



Mission Model Canvas

Project title:

Capti'vin

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Key Partners 🤝

Which persons and organizations can support your project and act as intermediaries?

- Viticultural or agricultural organizations to acquire more customers and have a bigger impact.

Cantons, for financial support and creating synergies with winemakers and local consumers of CO2

Regional industrial companies working in the F&B industry and looking for an alternative to fossil-fuel byproduct CO2 to reduce their footprint.

Engineers and suppliers for the captation device (piping system)

Key Activities 🌟

What are the three main activities needed to create/realize your project?

Service of capture and selling of biogenic CO2 byproduct from wine fermentation, through:

- 1) Carbon capture tech./device manufacturing and installation
- 2) Sale and maintenance service for the winemakers
- 3) Purchase/Sale, transport and storage of the CO2 for the F&B industry

Key Resources 🛠️

Which three skills and resources are central to the implementation of your idea?

- 1) Materials for the piping system: PVC, stainless steel, gas bundles
- 2) HR including maintenance technicians, sales staff, expertise in carbon capture and chemistry
- 3) Transportation, own vehicle or external company for collection and delivery

Value Propositions 📺

How do you explain your project to a stranger in 1 minute?

All-in-one solution for the capture and valorization of CO2 from wine fermentation with both a technology for the capture and the development of a value chain to valorize it, to:

- Reduce CO2 emissions,
- While generating new revenue stream,
- And preventing related environmental and safety risks for employees.

By boosting circular innovation in the F&B sector and beyond.

Customer Relationships ❤️

How do you actively involve your community in your project (beyond just looking/listening)?

Facilitating partnerships for circularity between winemakers and the F&B industry, coaching and advice for the product and optimal use through contact on the ground and personalized service, mutualization of installations/materials/storage between winemakers.

Channels 📱

What channels will you use to reach your community? How will the target group find out about your project?

Direct contact to selected winemakers first. Second, customer acquisition through networks of winemakers and support of Cantons.

Pro-active direct reach-out to end users of capture CO2.

Customer Segments 🧑🧑🧑

Who do you want to address with your idea or project? Who will jump at it? Name your main target groups.

CO2 capture installation

- Medium and large wineries in the Cantons of Vaud, Wallis and Geneva (to start). Targeting +100'000L of annual wine production.

Sales of byproduct

- Regional companies in the food and beverage industry: sparkling beverage producers, greenhouses or microalgae producers.

Cost Structure 💰

What costs do you expect to incur to realize your idea?

What are the costs?

Material costs, Labor costs, costs of transportation, costs of maintenance.

Revenue Streams 🌿

1. **Impact:** What does your idea do for the climate? How do you measure/verify the impact?

2. **Scaling/Expansion/Unfolding:** How to increase the impact of your project?

The revenue streams are:

- the sale/leasing of the technology/installation and maintenance,

50'000 CHF is the budget for our first demonstrator of the project at the HES-SO Valais-Wallis and our partner winery in Valais/Wallis. It is structured with the following main costs:

- 20'000 CHF of material costs including pipes, valves, a Buffer tank, CO2 storage bundles, sensors, electrical components - on both sites.
- 25'000 CHF of labor costs including mounting and installation, automation, tests, analyses and documentation - for the academic research team.
- 5'000 CHF of additional costs.

- the sale of the recovered CO2 to regional F&B companies and agricultural sector,
- consulting for valorization of CO2,
- and voluntary carbon credits and from the BAFU/OFEV for medium/long term storage of CO2.

In terms of impact, the project contributes to the reduction of GHG emissions (up to -15% in the wine's value chain and additional reduction depending on the utilization) and improves efficiency and circularity. Measure through assessment of numbers of tons recovered (and number of wineries), utilization options and carbon footprint analysis of the whole system.

Scaling up to other Cantons in Switzerland and neighboring countries with a bigger potential through higher wine production. Our main innovation and advantage is the development of a value chain and partnerships to valorize the CO2 compared to other existing concepts, which makes it a great opportunity for other applications of our technology and service (beer industry, methane production,...).