

EXAMPLE FOR UNIVERSITIES

VitisSense

Low-cost sensors for irrigation and disease management in vineyards — a university spin-off. Centro region, Portugal.

Opportunities Accacia found for this project

91%

Portugal 2030 — Productive Innovation Incentive Scheme

Grant / repayable incentive

Productive investment by a new SME in a convergence region.

86%

Mutual guarantee for the bank loan (national mutual guarantee system)

Guarantee

Cuts the personal guarantee asked of the founders and the spread.

74%

EIC Accelerator (Horizon Europe)

Grant + equity

Patented technology with field trials done; requires a European scale-up plan.

What Accacia flagged before export

- Municipal surcharge proposed by the AI at the 1.5% maximum — confirm the rate of the head-office municipality.
- Patent licence agreement with the university still being negotiated — this does not block exporting the plan.
- Letters of interest from the three wineries were uploaded as sources; the bank may ask for the originals.

1 · Describe the project
Text, attachments and links feed the project record.

2 · The AI writes and calculates
Plan, tables and bank-style analysis, without inventing data.

3 · Find opportunities
Funding, guarantees and commercial opportunities across the CPLP.

V

VITISSENSE

CENTRO REGION, PORTUGAL



Vineyard sensors · Centro region, Portugal

Illustrative image · AI-generated

FINANCING REQUEST

Business Plan

VitisSense, Lda

VitisSense — pilot line and certification of vineyard sensors

Centro region, Portugal · 5 years · EUR

The information in this document belongs exclusively to VitisSense, Lda and is confidential; anyone who consults it undertakes not to disclose any of it, in whole or in part, without the company's prior written consent.

2026

ILLUSTRATIVE PROJECT · FICTITIOUS DATA · EXAMPLE FOR UNIVERSITIES · GENERATED WITH ACCACIA BY LUSOHUB

Document details

Field	Value
Promoter	VitisSense, Lda (being incorporated)
Project	VitisSense — pilot line and certification of vineyard sensors
Project location	Centro region, Portugal
Promoter origin	Three researchers from an agricultural engineering lab (Portugal and Brazil) and the university, which takes 10% of the equity in exchange for the patent licence.
Intended recipient	Commercial bank · investment loan with mutual guarantee
Output profile	Bankability (credit analysis)
Projection horizon	5 years
Presentation currency	EUR
Document date	29 October 2026

Contents

0. Executive summary 5
1. Introduction and purpose of the request 6
1.1 Purpose and amount requested 6
1.2 Methodology, currency and horizon 6
2. The promoter and the project 7
2.1 About the promoter 7
2.2 The project 7
2.3 Team and staffing 7
3. Market and sales 8
3.1 Demand, clients and sales strategy 8
3.2 Forecast revenue 8
4. Investment and financing 9
4.1 Investment plan 9
4.2 Financing needs and sources 9
4.3 Terms of the proposed loan 10
4.4 Proposed guarantees 10
4.5 Debt service 10
5. Financial plan 12
5.1 Assumptions 12
5.2 Projected income statement 12
6. Viability and bankability analysis 14
6.1 Project valuation 14
6.2 Debt service coverage 14
6.3 Assessment from a bank analyst's perspective 15
7. Risk analysis 16
7.1 Risk matrix 16
7.2 Scenarios 16
8. Conclusion 17

List of tables

Table 1 — Investment plan 9
Table 2 — Financing needs and sources 9
Table 3 — Financing terms 10

Table 4 — Debt service 11
Table 5 — General assumptions 12
Table 6 — Projected income statement 12
Table 7 — Valuation — project perspective 14
Table 8 — Viability indicators 14
Table 9 — Debt service coverage 15
Table 10 — Assessment by dimension 15
Table 11 — Risk matrix 16
Table 12 — Scenarios 16

List of figures

Figure 1 — Investment by item 9
Figure 2 — Sources of funds 10
Figure 3 — Debt service — principal and interest 11
Figure 4 — EBITDA over time 13
Figure 5 — EBITDA margin and net margin 13
Figure 6 — Cumulative discounted cash flow 14
Figure 7 — DSCR by period 15

0. Executive summary

TOTAL INVESTMENT	FINANCING REQUESTED	NPV	IRR	MINIMUM DSCR	PAYBACK
480 EUR thousand	336 EUR thousand	423 EUR thousand	27.1%	1.67 times	3.4 years

VitisSense, Lda. Three researchers from an agricultural engineering lab (Portugal and Brazil) and the university, which takes 10% of the equity in exchange for the patent licence. It requests financing of 336,000 EUR over 6 years, with a 1-year capital grace period, at 5.5%. The financing is 70.0% of a total investment of 480,000 EUR.

VitisSense makes and sells soil-moisture and microclimate sensors, with an annual subscription for irrigation and mildew-risk alerts. The product comes from six years of research and two years of field trials on 40 hectares of vineyard. The investment sets up a pilot line able to produce 4,000 sensors a year and certifies the product for sale in the European Union.

Revenue grows from 280,000 EUR in year 1 to 1,350,000 EUR in year 5. EBITDA is negative in year 1 and turns positive in year 2 and reaches 500,000 EUR in year 5, a 37.0% margin. Net profit is positive from year 2.

Debt service coverage is lowest among the repayment years in year 2: 1.67 times. Proposed guarantees: Mutual guarantee over 50% of the loan, pledge over the pilot-line equipment and a promissory note signed by the company and guaranteed by the three founders. Reserve account equal to 6 months of debt service from year 2.

The most material risk is market risk — slower uptake by wineries. Mitigation: start with the three wineries holding letters of interest; entry price bundled with an annual subscription. Under the combined scenario of sales −15% and fixed costs +10%, minimum DSCR is 0.58. Assessment: viable, with conditions.

1. Introduction and purpose of the request

1.1 Purpose and amount requested

Medium- to long-term financing of 336,000 EUR is requested to fund the investment described in chapter 4, mainly sensor pilot production line and ce certification and product industrialisation. The request is addressed to: Commercial bank · investment loan with mutual guarantee.

Shareholders' equity of €144 thousand (30%) and a €336 thousand bank loan over 6 years, with a 1-year grace period, at 5.5%.

1.2 Methodology, currency and horizon

The study covers 5 years of activity, preceded by year 0, when the investment is made. The presentation currency is EUR. Figures are at constant prices.

The tax and macroeconomic assumptions used are set out in section 5.1.

2. The promoter and the project

2.1 About the promoter

VitisSense, Lda. Three researchers from an agricultural engineering lab (Portugal and Brazil) and the university, which takes 10% of the equity in exchange for the patent licence.

2.2 The project

VitisSense makes and sells soil-moisture and microclimate sensors, with an annual subscription for irrigation and mildew-risk alerts. The product comes from six years of research and two years of field trials on 40 hectares of vineyard. The investment sets up a pilot line able to produce 4,000 sensors a year and certifies the product for sale in the European Union.

2.3 Team and staffing

The team starts with 6 people and reaches 11 by year 5. Technical leadership stays with the researcher who holds the patent; a sales manager is hired in year 1.

3. Market and sales

3.1 Demand, clients and sales strategy

The first market is cooperative wineries and farms of more than 20 hectares in the Dão, Bairrada and Douro regions. The company holds letters of interest from three wineries covering 1,100 hectares. From year 3 it enters Spain through a farm-equipment distributor. Pricing is €290 per sensor and €9 per hectare per month for the subscription; recurring revenue reaches 45% of sales in year 5.

3.2 Forecast revenue

Revenue grows 48.2% a year on average, from 280,000 EUR in year 1 to 1,350,000 EUR in year 5. The yearly detail is in the projected income statement (chapter 5).

4. Investment and financing

4.1 Investment plan

Total investment is 480,000 EUR, made in year 0. The largest item is “Sensor pilot production line”, at 43.8% of the total with a 8-year useful life. Initial working capital of 60,000 EUR covers the first months of activity.

Item	EUR thousand	% of total	Useful life (years)
Sensor pilot production line	210	43.8%	8
CE certification and product industrialisation	120	25.0%	5
Commercial launch	40	8.3%	3
Other investment and contingencies	50	10.4%	5
Initial working capital	60	12.5%	—
Total investment	**480**	**100.0%**	

Table 1 — Investment plan

Year-0 figures. Useful lives drive the depreciation in chapter 5.

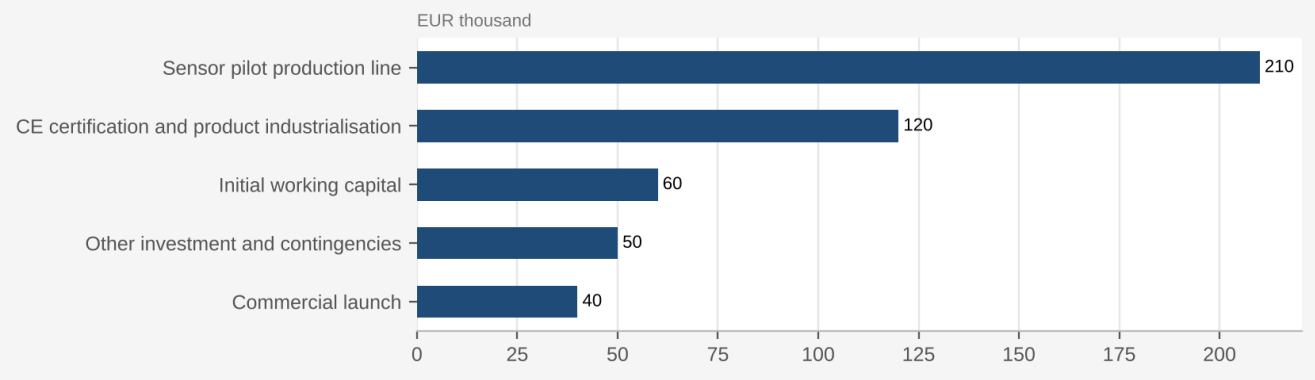


Figure 1 — Investment by item

4.2 Financing needs and sources

Total needs are 480,000 EUR and sources match them exactly. Equity cover 30.0% of the investment; bank debt, 70.0%.

Item	EUR thousand	% of total
Fixed-asset investment	420	87.5%
Working capital	60	12.5%
Total needs	**480**	**100.0%**
Equity	144	30.0%
Bank financing requested	336	70.0%
Total sources	**480**	**100.0%**
Check (sources − needs = 0)	**0**	**—**

Table 2 — Financing needs and sources

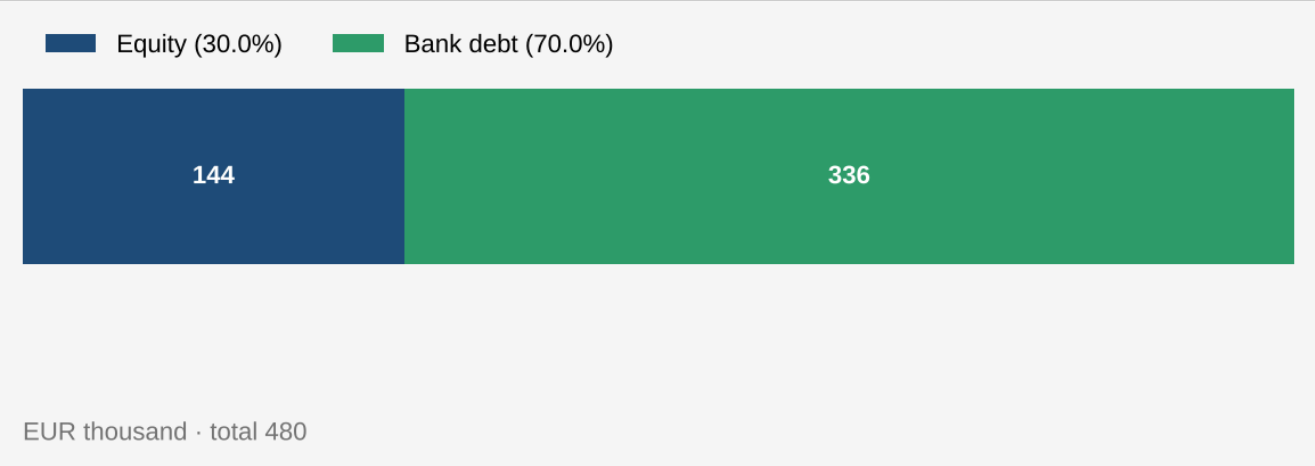


Figure 2 — Sources of funds

4.3 Terms of the proposed loan

Item	Term
Amount	336,000 EUR
Currency	EUR
Interest rate	5.50%
Total term	6 years
Capital grace period	1 year
Calculation period	Annual
Repayment method	Equal principal

Table 3 — Financing terms

Terms proposed by the promoter, used to compute debt service.

4.4 Proposed guarantees

Mutual guarantee over 50% of the loan, pledge over the pilot-line equipment and a promissory note signed by the company and guaranteed by the three founders. Reserve account equal to 6 months of debt service from year 2.

4.5 Debt service

Only interest is paid during the grace period. Principal is repaid in equal instalments until maturity; at the end of year 5 outstanding principal is 67,200 EUR.

Item	Year 1	Year 2	Year 3	Year 4	Year 5
Opening principal	336	336	269	202	134
Principal repayment	0	67	67	67	67
Interest	18	17	13	9	6
Total debt service	**18**	**84**	**80**	**76**	**73**
Closing principal	336	269	202	134	67

Table 4 — Debt service

EUR thousand.

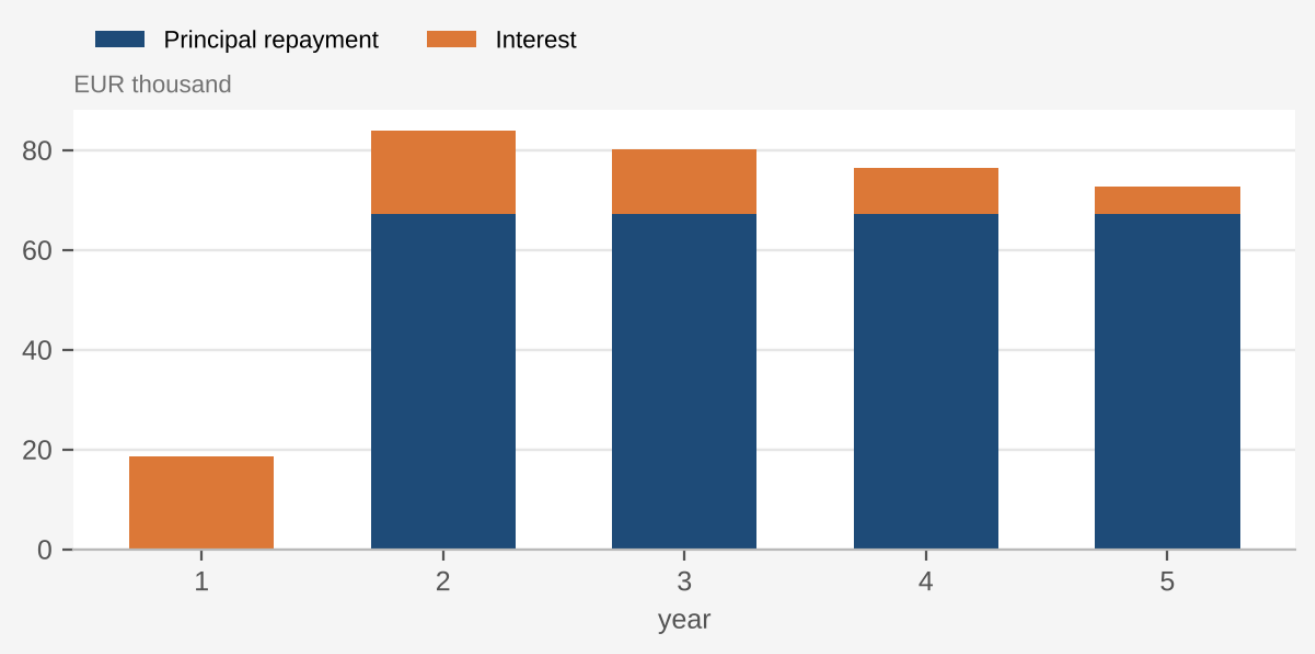


Figure 3 — Debt service — principal and interest

5. Financial plan

5.1 Assumptions

The following assumptions underlie every projection in this plan.

Assumption	Value
Corporate income tax — general rate	19%
Corporate income tax — SME, first €50,000 of taxable profit	15%
VAT — standard rate (mainland)	23%
Social security — employer	23.75%
Municipal surcharge	1.5%
Prices	Constant
Variable costs (% of sales)	30%
Project discount rate	8%

Table 5 — General assumptions

5.2 Projected income statement

EBITDA is negative in year 1, because the structure is in place before revenue settles, and turns positive in year 2. EBITDA margin moves from −1.4% in year 1 to 37.0% in year 5, as fixed costs are diluted.

Tax reflects carry-forward of early-year tax losses. Net profit is positive from year 2 and reaches 342,907 EUR in year 5.

Item	Year 1	Year 2	Year 3	Year 4	Year 5
Sales and services	280	600	900	1,150	1,350
Variable costs	(84)	(180)	(270)	(345)	(405)
External supplies and services	(60)	(80)	(95)	(105)	(115)
Staff costs	(140)	(200)	(260)	(300)	(330)
EBITDA	**(4)**	**140**	**275**	**400**	**500**
Depreciation and amortisation	(74)	(74)	(74)	(74)	(74)
Operating profit (EBIT)	**(78)**	**66**	**201**	**326**	**426**
Interest expense	(18)	(17)	(13)	(9)	(6)
Profit before tax	**(96)**	**50**	**188**	**317**	**421**
Income tax	0	0	(25)	(58)	(78)
Net profit for the period	**(96)**	**50**	**163**	**259**	**343**

Table 6 — Projected income statement

Figures in EUR thousand.

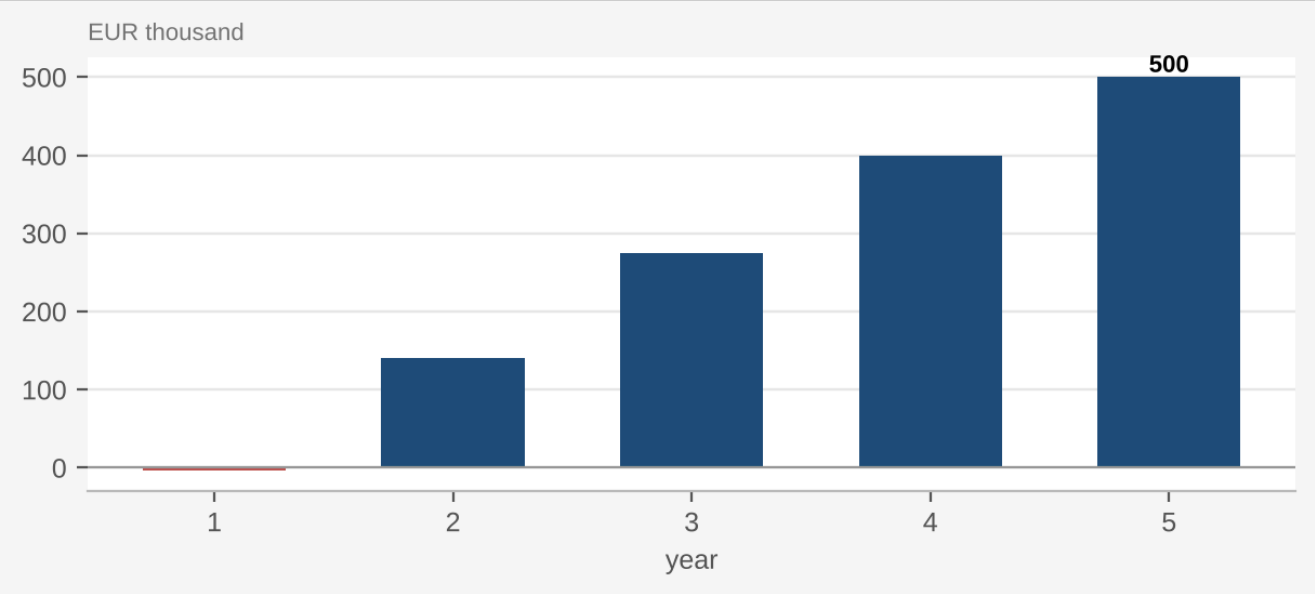


Figure 4 — EBITDA over time

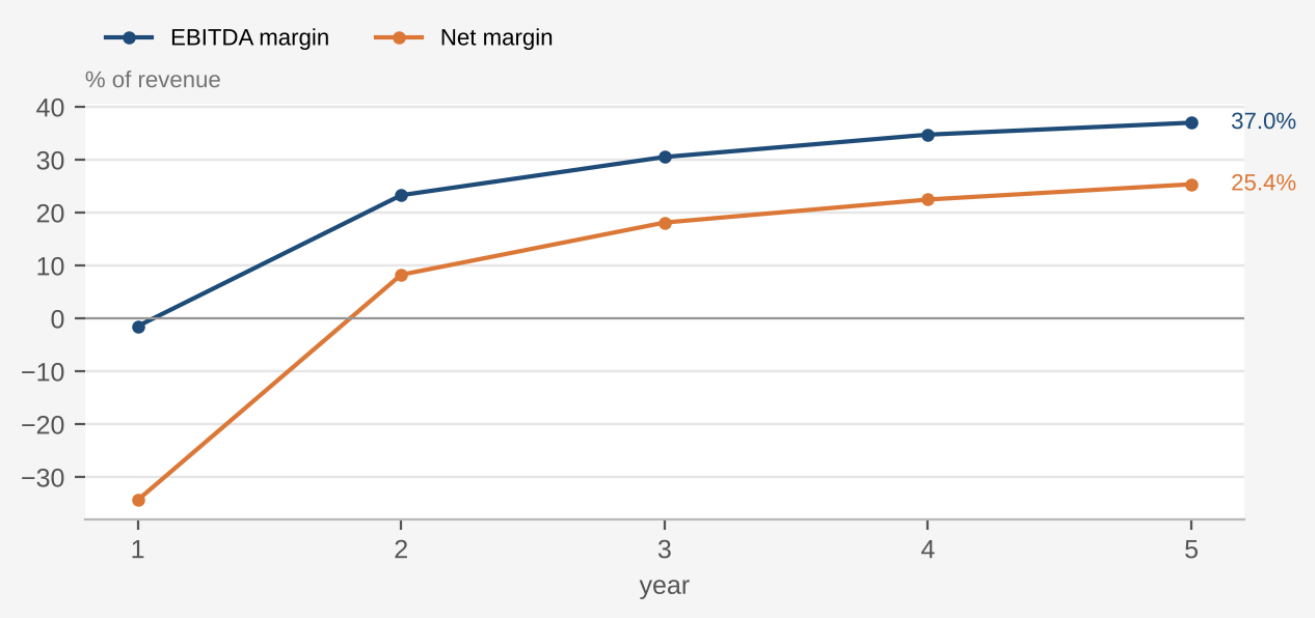


Figure 5 — EBITDA margin and net margin

6. Viability and bankability analysis

6.1 Project valuation

Project cash flow starts from EBITDA, deducts tax on operating profit and the investment, and adds in the last year the residual value (asset book value plus working capital). At a 8% discount rate, NPV is 423,289 EUR, IRR 27.1% and simple payback 3.4 years.

Item	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
FCFF	(480)	(4)	127	237	338	531
Discount factor	1.000	0.926	0.857	0.794	0.735	0.681
Discounted FCFF	(480)	(4)	109	188	248	361
Cumulative discounted FCFF	(480)	(484)	(374)	(187)	62	423

Table 7 — Valuation — project perspective

Figures in EUR thousand; discount factors at 8%.

Indicator	Value
Project NPV	423,289 EUR
Project IRR	27.1%
Simple payback	3.4 years
Discounted payback	3.8 years

Table 8 — Viability indicators

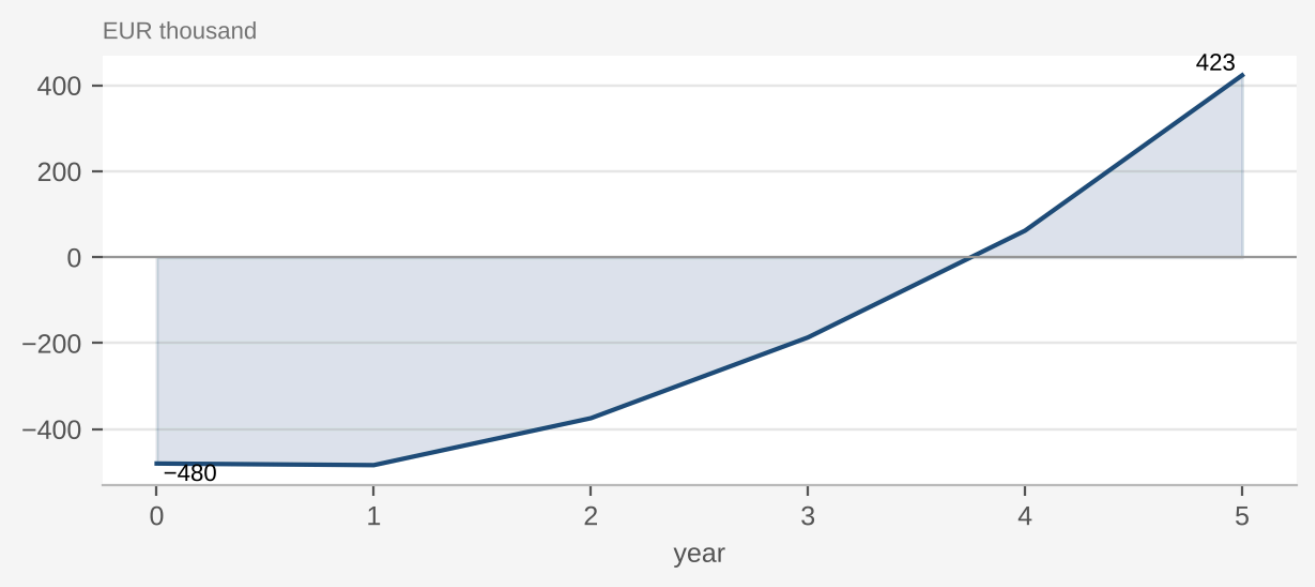


Figure 6 — Cumulative discounted cash flow

6.2 Debt service coverage

Debt service coverage (DSCR) measures how many times available cash flow — EBITDA after tax — covers debt service. In the principal-repayment years the lowest value is 1.67 in year 2 and the average 3.77. Banks usually look for 1.2 or more.

In year 1, still within the grace period, DSCR is −0.22: the year's cash flow does not cover interest, which is paid from initial working capital.

Item	Year 1	Year 2	Year 3	Year 4	Year 5
Cash flow available (CFADS)	(4)	140	250	342	422
Debt service	18	84	80	76	73
DSCR	**−0.22**	**1.67**	**3.12**	**4.47**	**5.80**

Table 9 — Debt service coverage

CFADS and debt service in EUR thousand; DSCR in times.

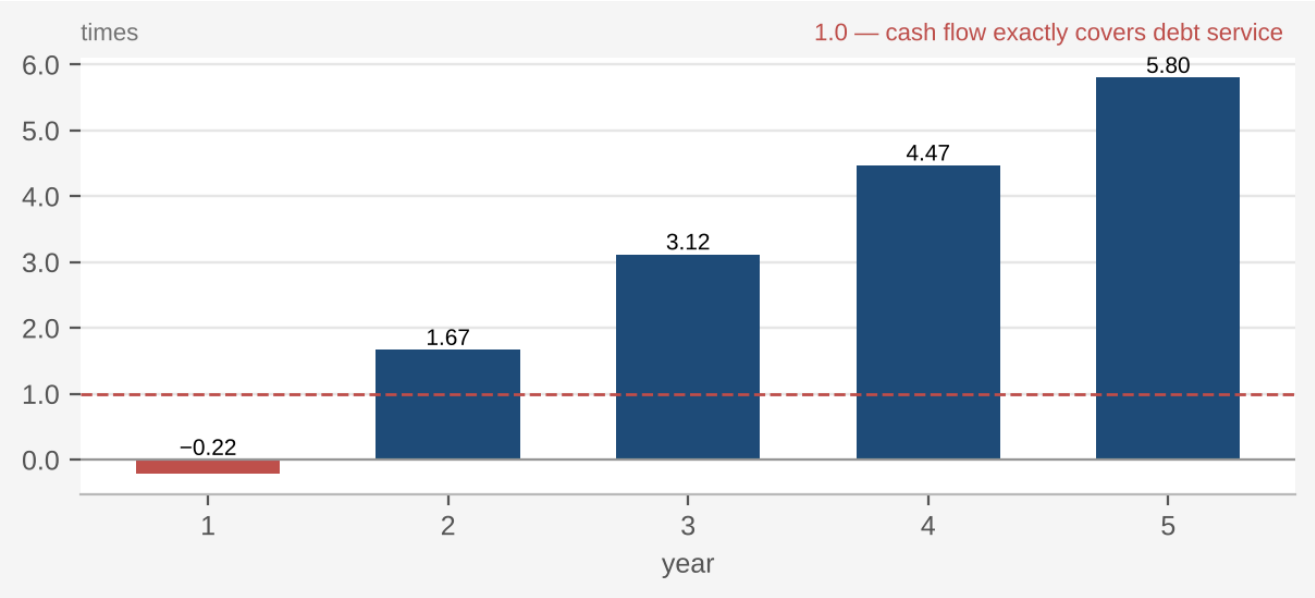


Figure 7 — DSCR by period

6.3 Assessment from a bank analyst's perspective

Summary of the credit analysis across five dimensions, with a recommendation.

Dimension	Rating	Basis
Commercial viability	Adequate	No signed contracts yet; letters of interest cover 1,100 ha.
Operational viability	Adequate	Strong technical team; sales lead still to hire.
Economic and financial viability	Strong	37% EBITDA margin in year 5.
Bankability	Strong	Minimum DSCR of 1.67; 30% equity.
Stress test	Needs strengthening	Minimum DSCR of 0.58 in the combined scenario.

Table 10 — Assessment by dimension

Recommendation: Viable, with conditions. The project is viable. Year 1 has negative EBITDA and falls inside the grace period, covered by working capital. Recommended for approval with a mutual guarantee and a reserve account equal to 6 months of debt service from year 2.

7. Risk analysis

7.1 Risk matrix

The matrix identifies 4 risks, each with a mitigation measure and an owner.

Risk	Probability	Impact	Mitigation	Owner
Market risk — slower uptake by wineries	Medium	High	Start with the three wineries holding letters of interest; entry price bundled with an annual subscription.	Sales lead
Technical risk — sensor reliability in the field	Low	Medium	Two years of trials on 40 ha; 10-day replacement warranty.	Technical lead
Execution risk — CE certification	Medium	Medium	Accredited lab contracted; schedule with 3 months' slack.	Technical lead
IP risk — patent licence	Low	High	Exclusive licence agreement with the university before first drawdown.	Management

Table 11 — Risk matrix

7.2 Scenarios

Scenarios change the base-case assumptions and run through the same calculation engine: sales −15%, fixed costs +10%, and both at once.

Item	Base	Sales −15%	Fixed costs +10%	Combined
Revenue in year 5	1,350	1,148	1,350	1,148
EBITDA in year 5	500	358	455	314
NPV	**423**	**142**	**314**	**28**
IRR	**27.1%**	**14.9%**	**22.4%**	**9.4%**
Minimum DSCR	**1.67**	**0.92**	**1.34**	**0.58**

Table 12 — Scenarios

Figures in EUR thousand, except ratios. Minimum DSCR over the principal-repayment years.

In the combined scenario minimum DSCR falls to 0.58, below 1.0 in one year. The gap would then have to be covered by additional equity or the guarantees in section 4.4. This is the unfavourable information this document discloses.

8. Conclusion

Five points, each with the figure that supports it.

First: the request is 336,000 EUR, 70.0% of a total investment of 480,000 EUR, with 30.0% covered by equity.

Second: revenue grows from 280,000 EUR in year 1 to 1,350,000 EUR in year 5, with a 37.0% EBITDA margin at the end of the horizon.

Third: NPV is 423,289 EUR at 8%, with an IRR of 27.1% and simple payback of 3.4 years.

Fourth: debt service coverage bottoms at 1.67 in year 2, backed by the guarantees in section 4.4.

Fifth: under the combined scenario (sales −15% and fixed costs +10%) minimum DSCR is 0.58. In that scenario the project does not cover debt service from its own cash, and the recommendation includes the conditions that mitigate this.

Recommendation: Viable, with conditions.

Demonstration example generated with Accacia by LusoHub. Names, entities, figures and documents are fictitious; the cover image is illustrative and AI-generated.