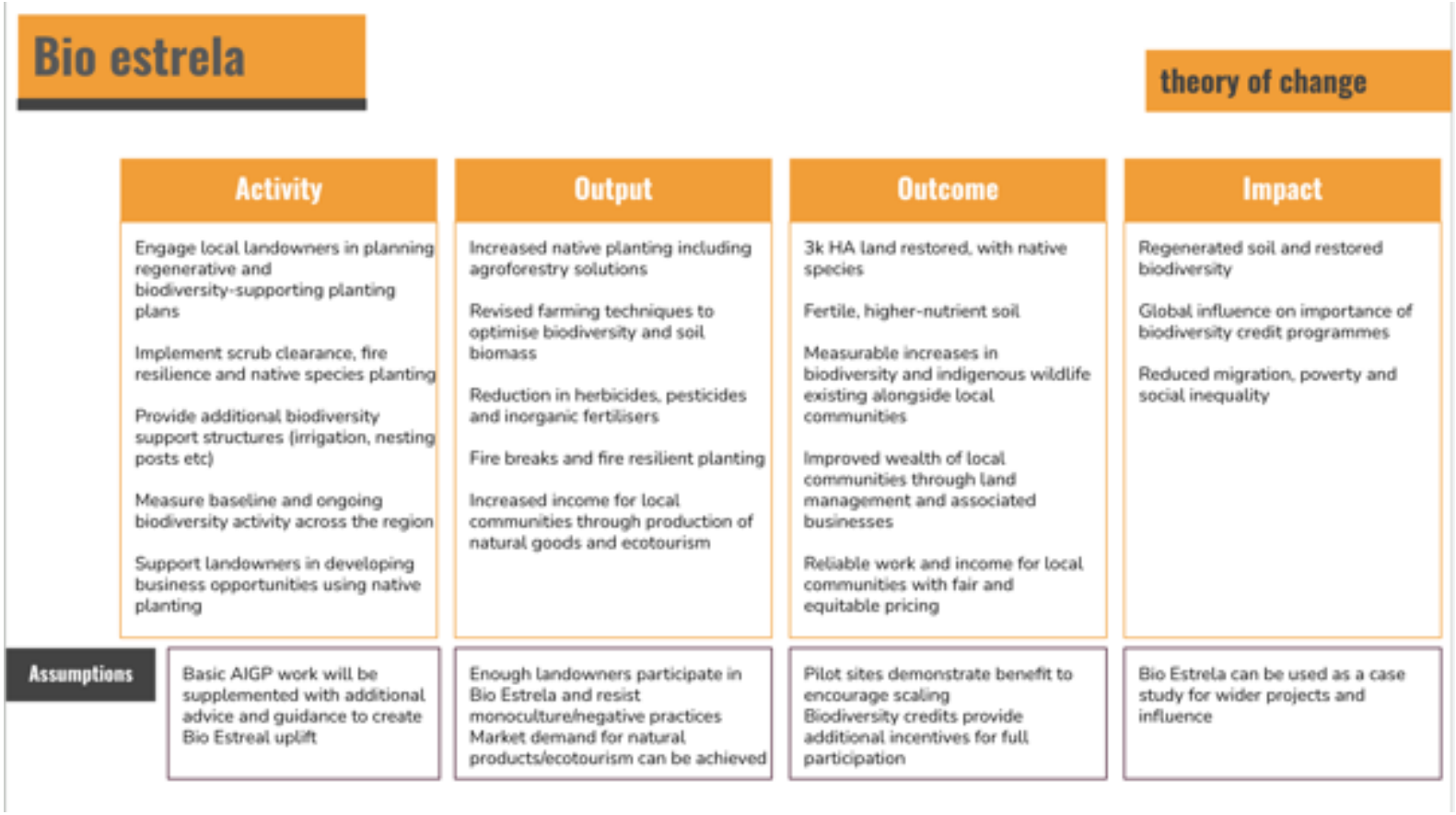
The E&S questionnaire should determine which Safeguard Plans are required by the project. For low risk projects, it is unlikely that an ESMP will be required. For moderate risk projects, and ESMP will be required. Projects will, according to the Standard, also require a mandatory Stakeholder Engagement Plan and a Grievance Redress Mechanism.

Some projects might require specialist plans, such as an Indigenous Peoples Plan (IPP) or a Livelihood Restoration Plan.

SECTION A: PROJECT INFORMATION	
Project title:	**Bioestrela**
Project coordinator:	**C Level / URZE (BEP team)**
Country:	**Portugal**
Geography/ landscape:	National Park, mountain forest
Project summary:	Bioestrela presents a bold vision of ecological and cultural regeneration in the Serra da Estrela. We are developing collaborative, science-backed, and community-oriented solutions for restoring biodiversity, protecting natural resources, and promoting sustainable land use practices. Building on the primary interventions of the AIGP, Bioestrela will implement truly regenerative solutions that deliver significant and measurable improvements to local ecosystems and communities. The total potential area comprises 5000 Ha, though the project will begin working on 3 pilot areas (regeneration hubs) and will eventually scale up from there: Valezim (18.52 Ha), Furtado (9.49 Ha) and Aljão (71.90 Ha). By combining restoration and improved management interventions we are able to engage the community, build capacity and the sustainable practices to be implemented and maintained throughout the years will bring long-term ecological, cultural and socio-economic benefits to the area. Bioestrela counts on various partners, including local, regional and national NGOs, associations and cooperatives, Universities and Higher Education Institutes, the parishes of the villages involved, among others.

Name and role of project coordinator staff member filling this questionnaire:	**BEP team**
Confirm that the Plan Vivo Exclusion List is appended to this E&S questionnaire:	*Yes*

Annex 6 – Theory of Change



Appendix 1 – Criteria for Key Biodiversity Areas

A. Threatened biodiversity		
A1 Threatened species		Assessment parameters
A1a	≥0.5% of global population size and ≥5 reproductive units (RU) of a CR/EN species	(i) no. of mature individuals (ii) area of occupancy (iii) extent of suitable habitat (iv) range (v) no. of localities (vi) distinct genetic diversity
A1b	≥1.0% of global population size and ≥10 RU of a VU species	
A1c	≥0.1% of global population size and ≥5 RU of a species listed as CR/EN due only to past/current decline [= Red List A1, A2, A4 only]	
A1d	≥0.2% of global population size and ≥10 RU of a species listed as VU due only to past/current decline [= Red List A1, A2, A4 only]	
A1e	Effectively the entire population size of a CR/EN species	
A2 Threatened ecosystem types		
A2a	≥5% of global extent of a CR or EN ecosystem type	
A2b	≥10% of global extent of a VU ecosystem type	
B. Geographically restricted biodiversity		
B1. Individual geographically restricted species	≥10% of global population size and ≥10 RU of any species	(i) no. of mature individuals (ii) area of occupancy (iii) extent of suitable habitat (iv) range (v) no. of localities (vi) distinct genetic diversity
B2. Co-occurring geographically restricted species	≥1% of global population size of each of a number of restricted range species in a taxonomic group: ≥2 species or 0.02% of the total number of species in the taxonomic group, whichever is larger	
B3. Geographically restricted assemblages		
B3a	≥0.5% of global population size of each of a number of ecoregion-restricted species in a taxonomic group: ≥5 species or 10% of the species restricted to ecoregion, whichever is larger	(i) no. of mature individuals (ii) area of occupancy (iii) extent of suitable habitat (iv) range (v) no. of localities
B3b	≥5 RU of ≥5 bioregion-restricted species or ≥5 RU of 30% of the bioregion-restricted species known from the country, whichever is larger	
B3c	Site is part of the globally most important 5% of occupied habitat for ≥5 species in the taxonomic group	(i) relative density of mature individuals (ii) relative abundance of mature individuals
B4. Geographically restricted ecosystem types		
	≥20% of the global extent of an ecosystem type	
C. Ecological integrity		
	Site is one of ≤2 per ecoregion with wholly intact ecological communities	composition and abundance of species and interactions
D. Biological processes		
D1. Demographic aggregations		
D1a	≥1% of global population size of a species, over a season, and during ≥1 key stage in life cycle	no. of mature individuals
D1b	Site is among largest 10 aggregations of the species	no. of mature individuals
D2. Ecological refugia	≥10% of global population during periods of environmental stress	no. of mature individuals
D3. Recruitment sources	Produces propagules, larvae or juveniles maintaining ≥10% of global population size	no. of mature individuals
E. Irreplaceability through quantitative analysis		

Appendix 2 – Criteria for Important Plant Areas

Sub-criterion	Threshold
(A) Threatened species	
A(i) Site contains one or more **globally threatened** species	Site known, thought or inferred to contain ≥**1%** of the global population AND/OR ≥**5%** of the national population OR the **5 "best sites"** for that species nationally, whichever is most appropriate
A(ii) Site contains one or more **regionally threatened** species	Site known, thought or inferred to contain ≥**5%** of the national population, OR the **5 "best sites"** for that species nationally, whichever is most appropriate
A(iii) Site contains one or more **highly restricted endemic** species that are potentially threatened	Site known, thought or inferred to contain ≥**1%** of the global population AND/OR ≥**5%** of the national population, OR the **5 "best sites"** for that species nationally, whichever is most appropriate
A(iv) Site contains one or more **range restricted endemic** species that are potentially threatened	Site known, thought or inferred to contain ≥**1%** of the global population AND/OR ≥**5%** of the national population, OR the **5 "best sites"** for that species nationally, whichever is most appropriate
(B) Botanical richness	
B(i) Site contains a **high number of species** within **defined habitat or vegetation types**	For each habitat or vegetation type: up to 10% of the national resource can be selected within the whole national IPA network OR the **5 "best sites"** nationally, whichever is the most appropriate
B(ii) Site contains an **exceptional number of species of high conservation importance**	Site known to contain ≥**3%** of the selected national list of species of conservation importance OR the **15 richest sites** nationally, whichever is most appropriate
B(iii) Site contains an **exceptional number of socially, economically or culturally valuable species**	Site known to contain ≥**3%** of the selected national list of socially, economically or culturally valuable species OR the **15 richest sites** nationally, whichever is most appropriate
(C) Threatened habitat	
C(i) Site contains **globally threatened or restricted** habitat/vegetation type	Site known, thought or inferred to contain ≥**5%** of the national resource (area) of the threatened habitat type OR site is among the best quality examples required to collectively prioritise **20–60%** of the national resource OR the **5 "best sites"** for that habitat nationally, whichever is the most appropriate
C(ii) Site contains **regionally threatened or restricted** habitat/vegetation type	Site known, thought or inferred to contain ≥**5%** of the national resource (area) of the threatened habitat type OR site is among the best quality examples required to collectively prioritise **20–60%** of the national resource OR the **5 "best sites"** for that habitat nationally, whichever is the most appropriate
C(iii) Site contains **nationally threatened or restricted** habitat/vegetation type, AND/OR habitats that have **severely declined in extent** nationally	Site known, thought or inferred to contain ≥**10%** of the national resource (area) of the threatened habitat type OR site is among the best quality examples required to collectively prioritise up to **20%** of the national resource OR the **5 "best sites"** for that habitat nationally, whichever is most appropriate