# 1. Introduction

Alvinesa is committed to doing business sustainably and tackling climate change. Since inception, our business model has been a clear example of circular economy. Guided by 30 years of technical expertise, we have been transforming raw material coproducts from the wine-making process into ingredients used to produce a range of mostly consumer products for global markets, finally returning nutrients to the land to produce new crops.

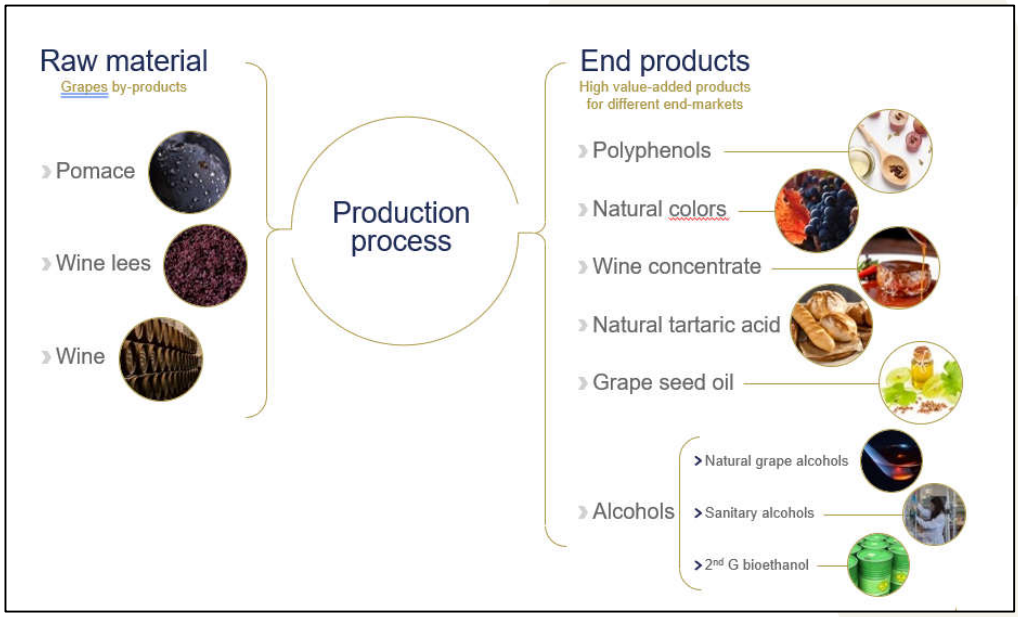


*Figure 1. Scheme of raw materials and products obtained from coproducts from the winemaking process.*

The sustainability ethos of Alvinesa is based on partnering with suppliers close to our production site in Spain. Our main input is 100% Vitis vinifera wine grape pomace which is extracted only with the use of water, promoting the use of no or low-pesticide grape pomace. In addition, Alvinesa manages and controls its own logistics teams and network to work directly with wineries.

We are proud that more than 97% of the energy used in the process and in the fleet today comes from sustainable sources - biomass from the manufacturing process after the extraction of natural ingredients, and electricity produced in our on-site 3MW photovoltaic park or from the electricity grid with renewable energy guarantees of origin. Although Alvinesa always has had a vision and culture focused on sustainability, we have doubled down our investment and focus over the last few years coinciding with our science-based emissions reduction target (SBT) validated by the Science Based Target initiative (SBTi).

Alvinesa is certified in ISO 14001:2015 Environmental Management System certification, ISO 45001:2018 Occupational Health and Safety Management System certification, ISO 9001:2015 Quality Management System certification, FSSC 22000 in manufacturing of polyphenols and tartaric acid, ISCC EU according to

Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources (for Bioethanol and Grape seed oil as biofuel) and SURE-EU also according to that same Directive (for Biomass). In addition, during FY24, Scopes 1, 2 and 3 of Alvinesa's organizational carbon footprint for FY23 were audited and certified for the first time, following the guidelines of ISO 14064-1 and GHG Protocol Corporate Standard.

The following data is presented for our fiscal year, which is from August to July, and coincides with the time of the grapes harvest in Spain.

## 2. SBT PROGRESS REPORT 2024

Since 2021, Alvinesa monitors greenhouse gas (GHG) KPIs to measure progress toward our SBTi-approved GHG emissions reduction target. We report the percentage change since our 2021 baseline in line with our SBTi commitment. Total $CO_{2e}$ emissions from scope 1+2 sources for 2021 were 4.350,11 tonnes, which is our starting point.

*Table1. Greenhouse Gas Emissions and Energy from renewable sources.*

| Reporting period August 1 – July 31 | FY 21 | FY 22 | FY 23 | **FY 24** |
|---|---|---|---|---|
| **Greenhouse Gas Emissions** | | | | |
| **Intensity-based $CO_{2e}$ emissions Scope 1+2:** | | | | |
| Emission intensity (t $CO_{2e}$/t Production) | 0.099 | 0.105 | 0.053 | **0.045** |
| Progress | - | 6.06% | -46.46% | **-54.55%** |
| **Absolute $CO_{2e}$ emissions from Scope 1+2 sources:** | | | | |
| Emissions (t $CO_{2e}$) | 4,350.11 | 3,910.84 | 2,241.73 | **2,028.92** |
| SBT trajectory | - | -10.10% | -48.47% | **-53.36%** |
| **Scope 1 $CO_{2e}$ emissions** | | | | |
| Company vehicles (cars, trucks, tractors, loaders…) (t $CO_{2e}$) | 2,119.36 | 1,963.26 | 2,154.34 | **1,970.74** |
| Own operations (t $CO_{2e}$) | 15.22 | 16.06 | 87.39 | **58.18** |
| **Scope 2 $CO_{2e}$ emissions (market based)** | | | | |
| Grid Electricity (t $CO_{2e}$) | 2,215.54 | 1,931.52 | 0 | **0** |
| **Scope 3 $CO_{2e}$ emissions** | | | | |
| Other indirect emissions (t $CO_{2e}$) | - | - | **137,784.65** | **In calculation process** |

| Energy consumed from renewable sources | | | | |
|---|---|---|---|---|
| Consumption of electricity from PV (KWh) | 728,125.82 | 3,132,638.00 | 2,876,196.84 | **2,814,683.89** |
| Energy from biomass (KWh) | 222,136,536.00 | 238,319,374.79 | 317,721,605.58 | **264,229,006.83** |
| % Energy consumed from renewable sources | 92.74 | 95.78 | 97.70 | **97.40** |

Below is a graph where is seen of the trend in each contribution to the total emission.

## 2.1 Scope 1+2 Absolute $CO_{2e}$ emissions & emissions intensity

We achieved a significant reduction in the total Scope 1 and 2 $CO_2$ emissions from FY21 to FY24, as shown in Figure 2, with more than a 50% reduction. This drop has been reflected in the emission intensity in terms of production (t $CO_2$e/t product), which has decreased by almost 55%, and a 70% reduction in terms of revenues versus FY21.

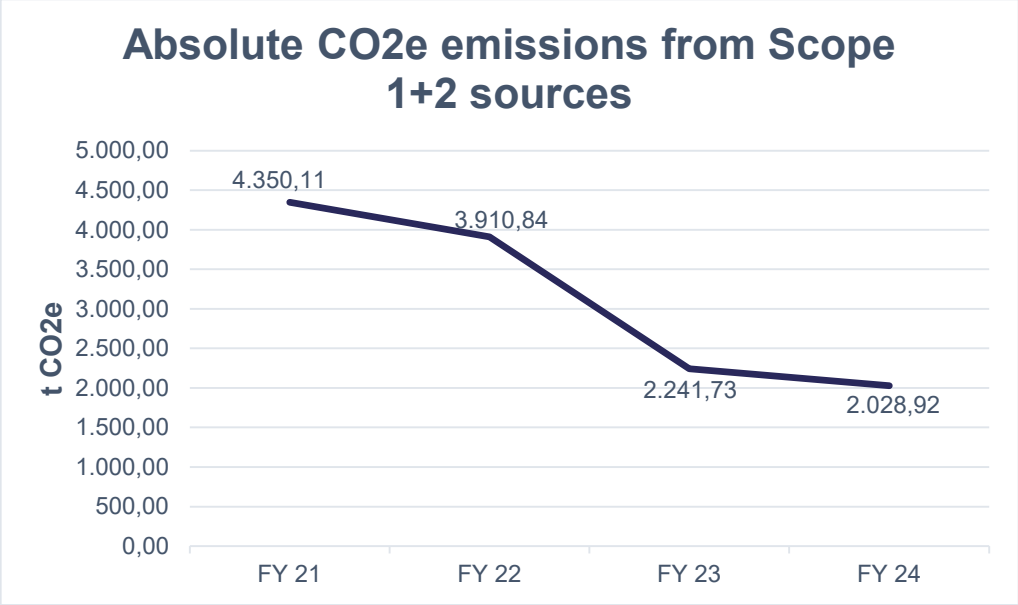


*Figure 2. Absolute CO2e emissions from Scope 1+2 sources.*

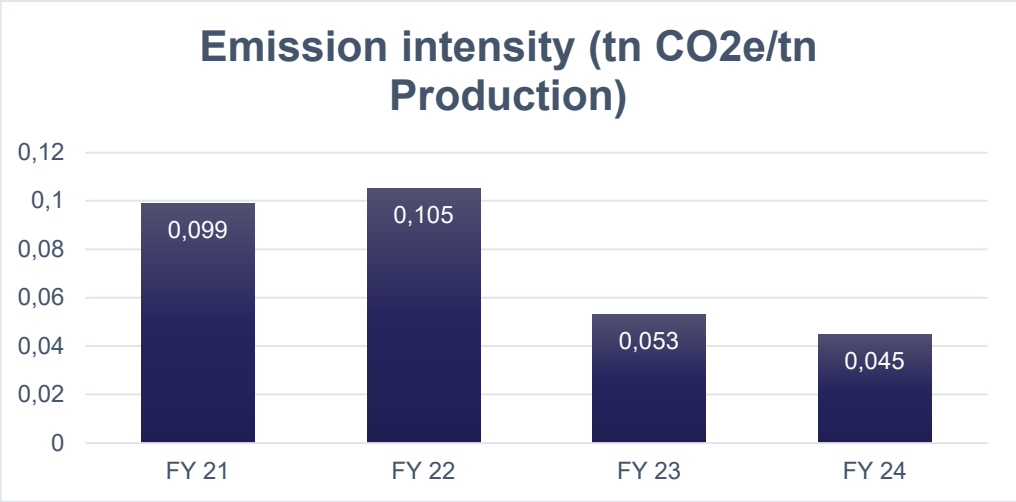


*Figure 3. Emission intensity.*

## 2.2 Scope 1 $CO_{2e}$ emissions

From FY21 to FY24, there were minor changes in Scope 1 emissions, primarily due to diesel consumption by the fleet of trucks. These emissions were influenced by variations in production and the amount of raw material collected during the grape harvest, which can vary from year to year. Additionally, there was an increase in $CO_2$ emissions due to preventive maintenance in the factory.

Starting in FY24, there is a plan to renew the fleet by replacing the oldest trucks with newer, more efficient ones. There has also been a decrease in maintenance needs for cooling and air conditioning equipment, following the replacement of an old refrigeration unit with a more efficient and lower-emission model. We remain committed to continuing the implementation of efficiency measures to reduce these emissions in the future.

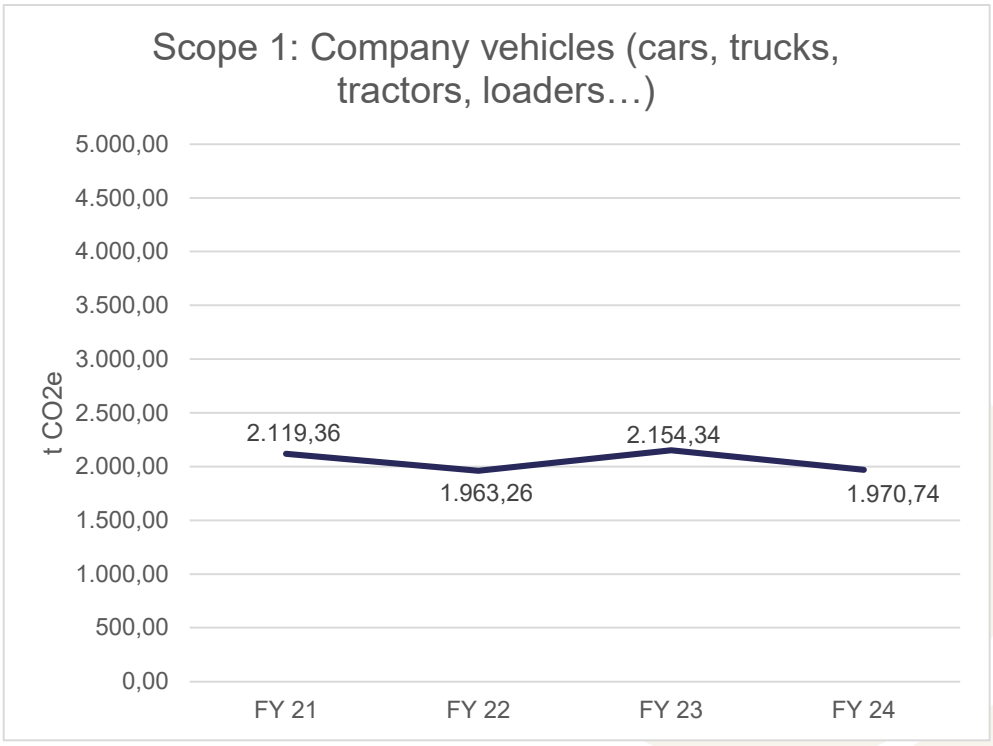


*Figure 4. Emissions from Scope 1.*

## 2.3 Scope 2 $CO_{2e}$ emissions

As in FY23, we continue to maintain net-zero Scope 2 emissions (market-based approach), which remains a key milestone on our decarbonization journey. During FY24, we have maintained the 100% of electricity purchased with a guarantee of renewable origin, which was already achieved last FY23. In recent years, we have significantly increased the percentage of electricity purchased with a guarantee of renewable origin, which, together with the start-up of the photovoltaic plant from May 2021, meets all of our electricity demand. These results led to a significant decrease in the total CO2 emissions (scope 1 + scope 2) - 53% less than the FY21 baseline.

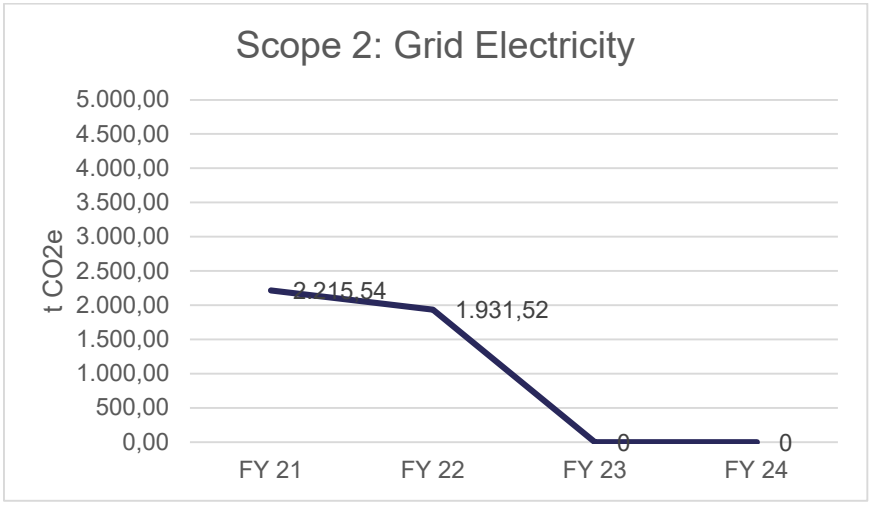


*Figure 5. Emissions from Scope 2.*

## 2.4 Scope 3 $CO_{2e}$ emissions

We are pleased to report that, in FY24, Alvinesa certified its Scope 3 emissions for the first time, as part of Alvinesa **sustainability initiatives. In order to identify** all relevant sources of Scope 3 emissions in our value chain, taken into account the diversity of products manufactured by Alvinesa, the calculation has been carried out by the Carbon Disclosure Project, its document "CDP Technical Note: Relevance of Scope 3 Categories by Sector" (Version 2.0, dated January 25, 2023), considering the production of products for food and beverages as the main activity of the organization, the relevant categories to be calculated should be:

- Category 1: Purchased goods and services.
- Category 9: Downstream transportation and distribution.
- Category 4: Upstream transportation and distribution.

Additionally, Alvinesa decided to include other categories within the Scope 3 calculation as it had data on them:

- Category 3: Activities related to fuel and energy consumption.
- Category 6: Business trips.
- Category 7: Employee travel.

The most significant contribution to Alvinesa´s Scope 3 emissions in FY23 came from Category 1: Purchased Goods and Services. This category encompasses all purchases of raw materials and auxiliary products for our production process, primarily sourced from Spain and Portugal. In the next fiscal year, our challenge is to analyze the pathways and develop a roadmap to decrease our Scope 3 emissions.

## 2.5 Energy consumed from renewable sources

In May 2021, Alvinesa commissioned its 2.5 MW photovoltaic plant, following an investment of €1.5 million. In October 2022, an additional investment was made to expand the capacity of the photovoltaic plant by 0.5 MW – becoming operational in February 2023. The photovoltaic plant contributes between 16-20% to Alvinesa's total electricity consumption.

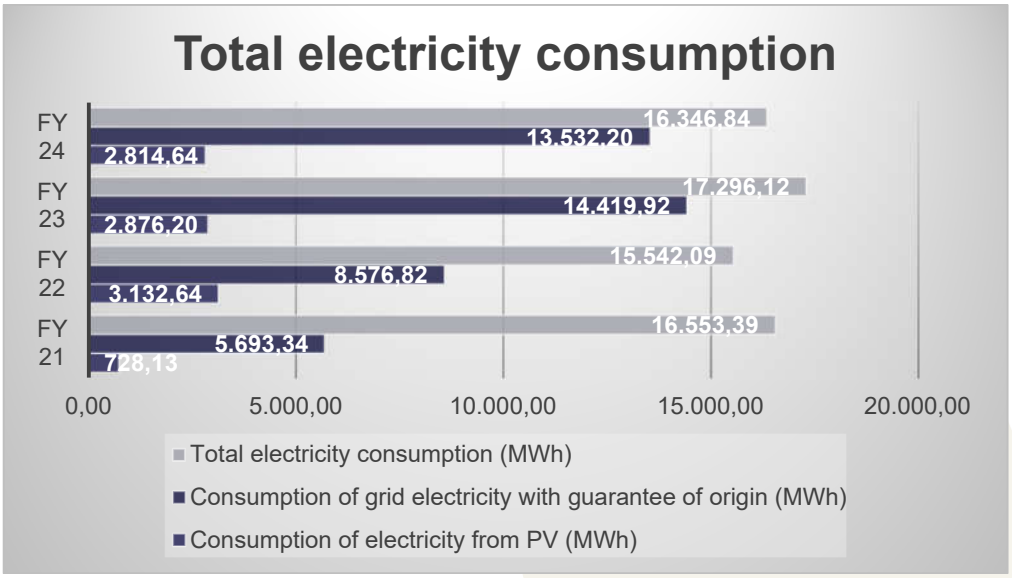


*Figure 7. Consumption of electricity.*

In addition to the production of electricity from the photovoltaic plant, Alvinesa uses sustainable biomass to produce heat steam consumed in the process lines, which means that Alvinesa consumed 97.4% renewable energy during the last fiscal year.

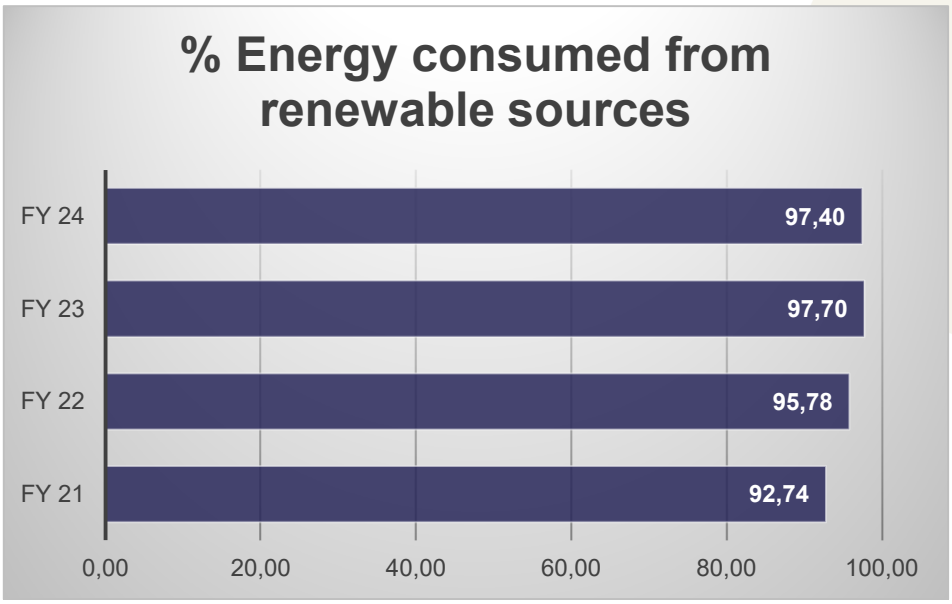


*Figure 8. % of energy consumed from renewable sources.*

## 3. Conclusion

In conclusion, Alvinesa has made a demonstrable effort over the last few fiscal years to increase on-site energy production from renewable sources from 93% to almost 98%. The installation of a 3 MW photovoltaic plant, coupled with the procurement of grid electricity that carries a 100%

renewable guarantee of origin, has resulted in net zero Scope 2 emissions and a reduction of more than 50% in combined total Scope 1 and 2 CO2 emissions from FY21 to FY24. This achievement not only meets our sustainability target for 2030 but also underscores our commitment to aligning our business practices with the Paris Agreement goals. Additionally, this first Scope 3 certification has been carried out.

Our main challenges will include analyzing FLAG emissions and incorporating them into our carbon footprint following the latest SBTi update and examining the principal contributions within our Scope 3. After this initial calculation, we understand that there is significant room for improvement, and reducing emissions linked to it will become a key objective in the coming fiscal years.