ANNUAL REPORT

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algarve





"This curious world we inhabit is more wonderful than convenient; more beautiful than it is useful; it is more to be admired and enjoyed than used."

[—] Henry David Thoreau



Project summary

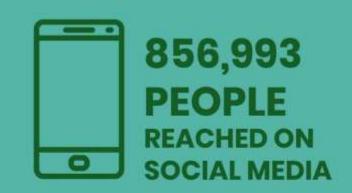
Unlike building a physical structure, such as a house, the intentional intervention of ecological restoration is akin to building a business. The model developed under Renature Monchique focuses on cost versus impact. By working through an NGO, Ryanair and their public partners have set the platform for private-public-civil society partnerships - essential partnerships for large-scale restoration.

The Renature Monchique project was able to reach out to landowners, initiating ecological restoration processes (social and/or physical) in 291 hectares of fire-damaged land. 61,860 endemic trees consisting of 7 species from this region were planted from November 2019 to early April 2020.

There is an essential requirement to make these projects long-term. The opportunity to recover some of the 'past mischief' is clearly presented as an opportunity to restore lost and degraded habitats, to install hope in many landowners unable to carry out such large-scale restoration, and to provide job opportunities. But most importantly, to leave a strong legacy for future generations and to restore lost intergenerational equity.

Key/ stats

What was accomplished!

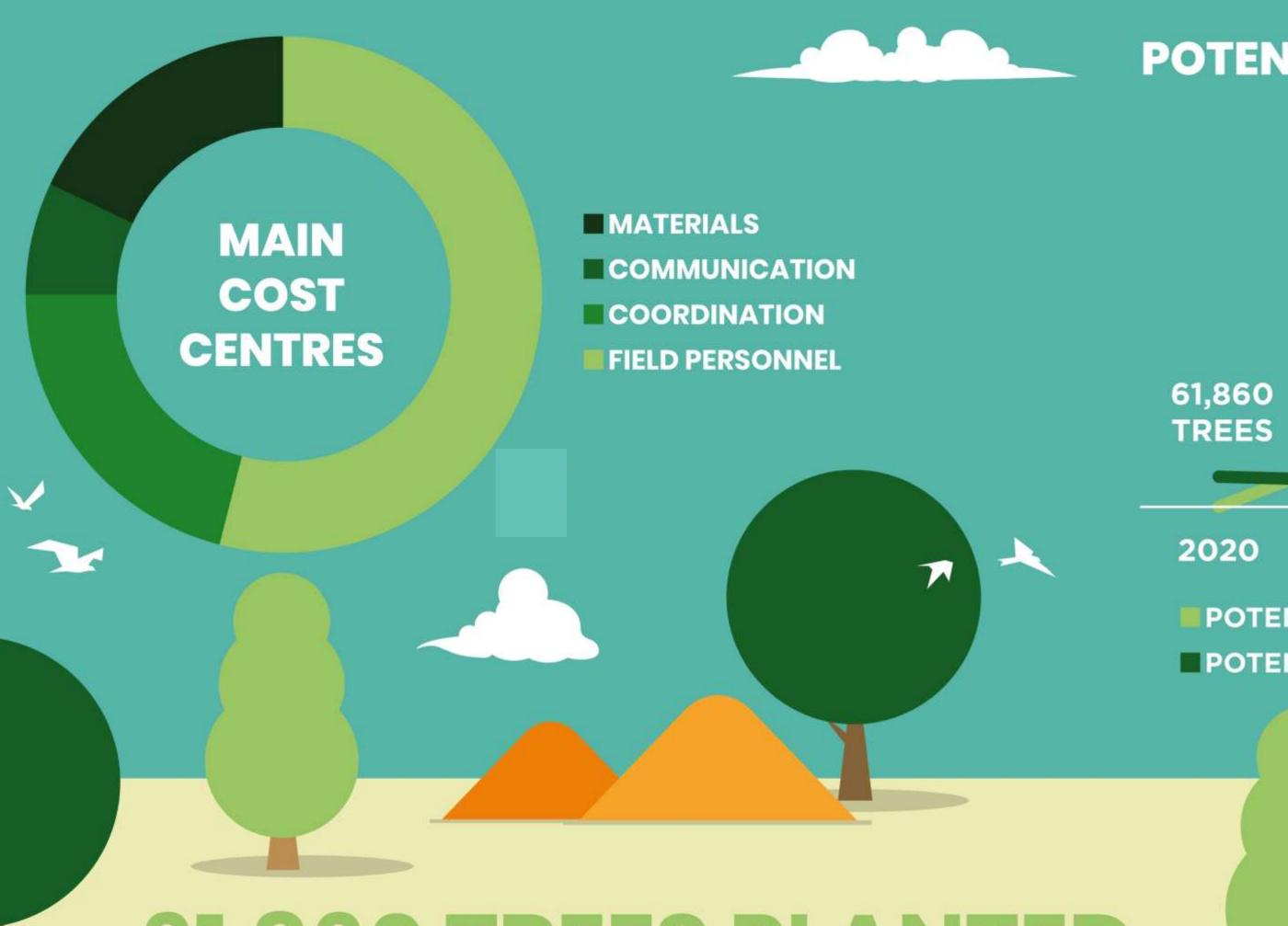




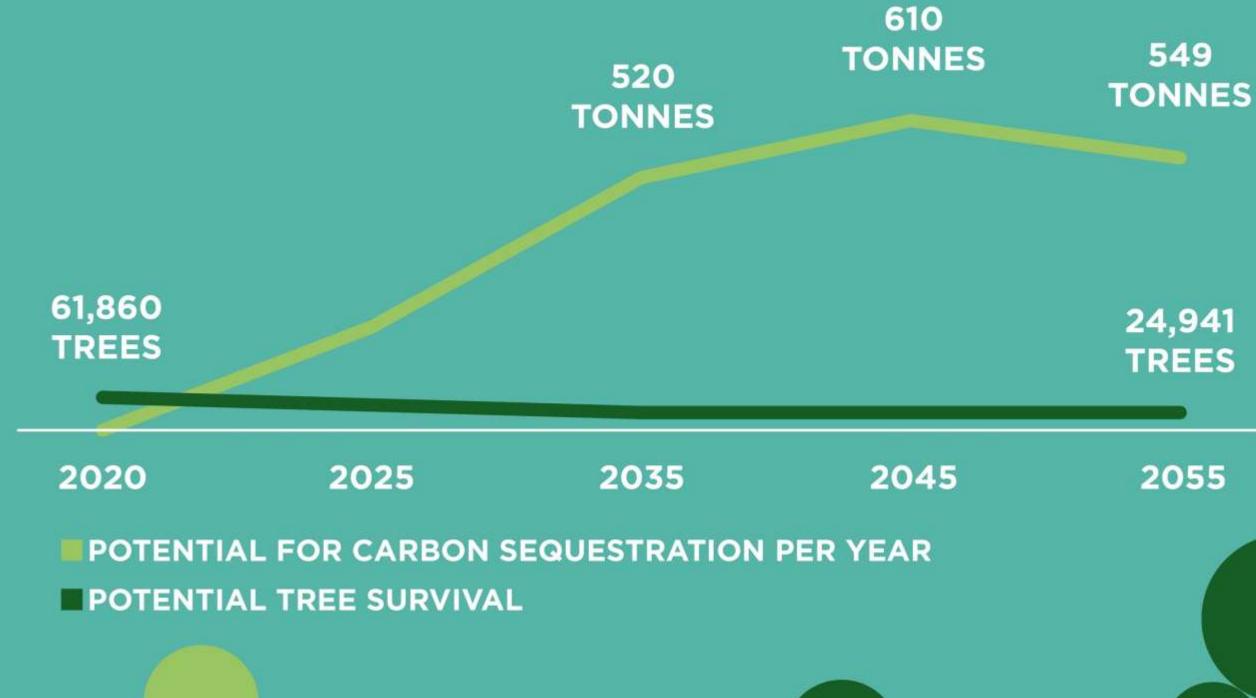








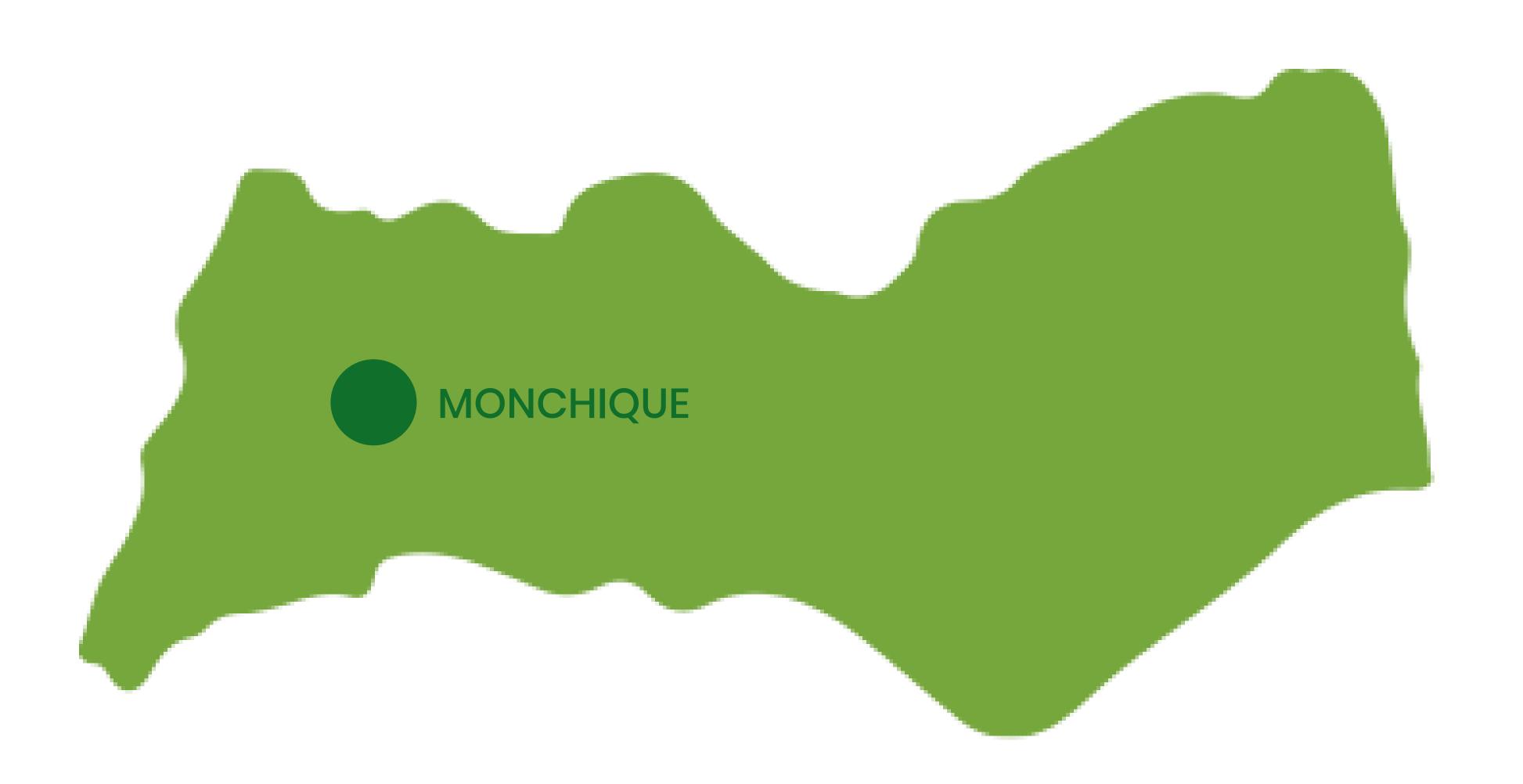
POTENTIAL IMPACT OF ECOLOGICAL RESTORATION



61,860 TRES PLANTED ECOLOGICAL RESTORATION WAS INITIATED 291 HECTARES

01. Public Relations | P902. Implementation | P1803. Financial Execution | P33

Algarve, Portugal



01. Public Relations

From Strategy to Implementation.

Why a public relations strategy?

There is an urgency for developing renature projects in a context for change in Portugal - 140,000 ha burned on average every year between 2009 and 2018;

The opportunity to take advantage of innovative tools by creating a communications model based a **transmedia campaign**;

The possibility of showing the process - it's not just about planting trees!

Limitations of a project that:

- has no immediate visible results trees take 15-years to grow;
- has areas of intervention with low visibility and difficult accessibility the need for a big social audience;

Key concepts









Web Series

The project narrative was composed of a Web Series. The campaign content adapted to each medium of communication, allowing the user to have a more immersive narrative experience according to the content viewed.

Field activities

The Web Series and social media content made known the territory, habitats, and the ecosystems of the Monchique region. while disclosing the processes of renaturalization based on project actions.

Events

The project communication cycle was completed through events, such as the launch and volunteer activities, and public relations via both media and the project partners.

Transmedia Narrative Website Web series Physical elements Press **Events** Social articles media

856,993 people

Reached through social media

272,906 views

Of the project Web Series

150 volunteers

Participated in project activities



Project Web series

"Renature Monchique is a project to restore key Natura 2000 habitats, supporting local well-being and mitigating the future impacts of climate change in the Monchique area of the Algarve devastated by the largest wildfire in Europe in 2018. Here's a 5 episode Web Series demonstrating the actions taken."



Project Outreach

"Renature Monchique provided the opportunity for 4 environmental engineering masters students from Nova University Lisbon to participate in the activities of the project.

Conducted as a scientific and technical field trip, these students were introduced to the practical methods employed for the project."



02. Implementation

From Planning to Planting





The process



Establish partnerships Area selection, survey and

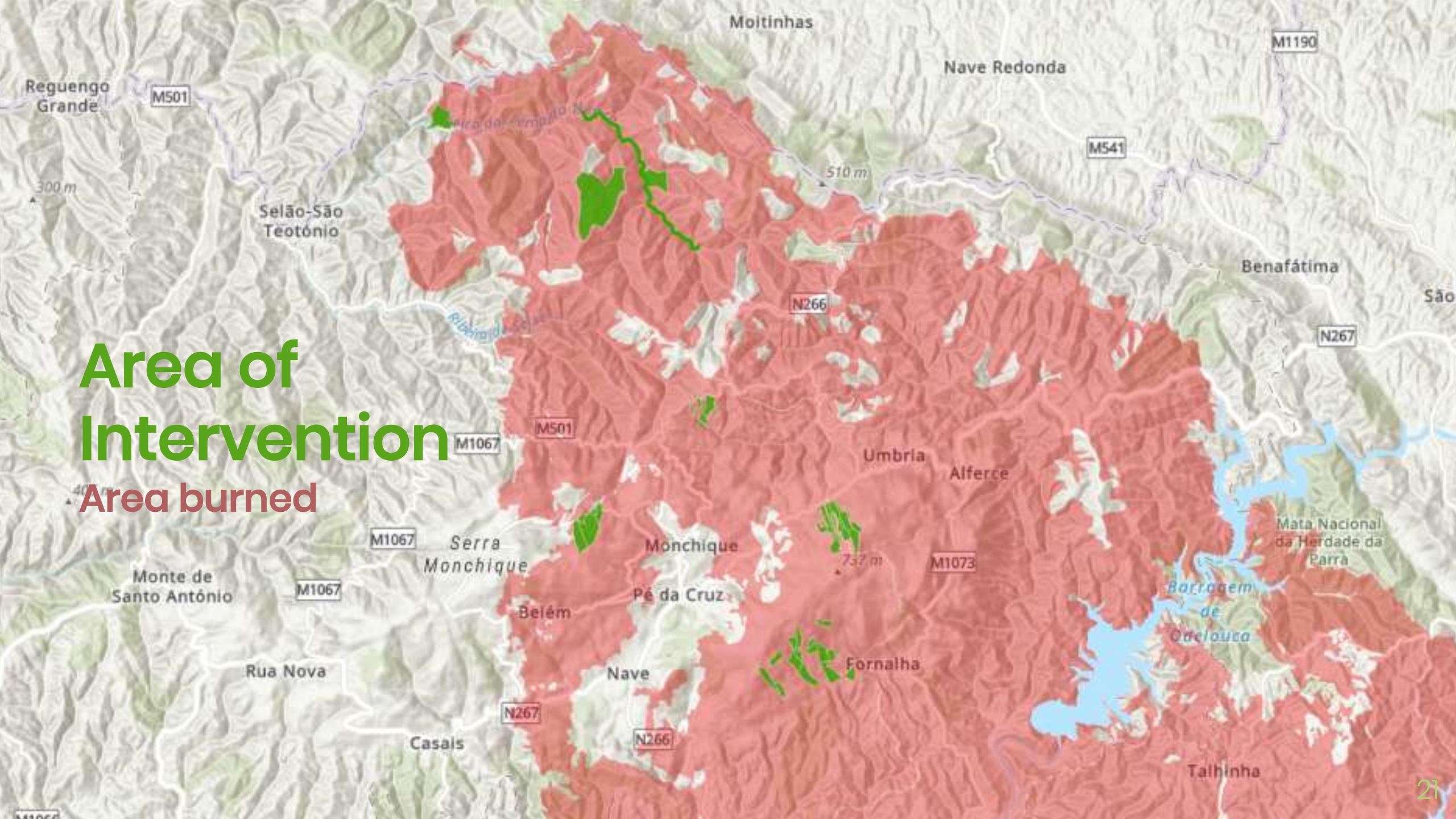
analysis

 Project (intervention) design Operational planning

- 2. Planting
- Site recovery and preparation
 Planting

- 3. Aftercare
- . Monitoring and evaluation . Replanting





61,869 trees planted

Ecological restoration was initiated over 291 hectares.

More than 90 landowners

Were helped.

Ecological restoration is both a social process and a physical process. It is also a medium to long term process that can take 15 to 20 years to complete.

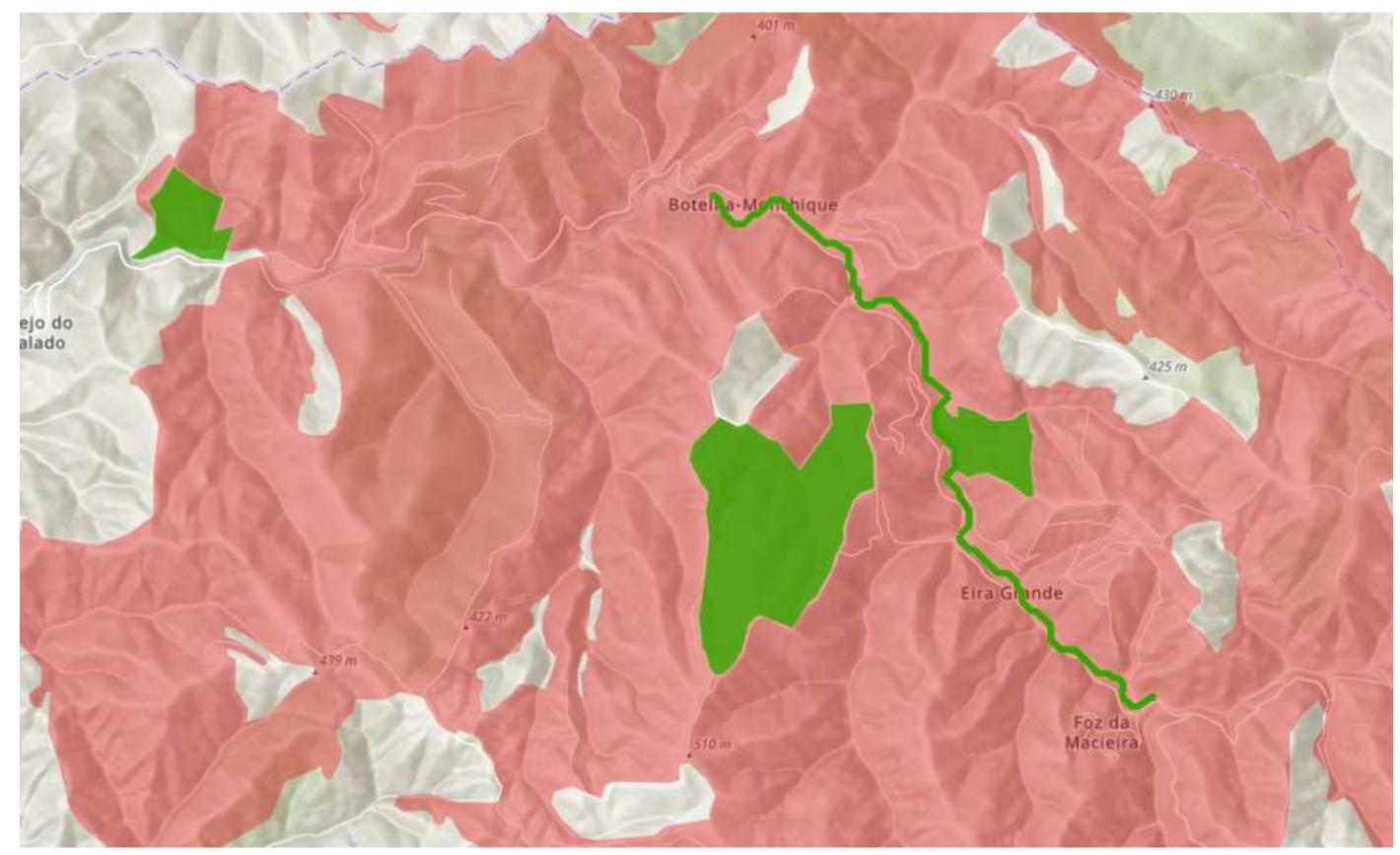
Ecological restoration as a social process it requires the cooperation and the capacity of private landowners, communities, and local authorities.

Ecological restoration as **a physical process** is a direct intervention on fire-impacted land, i.e. by carrying out activities relating to the preparation of plots, such as marking access routes, stabilizing eroded areas, removing invasive plants, setting markers where planting will take place, and finally planting. Not all the areas required intervention, a selection that was crucial in order to maximize the impact of the interventions.



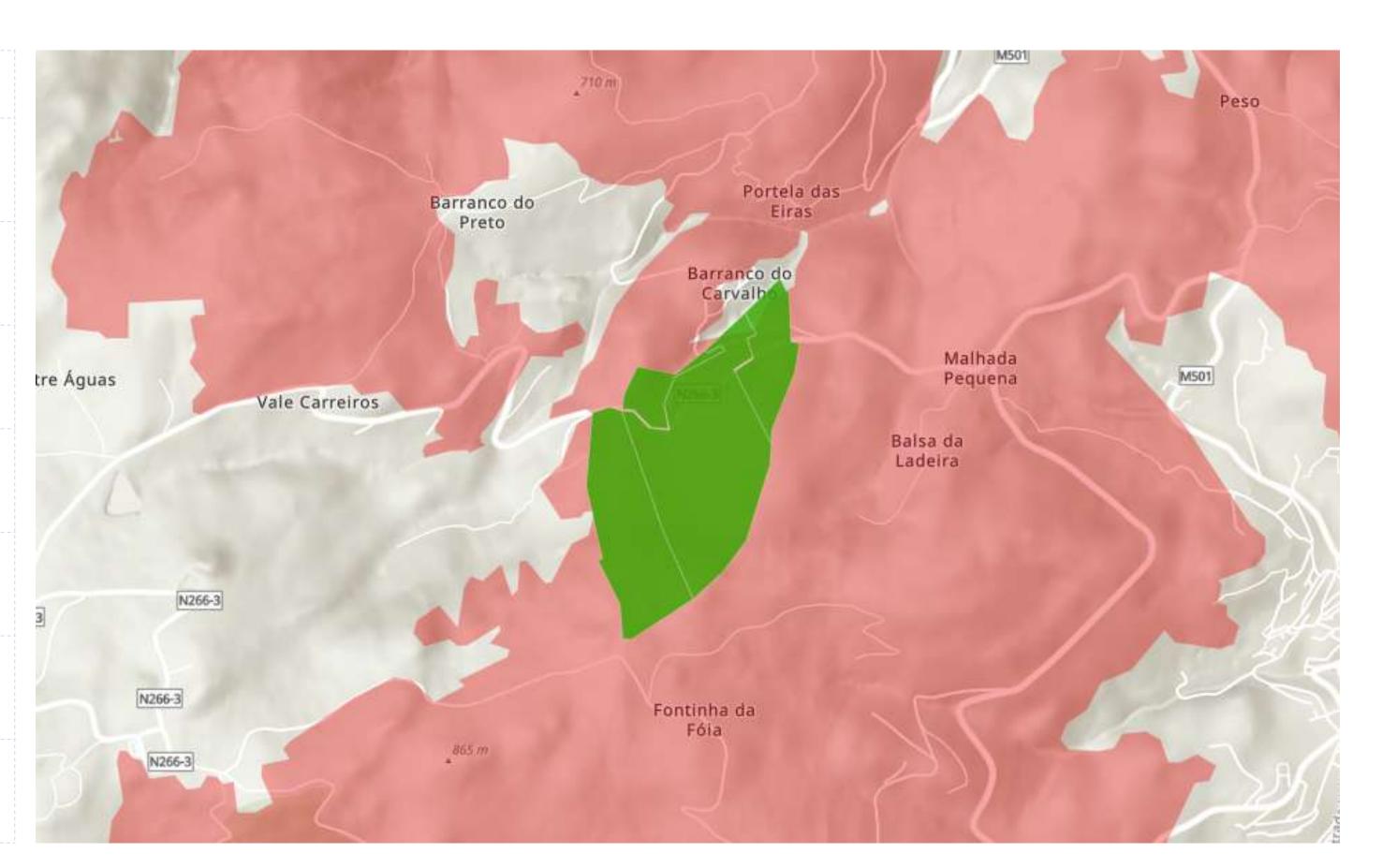
Area 1 — Perna da Negra 124 hectares

| Species | Number of trees planted |
|-------------------|-------------------------|
| Cork Oak | 15,510 |
| Strawberry tree | 12,698 |
| Common alder | 6,510 |
| Narrow-leafed ash | 4,958 |
| Chestnut | 0 |
| Portuguese oak | 2,124 |
| Monchique oak | 0 |



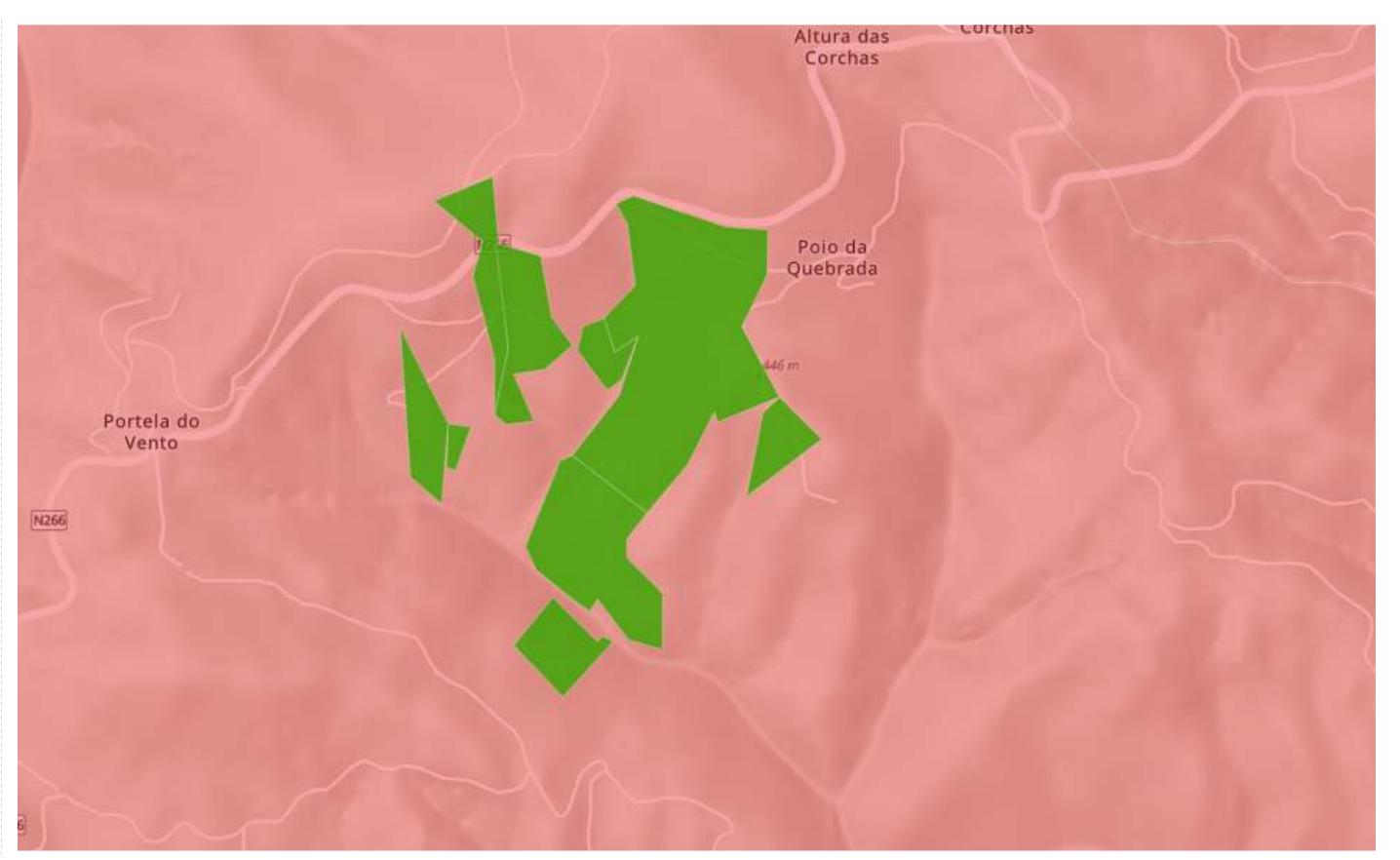
Area 2 – Foia 32 hectares

| Species | Number of trees planted |
|-------------------|-------------------------|
| Cork Oak | 1,038 |
| Strawberry tree | 0 |
| Common alder | 0 |
| Narrow-leafed ash | 32 |
| Chestnut | 1,403 |
| Portuguese oak | |
| Monchique oak | 88 |



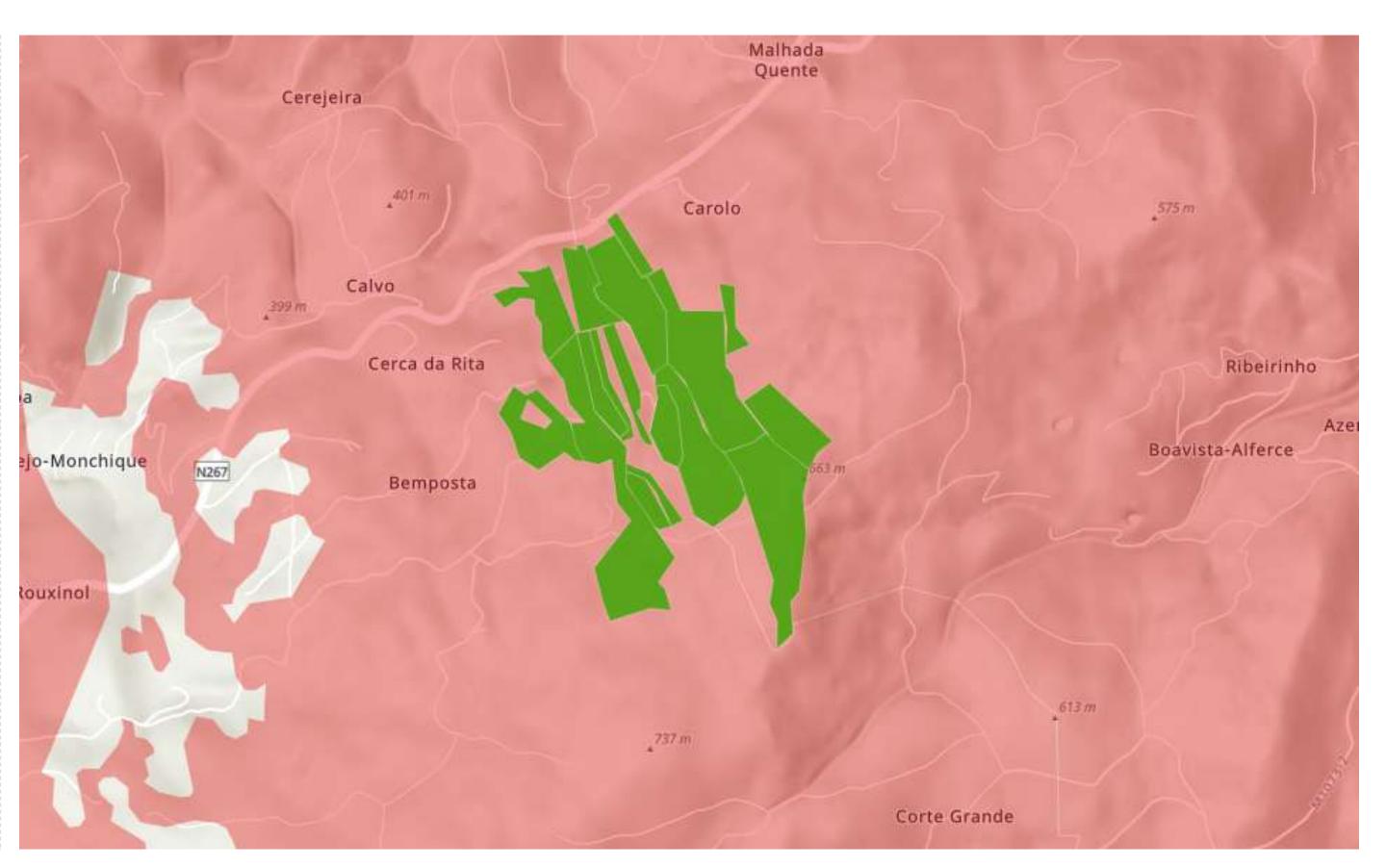
Area 3 – Corchas 13 hectares

| Species | Number of trees planted |
|-------------------|-------------------------|
| Cork Oak | 655 |
| Strawberry tree | 3,162 |
| Common alder | 0 |
| Narrow-leafed ash | 0 |
| Chestnut | 262 |
| Portuguese oak | 12 |
| Monchique oak | 0 |



Area 4 - Picota North 42 hectares

| Species | Number of trees planted |
|-------------------|-------------------------|
| Cork Oak | 6,886 |
| Strawberry tree | 2,080 |
| Common alder | 0 |
| Narrow-leafed ash | 0 |
| Chestnut | 1,431 |
| Portuguese oak | 196 |
| Monchique oak | 0 |



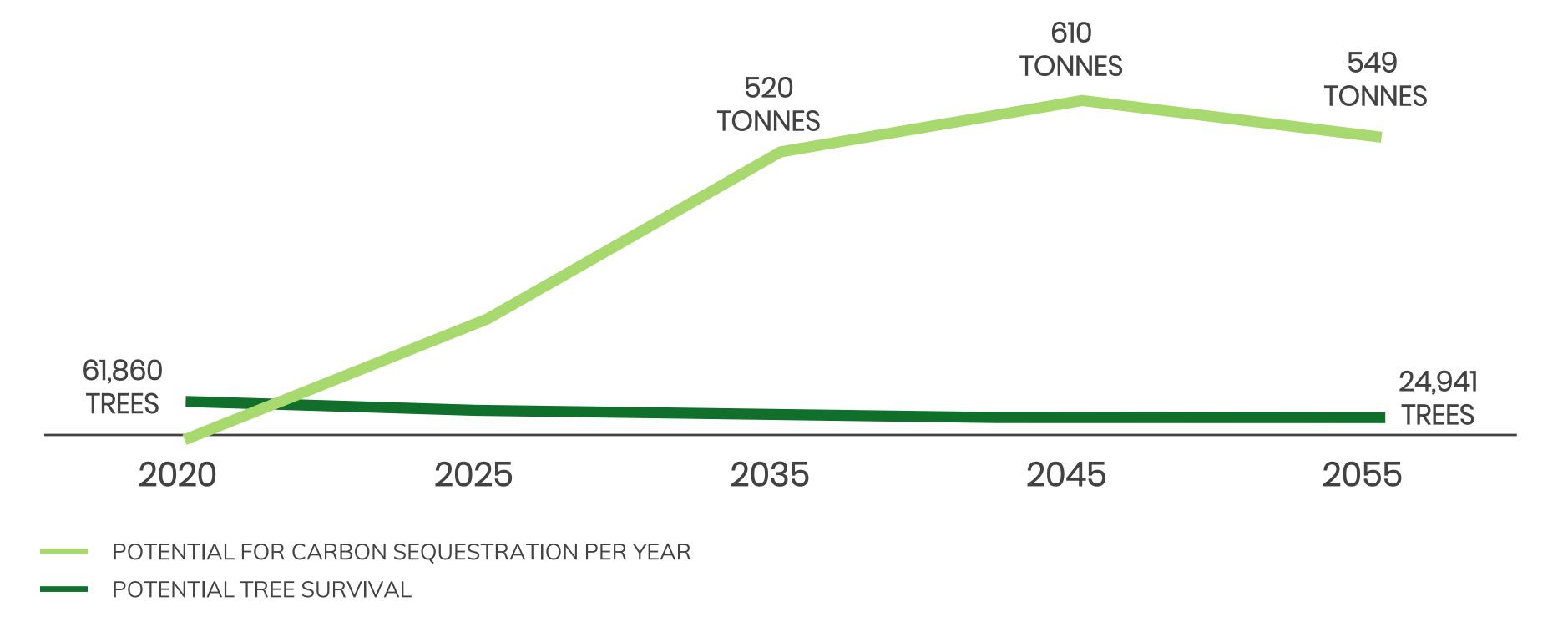
Area 5 - Picota South 80 hectares

| Species | Number of trees planted |
|-------------------|-------------------------|
| Cork Oak | 1,291 |
| Strawberry tree | 1,360 |
| Common alder | 0 |
| Narrow-leafed ash | 0 |
| Chestnut | 54 |
| Portuguese oak | 98 |
| Monchique oak | 12 |





The potential impact of ecological restoration



Tree mortality estimated at 30% until 2025, 20% from 2025 to 2045 and 5% from 2045 to 2055 (an uncertain and unpredictable factor)^[1] Carbon sequestration calculated @ 22kg/year for adult trees (0.02 tonnes)^{[2], year}

Detailed knowledge of tree mortality (death) and its causes are limited by some practical considerations such as: the reaction of young trees being removed from a nursery environment into the field; the life span of tree species; and, the infrequency, as well as episodic nature of tree mortalities and reasons for this, such as rainfall and temperature, wind and fire, pests and diseases, specific of the Mediterranean region.

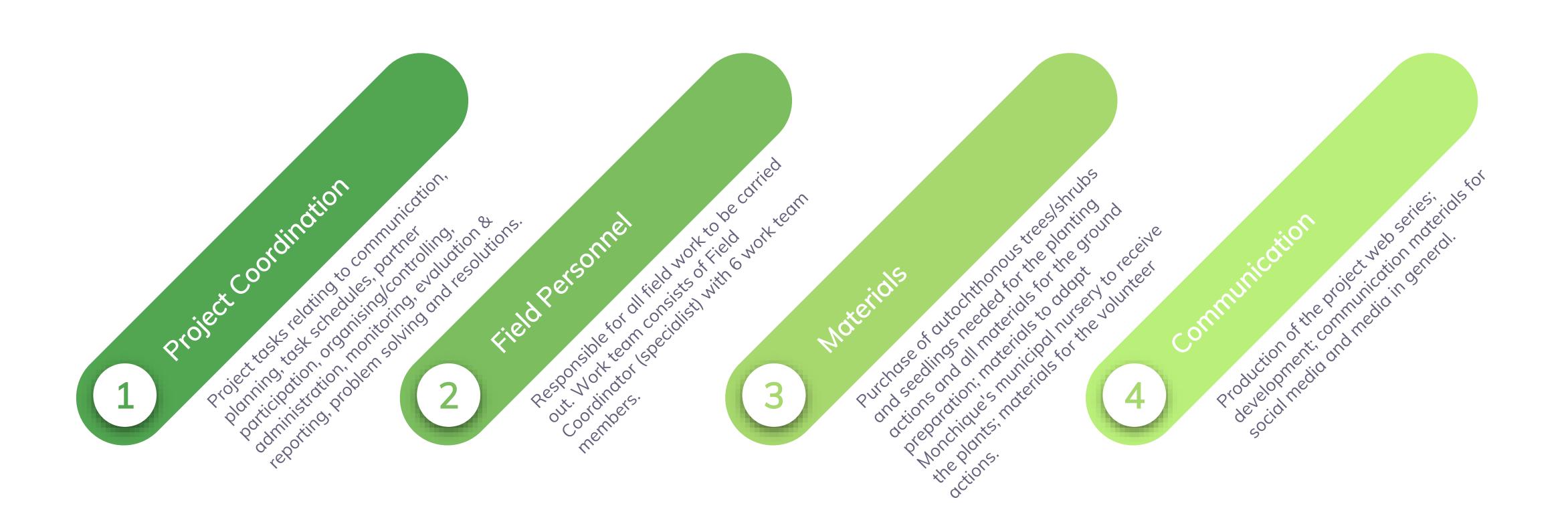
[2] Source: Trees help tackle climate change (European Environment Agency 2012). Available at: https://www.eea.europa.eu/articles/forests-health-and-climate-change/key-facts/trees-help-tackle-climate-change.

03. Financial Execution

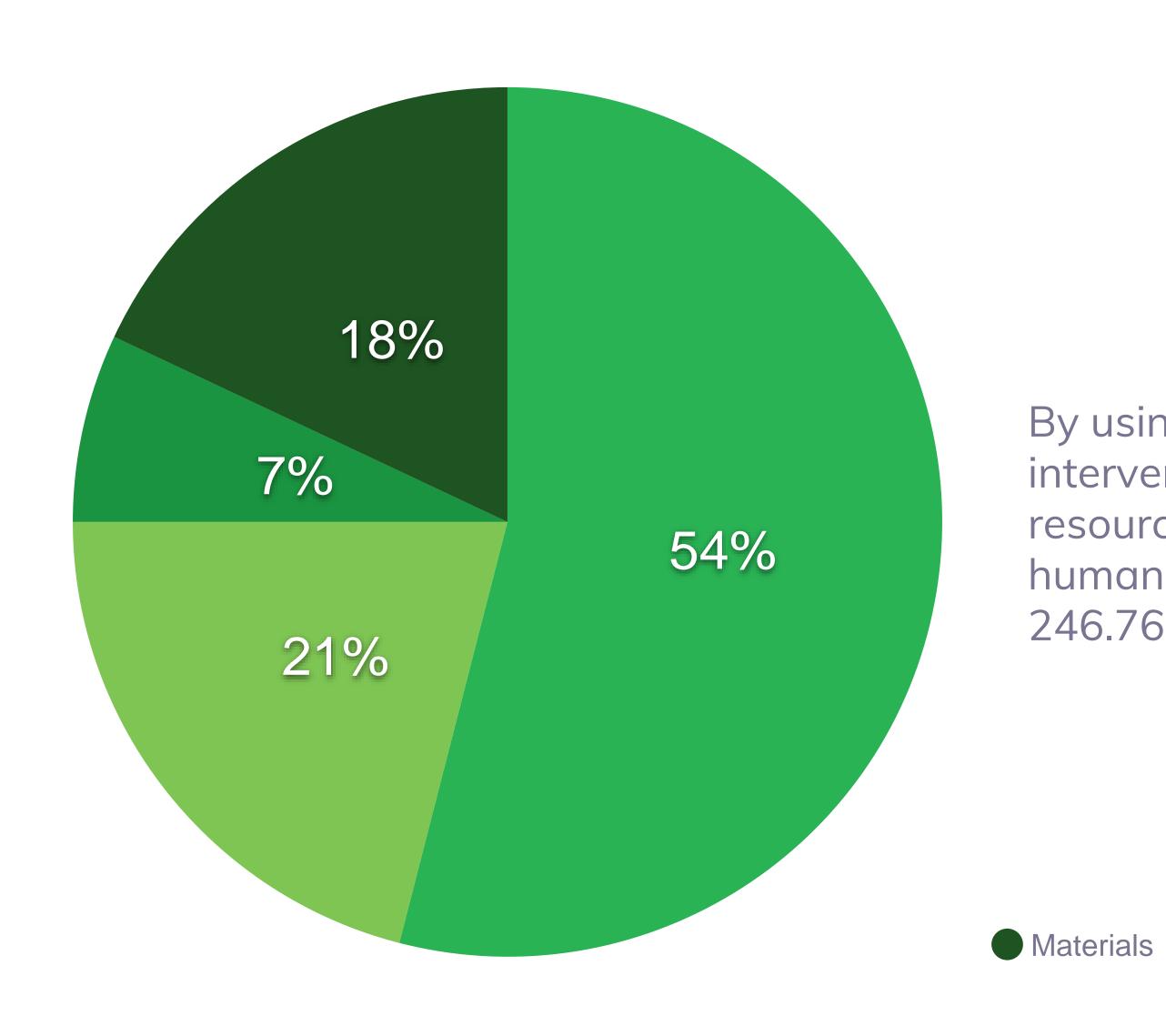
Turning Cost into Investment



Main cost centres



Main cost centres

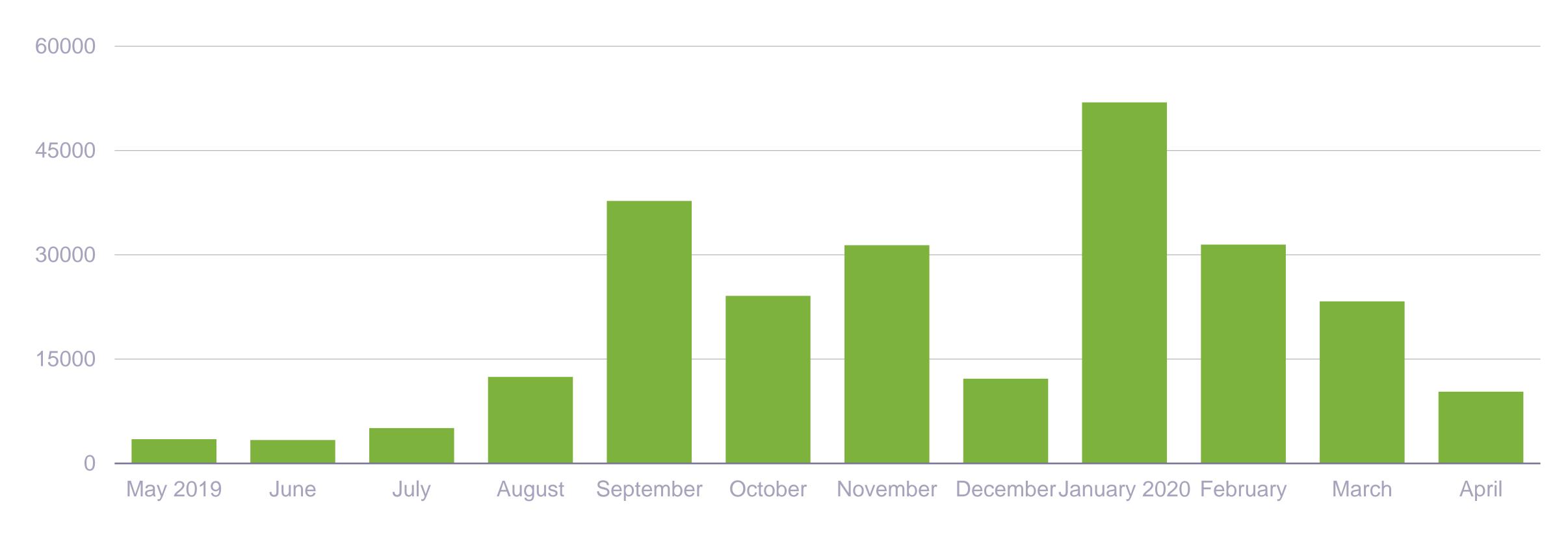


By using a low impact methodology for the intervention (ecological restoration), most resources are linked to materials (trees) and human labour (field personnel). A total of 246.767€ was spent.

Field Personnel Coordination

Communication

Monthly distribution



Turning cost into investment

An investment today, for the future...

A trip from Dublin to Faro is 1,800 km^[1], producing 0,124t^[2] of CO² per passenger.

By 2025 the trees planted <u>today</u> should be able to <u>offset</u> the carbon footprint equivalent of 1,741 passengers flying from Dublin to Faro.

By 2035 that number will increase to 4,193 passengers.

