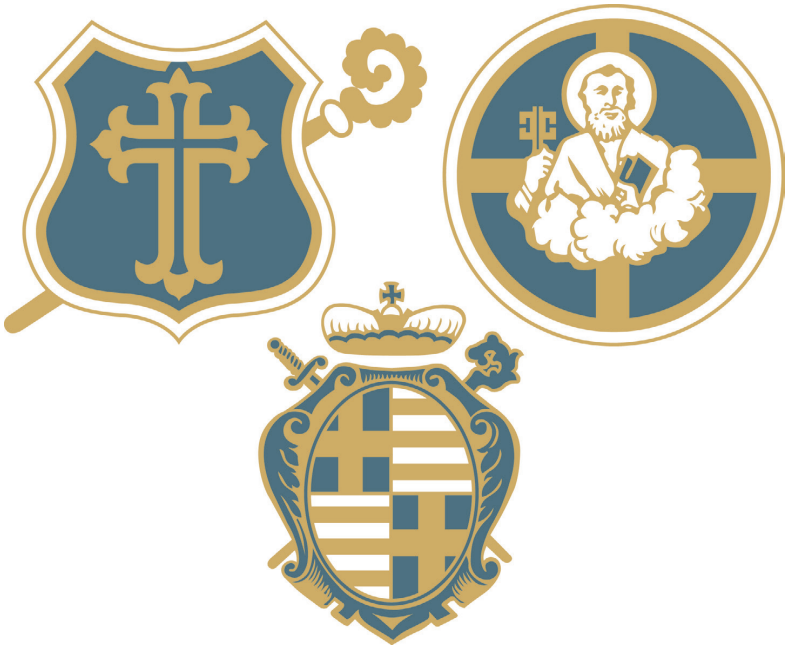


Bischöfliche Weingüter Trier

Sustainability Roadmap

Created by:
Lukas Böhm
Assistant to the Management
Sustainability and Quality Management
l.boehm@bischoeflicheweingueter.de

Our Vision for Sustainability Development

The history of viticulture in the Moselle region dates back to the times of Roman rule. Along the river valleys of Saar, Ruwer and Moselle, the Romans established viticulture and created a tradition that is still deeply rooted in the region today.

In 1966 the Bischöfliche Weingüter Trier were established by merging the vineyards and wineries of Bischöfliches Konvikt, Bischöfliches Priesterseminar and Hohe Domkirche. On more than 120 hectares spread over 145 plots in the Saar, Ruwer and Moselle river valleys, we cultivate the heritage of ecclesiastical viticulture. As the successor entity, we see it as our responsibility to continue the winemaking tradition in the present and preserve it for future generations.

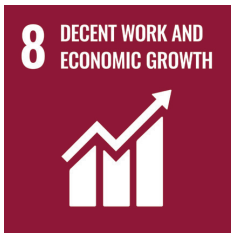
The diverse global challenges of our time have an impact on the environment, our social life and our business activities. Against this background, we see the transformation of our company into a sustainable winegrowing enterprise as the key to being able to continue our responsibility and fulfil our mission.

Our sustainability approach is based on the United Nation's guiding principles for sustainable development 2030. Further information on the topic is available at https://sdgs.un.org/2030agenda.

Sustainability means for us...

...contribute to the regional public welfare

...to preserve the winegrowing tradition today and in the future.



...preserve the river valleys nature for future generations

Our business activities have an impact on SDG 6 Clean water and sanitation, SDG 8 Decent work and economic growth, SDG 12 Sustainable consumption and production patterns, SDG 13 Climate action and SDG 15 Life on land.

In the following, we as Bischöfliche Weingüter Trier show our responsibility for the topics and the actions we undertake to support the global goals. Please feel free to contact us personally if you have any questions or require more information.

...preserve the river valleys nature
for future generations.

Agriculture and thus viniculture are already affected by the impacts of global warming. Increasing temperature leads to a premature start of vegetation and a longer vegetation period for the vines. Consequently, late frosts in spring are an increasing threat. High temperatures and lack of rainfall in summer causes water shortage. As a result, vines face drought stress, especially grape production. Furthermore, the probability of extreme weather events, such as storm rain, increases..

Drought stress on wine grapes

Normal wine grapes

Against this background, viticulture will be subject to major challenges in the future regarding the quality and quantity of grapes. However, agriculture also contributes to climate change, e.g. by nitrogen oxides in fertilisers or the fuel consumption of tractors. Combating climate change and adapting to its consequences is therefore a central component of our sustainability activities.

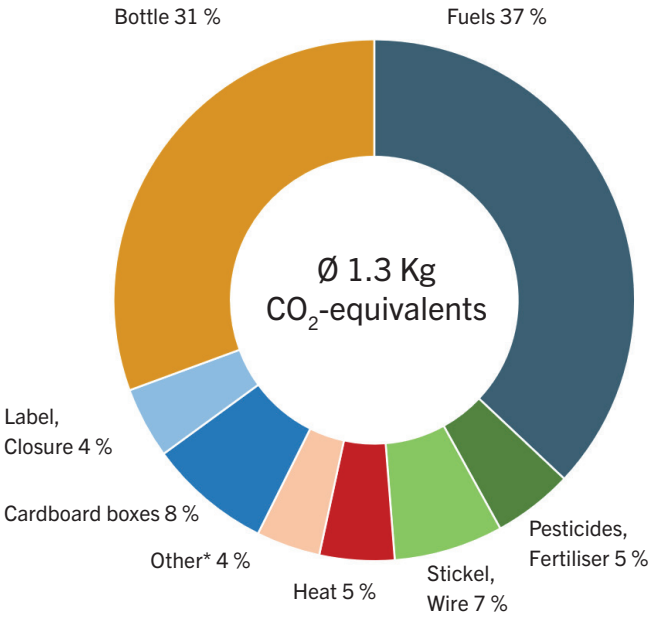
Our Responsibility:

Based on a carbon footprint for a 0.75-litre bottle of wine with data from 2019, we have developed activities against climate change. Currently, a 0.75-litre bottle of wine from our company generates about 1.3 kg of CO2 equivalents. The majority of the emissions are created by grape production and bottling including packaging of the wines. Both areas of the company emitted 43 % for each. In contrast the pressing of the berries only causes 2%. The actual vinification in the cellar and the administration, including sales, account for 12% of the emissions.

CO_2-Emissions by sectors

Grape production:	43 %
Wine pressing:	2 %
Winery and administration:	12 %
Bottling and packaging:	43 %

0,75 litre wine bottle produces on average...



* Water, Paper, Electricity

Our fuel consumption is the largest source of emissions at 37 %. This is followed by glass bottles with a share of around 31% and cardboard packaging with around 8% due to the high energy consumption in the production of both components. With this in mind, we have set ourselves the goal of achieving climate neutrality by 2035. Climate neutrality means for us a…

Balance between...

unavoidable CO_2-Emissions

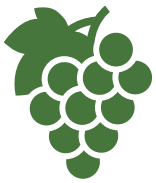
and the binding of CO_2-Emissions

To achieve our goal, we are integrating three key elements into our actions. We reduce the consumption of energy and raw materials in our processes or switch to climate-neutral alternatives. All remaining unavoidable emissions will be compensated by projects that bind CO_2 from the atmosphere.

Elements of Climate Neutrality

1. Increase Efficiency:

Saving raw materials and energy



2. Decarbonisation:

Replacing CO_2 in processes

3. Neutralisation:

Compensation and binding of CO_2-Emissions

The modernisation of our company buildings and technical facilities plays a central role in this. On the one hand, we reduce energy consumption through modernisation of our older buildings. Whereas, on the other hand, the idea of decarbonisation is reflected in new buildings.

In addition to the goal of climate neutrality, we are actively addressing the effects of climate change on viticulture. In particular, the water balance is at the centre of our considerations. Observations in recent years have revealed a shift in rainfall patterns. While sufficient, and even slightly increasing rain falls during the dormant phase, the amount of rainfall during the vegetation phase is strongly reduced while temperatures are reaching higher levels. We are trying to respond to the situation with the following measures in viticulture:

We plant new vines on rootstocks that are more resistant to drought due to their deep root system. The sowing of cover crop mixtures protects the soil from erosion and increases its water retention capacity. We use organic compost to ensure an adequate supply of nutrients to the soil and avoid fertilisation as far as possible.

...preserve the river valleys nature for future generations.

On about 120 hectares we cultivate vines, which is means an intensive use of the land. On the one hand, the soil provides our vines with nutrients and water. On the other hand, an emission of pesticides and fertilisers takes place. But, the agricultural use over hundreds of years has also lead to diverse habitats for different plant and animal species in the vineyards.

The vineyard alleys, dry stone walls, rocky outcrops, fallow areas and forest margins form coherent habitats and are thus home to molluscs, insects, reptiles, rodents, birds and other wildlife. Therefore, the **preservation of biodiversity** on our land is of great importance. On the vineyards, we are switching from intensive to extensive cultivation, with the aim of preserving the existing cultural landscape as a habitat for a variety of animal species.

Our Responsibility:

In soil management, we only fertilise as needed based on a nutrient balance and concentrate on the application of organic matter. Instead of herbicides, finger hoes and roller hoes are used in 90 % of our plots as purely mechanical control of weeds. Only on the steepest slopes there is still a limitation to mechanisation. When it comes to the indispensable plant protection, we reduce the sheer quantity by using the latest technology or resort to alternatives from organic viticulture. All the products used are classified as bee-friendly.

The vineyard ecosystem with its different structures provides a stable habitat for flora and fauna, especially for heat-loving species. A large number of animals and plants can be found in our sites. The species illustrated along the river map are examples. Besides bumblebees and bees, butterflies like the peacock butterfly, dragonflies but also roe deer and many other species are part of the **vineyard ecosystem.**

The cultivation of the vineyards keeps the land open and prevents the landscape from becoming overgrown with hedge plants and shrubs. Over the centuries, a rich ecosystem has developed in the areas cultivated by humans. In this respect, the preservation of the cultivated landscape along the Saar, Ruwer and Moselle contributes to the protection of biodiversity.

...to preserve the winegrowing tradition today and in the future.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Our standard of living has exceeded the actual available capacities of natural resources for years. As a consequence, the basis of life and thus the possibilities of satisfying the needs of future generations are highly endangered. For sustainable value creation, we strive for the idea of circular economy in the areas of cardboard packaging, glass bottles and procurement.

Packaging and shipping material:

Lighter cartons make it possible to transport the same number of bottles at a lower weight and reduce fibre consumption. Also, a high share of recycled material leads to a lower demand of fibre in new cardboards. Therefore, we work to reach a high percentage of recycled fibre in all cartons and the long-term goal of 100%.

less paint

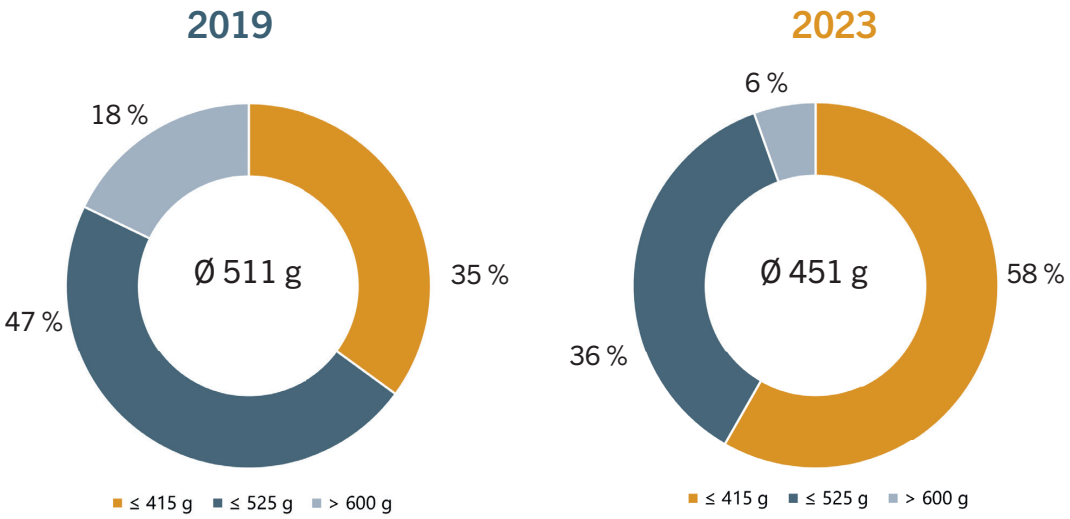
- 100 g lighter

- 50 g lighter

70 % FSC-Mix

Wine Bottle

In addition to cardboard and shipping packaging, the production of glass bottles also consumes large amounts of energy and raw materials. With a lightweight bottle, the consumption in production is lower. Therefore, we do not use bottles with a high net weight in the premium segment. Lightweight glass bottles are used for all our standard and village wines.

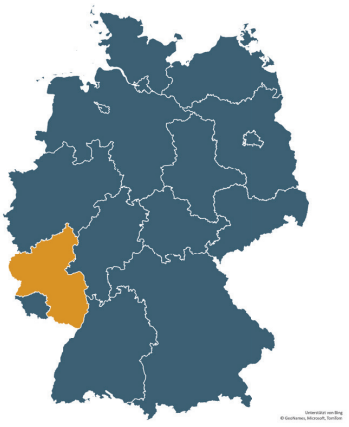


We have already been able to increase the proportion of glass bottles weighing ≤ 415 g from 35 % in 2019 to 58 % today. Overall, the average weight of a wine bottle has reduced by 60 g compared to the value in 2019.

Procurment

When purchasing raw materials and supplies, we make sure to place our orders to local suppliers whenever possible. Our investments in machinery and equipment are characterised by a long-life cycle.

1. Local Sourcing **2. Fairness** **3. Durable**



...preserve the river valleys nature for future generations.

Lack of rainfall, lack of meltwater and long dry periods mean that water sources in Germany are insufficiently regenerated. As a result, water usage is higher and the potential conflicts over water are increasing. This development also affects the Bischöfliche Weingüter Trier.

Our Responsibility

We extract water for cleaning and rinsing processes which causes pollution in the wastewater. Moreover, during crop management in the vineyards, pesticides enter the groundwater. In dealing with water as a resource, we therefore strive to reduce the negative effects of our actions by.....

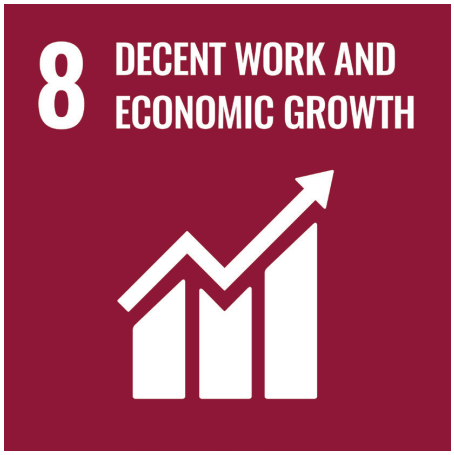
...data transparency in consumption

... water savings in production

... reduction of substance entries

... use of grey water and rainwater

…contribute to the regional public welfare



Based on our Christian values, we feel responsible for contributing to a sustainable economic growth and decent jobs through our corporate activities. We support the local economic cycle and fulfil our social duty of care as an employer by…

…providing wages above standard pay scale

…considering inclusive employment opportunities

…sourcing from local suppliers and service providers

…offering education and training along the principle of life-long-learning