

CASE STUDY:

Bringing carbon benefits to market

FĂGĂRAȘ MOUNTAINS



United Nations Geospatial, 2023

Background

The Carpathian Mountains project is located in the Făgăraș mountains of Southern Carpathians in Romania. It spans over 50,000 hectares of forests and grasslands. While some of the old-growth forest (mixed deciduous and coniferous, including Norway spruce and beech species) has survived, much has been degraded by clear-felling and other destructive forest management practices (such as timber extraction) and spruce monoculture plantations have replaced natural forest in some places.

The project has purchased almost 21,000 hectares and intends to create a large wilderness reserve to stimulate natural processes and sustain biodiversity, including a healthy carnivore population. To achieve this, the project is replanting native tree species in degraded areas, restoring riparian gallery forests and repairing areas damaged by erosion. The project is also purchasing land parcels from some landowners for protection in perpetuity and trying to find alternative income for forest owners to stop harvesting forests.

Partner organisations: [Foundation Conservation Carpathia](#)

Interview with Barbara Promberger, Executive Director of Carpathia Conservation Foundation

How did you make a decision to sell credits and have you been successful?

The project relies on collaboration with private landowners and income from carbon credits can be an alternative to exploitative land management practices. Having some successful cases of private owners making money from carbon credits would demonstrate to others that harvesting forest is not the only way to have income from the land. It would be an incentive for the landowners to join

our project. For us, having additional income from carbon credits also means more resources for restoration work. For these reasons we decided to proceed with registering with the VCS standard after a feasibility study. Currently our project is [registered](#) and we are preparing for an audit.

What options were available to you? What aspects of the project restricted your options?

We didn't consider standards other than VCS, which was proposed by a consultancy that approached us in 2019 and did the feasibility study. We were advised to work with the [VCS methodology for improved forest management activities in temperate and boreal forest](#). The methodology is based on management plans and these will change if the area becomes a national park. It's not clear how it will work then, but for the moment it works well and there is still some harvesting allowed. Under the carbon project, the credits come from not using harvestable timber after we purchase the land. We are not claiming credits for our restoration work, which happens in other areas. The reason is that replanting clearcut forest is already required under Romanian law [so no additionality], while other types of restoration we are doing would not be profitable under existing VCS methodologies. We also went with the option of certifying under the [Climate, Community and Biodiversity Label](#), which usually adds a premium of about 30% to your credit price. This made sense for us because we are already monitoring for many of the biodiversity parameters required.

The main restriction in the project was finding partners among the private landowners. Many of them want the income from carbon credits to match the income they usually get from harvesting, but it's risky to promise anything. We have convinced one town hall to join such a partnership so far.

Another factor that guided our decision-making were the terms of the original consultancy, which we eventually found too expensive for us. We also did not agree with their proposal to link credit sales with project development [NB: to cede future credits to the developer in exchange for help with developing the project]. We ultimately chose another company which better aligned with our project in vision and finances.

One option we also used was pre-financing project development ourselves, which gives us more freedom and allows us to hold on to the carbon credits rather than give them to the consultancy.

What is the process of setting up a carbon project like?

Our level of understanding was low in the beginning, and it took a long time to understand the standards and then to be confident in our work with the consultancy to start the project. It was helpful to speak with NGOs and other carbon projects in this initial stage. We had a division of labour with the consultancy, where we provided forestry data and stakeholder analysis, and they did the formal writeup of project development for VCS. We ended up doing much more work than we expected.

We had to select a validation and verification body (VVB) for auditing the project and went with the company recommended by our consultancy. We have also decided to claim credits from 2017, so we set our project starting date as August 2017. VCS allows this. Currently, we are going through the process of stakeholder consultation, which is a required step before the project is validated and credits verified. We planned to complete validation and verification before May 2023, which is five years after the starting date plus an extension we received due to delays caused by COVID. We are now facing additional delays not caused by us, which will lead to additional costs of about EUR50,000. After verification is complete, we will receive carbon credits which we can then sell.

Table 1. Approximate in-house labour costs for preparing carbon project.

Role	Tasks	Time commitment
GIS Specialist	Delivering spatial data from forest management plans	80 hours
Forest Specialist	Extracting data from forest management plans (in Romania often found only in hard copy)	80 hours
Conservation Director	Analysing data to find areas overlapping with protected areas or plots under other income schemes, field trips during audit, cross-checking	100 hours
Project Leader	Research, communicating with consultancies and registry, data checking, stakeholders, all monitoring development and supervision, field visits, etc	40-60 hours per month from project idea to credit issuance
Forest Monitoring	Inventory on about 600 sampling plots	30-40 days for four rangers and two external experts at the beginning of the project and every 5 years
Biodiversity Monitoring	Collecting and extracting data from camera traps, audio recorders, vegetation monitoring	4 months, 5 people for camera trap monitoring every 5 years 2 months one person for audio recorders every 3 years 1 person for two months every year

What will be the process of managing the carbon project over its lifetime, how much time and money will be required?

We don't intend to hire a dedicated staff member to manage the current project. However, we may need an additional senior staff member when we develop a platform to bring more forest owners into the project. The time commitment will vary: in years of verification, I imagine we will require the GIS and forest specialists and conservation director to spend about half of the time committed during the preparation of the project. In between verification the time spent will be mainly on sales efforts which will be embedded into our fundraising work.

For monitoring, we are hoping to use a technique called terrestrial laser scanning (TLS)¹. This is not a method that is acknowledged by the VCS but we are working with the standard to establish our project as a pilot using TLS. We expect that performing this for every verification will cost between EUR 30,000 and EUR 70,000 to scan our project area, depending on the number of sample plots required. This is still more cost effective than traditional forest inventory because of the size of the project area and difficult mountainous terrain. We don't have a plan yet for biodiversity monitoring but to be cost effective we intend to base it on camera trap analysis, which we already do.

How will you find buyers for your credits? What will be important to consider?

Because we decided to keep our credits, we are in a position to choose who we sell to. We are planning to have a due diligence process for this, because we want our buyers to be companies who are already reducing their carbon footprint, who had an audit done and know how much they cannot reduce.

We had many companies approach us that are interested in buying our credits. These offers came through brokers, so we don't know the company backgrounds. We did not begin negotiations because we don't want to sell credits before we actually have them. The offers were a minimum of EUR 20 per credit and buyers were looking for at least 50,000 credits per year for five years.

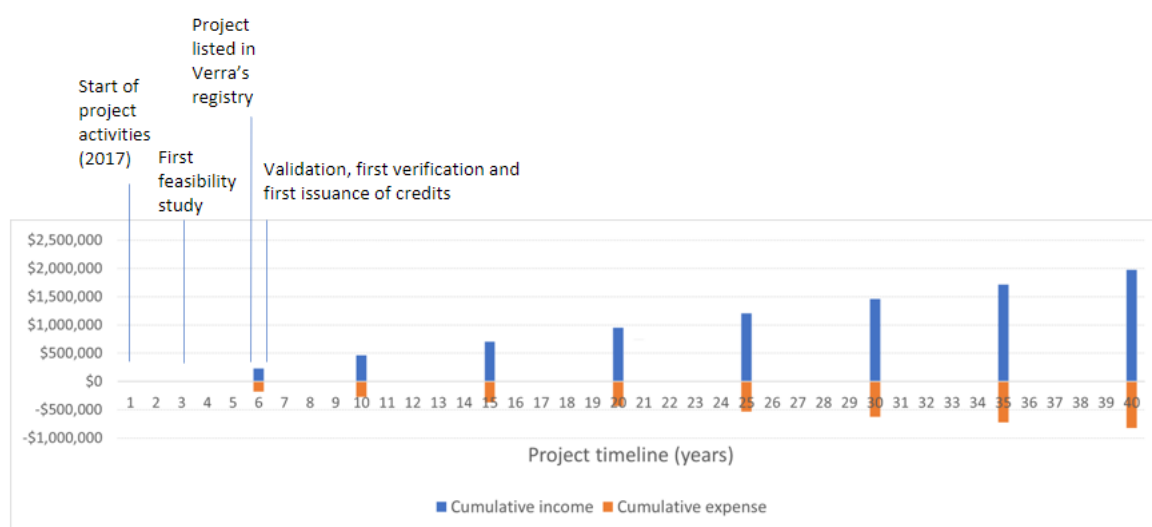


Figure 1. Projected carbon project costs and income from credit sales over 40 years, starting in 2017, estimated during the feasibility study. Included costs are Verra fees (account opening, registration, issuance, validation and verification), fees of the Climate Community and Biodiversity Standard (validation, verification and label), and consultancy fees. Costs associated with project implementation and monitoring are not included. All costs and incomes are in USD, the price of carbon credit was estimated at USD 13.

¹ The TLS method employs stationary laser-based instruments that sit on tripods and capture physical parameters of the surroundings with an optical beam. In the forestry context they can capture data such as height, species, biomass and diameter at breast height (DBH) and create 3D models (Liang et al. (2016) Terrestrial laser scanning in forest inventories. *ISPRS Journal of Photogrammetry and Remote Sensing*, 116, 63-77).

We would be interested in selling to a Romanian company, to keep the local connection. We will be selecting buyers based on their industry, and there will be a “stop list” of industries we will not be selling to. We haven’t looked into marketing our credits yet, but we think our project has a good story and there will be demand. We are also planning to keep some credits to offer to tourists coming through our TravelCarpathia programme to offset their trips.

Do you think all these efforts will be worth the reward? What were some unexpected challenges in the process of setting up the carbon project?

The level of interest from brokers who contacted us to purchase credits upfront for prices much higher than market average suggests that it will be worth the reward.

The biggest challenge was understanding the process to the level required to work with consultants, especially as we wanted to be involved at every step and then keep the credits. This makes it difficult to provide all the data and make sure information is correctly interpreted. If we were to do anything differently, it would be to insist on getting more insight into the processes behind each step and on more transparency. At the moment, it seems that in Europe especially one learns by doing, and a close collaboration with the consultant is crucial.

What would be your advice to projects considering selling credits?

My advice to other projects would be to choose the consultant carefully and don’t sell credits cheaply. Having a good understanding of the consultant’s work process is crucial because poor project management can cause delays making additional expenses inevitable. Understanding the steps involved and timely intervention when things don’t go as planned is important when a consultancy is involved.

Key Messages

Consider joining with other landowners. Joining up with other landowners can increase the impact of the project and help spread the costs.

Consider your consultants and intermediaries carefully. Understanding your long-term goals, budget and capacity gaps can avoid pitfalls when making deals and partnerships. Close collaboration, transparency and shared values are important.

Think about your end buyers and marketing strategy. There is a lot of demand. Additional co-benefits and a good story can increase your credit price. Direct deals with buyers can also minimize profits being absorbed by intermediaries.

Further reading:

[Carpathian Mountains - The Endangered Landscapes Programme](#)

[Conservation: We work to create Europe's largest forested National Park](#)

Disclaimer: The boundaries and names shown and the designations used on the map in this document do not imply official endorsement or acceptance by the United Nations.

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