

# The general ideas of the sustainability certificate

The objective of the Viticulture Durable program is to unite economic performance with an environmentally respectful way of working that is coherent with society's expectations.

The Viticulture Durable in Champagne certificate is a process, not a position, as holders must continuously improve their methods. And preferably do better than the minimum required by these standards.

## Evaluating yourself

The system is based on self-evaluation in combination with control i.e., you measure your progress on suggested topics by the help of predefined indicators and meet several compulsory requirements.

Every three years your progress will be evaluated by an external auditor from an appointed company and a meeting halfway will be carried out to help achieving the targets.

You will set yourself a new set of objectives to continue a dynamic of progression. Thus eventually, your methods will end up organic or close.

## The topics

The sustainability of a company is measured on several topics. The text presented here is based on the latest version of the Viticulture Durable en Champagne practical guide from January 2020.

- 1) Management of the farm
- 2) Strategies regarding sprays
- 3) Management of fertilizers
- 4) Preservation of the biodiversity
- 5) Preservation and accentuation of the place
- 6) Management of waste
- 7) Reduction of the carbon footprint

Each topic consists of a set of compulsory requirements for everybody then a set of requirements for holders of the Viticulture Durable en Champagne-certificate. These are divided in major and minor points. Finally, there are commitments that are subject for exchange between the winegrower and the auditor. No documentation is required though.

All compulsory requirements will be controlled during the first audit. During later audits, a sample of 25 % of the requirements will be controlled every three years.

The winegrower who commits himself will follow the requirements and ensure that any third-party company, employee, or helper is engaged as well.

Whenever documentation is possible – invoices, product labels et cetera – these are stored for possible use during the audit. The recommended documentation is comprehensive

## **Management of the farm**

The manager respects all requirements regarding the winegrowing activity of the company.

A comprehensive document for evaluation of risks in the company (in French: DUER) is provided for the employees.

The company provides material and individual safety equipment that fits the nature and risk of the task. This will be maintained and renewed when needed. Toilet and sink must be provided. Chemicals must be stored according to requirements.

### Viticulture Durable en Champagne-requirements

The objective is to have the necessary techniques, equipment, and human resources at one's disposal.

The manager will regularly train principles and methods in sustainable winegrowing and inform the staff and raise their consciousness about the objectives and practices regarding sustainability. A list of the equipment in use is available and updated.

### *Champagne Tange-Gerard management*

*In the company, we regularly educate ourselves whether this takes place meeting up with colleagues or as more formalized courses. The company employs one person parttime and occasionally seasonal staff who are all educated on the spot as this is needed. A third party who carries out sprays in our vineyards is certified like ourselves. Most tasks are done by Alain Gérard and Solveig Tange.*

## **Strategies regarding sprays**

All products are stored in a dedicated fitted room or cupboard that is not easily accessible and in accordance with the rules. Only products that are authorized in the vines will be used and dosages, limits, mixes, delays, and zones that cannot be treated are respected to the letter.

The place where the sprayer is filled is arranged in a way to avoid any kind of overflow anywhere. The preparations are made in a way that take unprotected water sources like streams, ditches, and the like into account. All persons or companies who spray in the vineyards and decide for sprays hold a certificate to do so.

The sprayer meets the norms of such equipment and is tested every five years by an approved third party. No overflow in neighboring plots or when maneuvering at the limits of the plot is tolerated. Treatments are forbidden in case of strong winds (level 3 on the Beaufort scale). Treatments close to any institution or habitation must respect restrictions. The level of the stocks regarding products must be declared annually.

## Viticulture Durable en Champagne-requirements (VDC)

The protection of the vines begins with a set of work methods that are used to limit the pressure of diseases and pests. Unfortunately, this is not enough. Treatments are often necessary. These sprays are done with machines that are according to the norms after evaluating the risk with both the knowledge of the history of the parcel and the products and their impact regarding health and environment.

The objectives of VDC are:

- a) To preserve the quality and the volume of the yields.
- b) To maintain or reestablish the biological and natural balance of the vineyards.
- c) To ensure a maximum efficiency of the interventions.
- d) To preserve the quality of the soils, the water, the air, and the rest of the environment.
- e) To ensure security of technicians and respect local population as well as consumers.

The commitment of the manager is to lower the consumption of products used to protect vines (\*). Whenever possible, these products should be chosen according to the best environmental and least toxic choice. The sprayer should be checked before each operation. Sprays should be done according to weather conditions thus extreme weather must be avoided. Managers of neighboring plots should agree on treatments and removal of grasses. To limit wastewater, the frequency of external washing should be reasonable. An action plan on how to stop herbicides by 2025 must be made. Prefer rainwater when filling the sprayer.

The manager must reduce herbicide usage according to the targets of the Ecophyto plan (\*\*). The sprays are adapted to the pressure of disease, but other methods can be tried: amongst them biocontrol, to spray at the height of the leaves and adapt the dose to the surface in question. The removal of buds, lifting the wires and trellising are done to avoid too many branches and leaves in the same spot. To limit development of diseases like downy mildew and powdery mildew in exposed plots the zone around the grapes is thinned out so the air can go through. In plots that are more exposed to disease, leaves around the grapes may be removed at an early stage. Only mechanical maintenance of the soils or green cover are allowed in plots where the vines have been removed to replant. The manager will participate in collective arrangements to protect the vines whenever such exist (for instance the mating disruption of the codling moth). Only new vines that carry a plant health passport will be used. This measure ensures that the plants have been treated with warm water to prevent the presence of virus diseases like *court-noué* and fanleaf viruses (*enroulement*). The manager is educated to recognize symptoms of the *flavescence dorée* and blackwood (*bois noir*) thus aware of procedures to apply if needed. The manager follows the requirements for the usage of treatments to limit risks of developing resistance. To preserve the quality of the air, the annual dose of copper is limited to 4.000 grams/hectare/year based on a five year average. The machines used for sprays must be equipped to being able to clean their tanks in the vineyards and to avoid overflow as well. Any new sprayer must follow the norms. When preparations are to be blended, the tools are adapted to the necessary quantities. These will be calculated carefully to avoid leftovers in the bottom of the tanks after treatment.

### *Champagne Tange-Gérard management*

*The sprays of our company are planned by Alain Gérard but performed by a supplier who is also certified Viticulture Durable en Champagne. Since 2021, our sprays comply 100% with the scheme of organic viticulture and we have registered our first year of conversion. We have worked on lowering our usage of pesticides these last years. In 2020, around 85% of our sprays were within the organic program. We do not use insecticides and herbicides. Since 2010 we*

*have participated in the mating disruption of the codling moth in the two communes where we have vineyards. We regularly participate in collective trainings, lately on recognizing possible signs of the flavescence dorée. Alain Gérard is the AVC correspondent of the commune of Soulières, which means he collects information about spring frost, dates of buds and flowers, possible disease, and measure the grapes in the days and weeks before the grape harvest. We buy vines to plant from a certified local supplier.*

## **Management of fertilizers**

The objective of the fertilizers is to maintain the contents of organic matter in the soils. Furthermore, to stimulate the biological activity of the soils. The calculation is to find the best dose to nourish the vines while we want to avoid excess. The strategy of the fertilization is established with the help of a soil analysis of each plot in combination with the amount of organic matter brought in and the wish regarding the level of yields. The rootstock is chosen to match the soil analysis which is done every 6 years for a parcel or a lot of similar parcels by an approved lab. Nitrogen fertilizers are to spread under the vines. Phosphate fertilizers are not allowed.

### *Champagne Tange-Gerard management*

*In the company, we use organic fertilizers - guano - that we spray ourselves. The cut off branches from the pruning are grinded into small pieces at the end of the winter. This will maintain the contents of organic matter of the soils. Our green cover of oats, vetch and mustard will contribute to maintain the mulch and nutrients as well.*

## **Preservation of the biodiversity**

No classified plant or animal can be removed or destroyed. Their habitats must be protected. Introduction of plants or animals that are not native is not allowed.

### Viticulture Durable en Champagne-requirements (VDC)

The objective is to maintain or develop the biodiversity and the ecological stability of the vineyards as well as preserve the natural environment and the quality of the water reserve.

The manager will engage to maintain a spontaneous or sown cover of plants in the winter. If a plot of vines is removed and not replanted within a year, a green cover will be sown.

The outlines of the plots must be permanently covered with grass and not receive neither fertilizer nor protections sprays. This goes for areas on the top, headlands and areas on the side that are not planted as well as ditches, approaches, and gravel roads. The manager will identify zones where hedges of species locally known can be planted. This is to favor biodiversity and limit the risk of releasing anything into streaming water or habitations.

### *Champagne Tange-Gerard management*

*A ditch that carries water in early spring separates two of our plots in the commune of Loisy-en-Brie. This ditch is the habitat of different flowers, grasses, bushes, and even small trees as well as insects and small animals. They all contribute to the biodiversity of the area. Our vineyards are covered all year with either plants that grow naturally or seeds. We may remove the green cover in the rows in case of serious lack of water which some summers put the vines in great distress*

## **Preservation and accentuation of the place**

The organization of any device on top of plots to change the course of a stream done to canalize the water to an existing or a future outlet will be created in conjunction with local authorities. In no way, a device can be installed to let water flow into neighboring or lower plots or to create an accumulation of water.

### Viticulture Durable en Champagne-requirements (VDC)

The preservation of the biological, physical, and chemical properties of the soil is of utmost importance for an AOC/AOP like champagne. This justifies specific measures like those mentioned regarding biodiversity and fertilization. Furthermore, the inscription of the “Coteaux, Maisons et Caves de Champagne” as UNESCO World Heritage is based on the preservation of the heritage of an expression of the joint forces of man with nature.

The objective is to present the landscapes at their best and maintain and renovate heritage elements in the vineyards. Erosion must be fought. The objective is to improve the conditions of life of the local population.

The daily manager engages in the integration in the landscape of new buildings, signposts, and boundaries of the vineyards. The manager participates in collective operations in the commune like the day when the village teams up to clean around the commune.

Works that may substantially change the morphology or the underground will be declared by the manager at least six weeks before the start of the work. The manager will maintain roads that access the farm and its surroundings as well as a good general state of the buildings. Small, built elements in the vineyards like walls or small sheds (“loges de vignes”) are renovated and maintained. Any little alteration in the vineyards like protections or supports is integrated in the landscape. This goes for protections for young plants as well. The length of the rows of vines depends on the slopes and the type of soil. The manager will take necessary measures to limit wheel tracks depth and pressure on soils.

### *Champagne Tange-Gerard management*

*The sown green cover of our vineyards works against the erosion we used to see in some plots in Loisy-en-Brie. Gradually, the management of the house with its outdoors is taken over by Alain Gérard and Solveig Tange to provide a frame and living for the family as well as the company. This means that the indoors is being renovated, the façade of the house and the courtyard is upgraded, and the garden is cultivated to create a pleasant and welcoming atmosphere for ourselves, our visitors and in the village. Roses and other flowers have been planted along the road to embellish the verge between walls and road.*

## **Management of waste**

The manager keeps a protocol for waste management. Nothing is left outside, buried, or burnt. Wastes are sorted, cleaned if necessary and stored in designated places on the farm while awaiting disposal. Waste that is dirtied with products for sprays of the vineyards is stored in a way, safe for people and environment, before elimination. Possible leftovers in tanks after sprays will be emptied in the vineyards or at a designated place for this and will be managed according to the requirements for such leftovers. Products in use for the sprays in the vineyards, not used or obsolete, will be stored in their original packaging in the designated room until elimination. Products that are not dangerous can be

dealt with like any other garbage of its kind. Dangerous waste must be dealt with by channels for this specific purpose.

The easiest way to get rid of waste is not to have any.

The goal is to produce as little waste as possible and if this cannot be avoided, to consider it a resource to reuse in a circular economic circuit.

Less waste is produced through preventive measures. When vines are removed, the root and stump can be revalued rather than burnt. When crushed, the cut off branches from the pruning of the vines may contribute to the reconstitution of organic matter in the soils.

#### *Champagne Tange-Gerard management*

*The company views whatever is found in the farm buildings that is not in use as a resource to use for something else. When purchases are necessary, we buy from local producers and craftsmen whenever possible. We currently work on the idea of using a big, buried diesel fuel tank to collect rainwater for the garden. Big baskets for grapes and wooden boxes for aging champagnes have been recycled to grow vegetables in the warm courtyard. Organic waste is composted in the garden.*

### **Reduction of carbon footprint**

The Champagne region has managed to reduce its carbon dioxide footprint by 15% in 15 years in absolute numbers and by 20% per bottle sold.

The 2020 general objective is to reduce the emissions by 25% in 2025 and by 75% in 2050. The individual objective is to evaluate the tasks in the light of always improving the performance. The direct emissions must be reduced for instance by implementing less energy-consuming practices. The indirect emissions must be reduced as well for instance by evaluation of the usage of various inputs.

The daily manager engages in the evaluations of the energetic efficiency, water consumption and any risk of pollution when a new building is built or an existing one is renovated. Any kind of fertilizers sprayed on leaves should be avoided unless a severe lack shows and creates physiological disorder.

At least every five years, the manager evaluates the carbon footprint of the farm with the aim to improve its environmental performance. The manager will use methods that impact the environment moderately when unwanted plants are to be removed. If it is necessary to fight frost in the spring, the manager will choose a method from the list of practices with a moderate environmental impact (for instance water sprays). Any usage of nitrogen fertilizers above 30 kg per hectare must be justified. To reduce the ecological footprint of trellising tools and for a better integration in the landscape, it is suggested to use wooden posts at the ends, either certified sustainable wood or of local origin.

#### *Champagne Tange-Gerard management*

*The biggest challenge for the company regarding CO2 is the many kilometers, we drive every year. Our objective is electrical cars. To provide green electricity for this as well as for our consumption in the farm, we have installed solar panels. The house is heated by a heat pump. Thus the house is self-sufficient when it comes to heat and electricity. Our fertilizers are measured. No frost protection is applied in the vineyards. As more than 30% of the emissions of greenhouse gasses in Champagne are linked with packaging, we have chosen to stay low on this to avoid adding this to our carbon footprint.*

(\*) Der er ingen absolutte krav til forbrugets størrelse, udover at det skal nedbringes. Dette hænger sammen med, at indehavere af certificeringen begynder deres proces på meget forskellige niveauer fra 100% konventionel vindrift til et blanding af konventionelle og økologiske metoder. Idéen er at hjælpe firmaer med at forbedre deres standarder i stedet for at kræve et begynderniveau, der gør det svært for mange at ændre deres arbejdsform.

(\*\*) Ecophyto planen er en fransk lov fra 2009, hvis mål er at reducere brug af pesticider. Den aktuelle lov, Ecophyto II fra 2018, indfører forbud i Frankrig mod herbicidet glyphosat (Roundup) fra 2025 (se

Dated: Soulières, May 2021, Alain Gérard and Solveig Tange.



Source:

This document is based on the Comité Champagne guidelines of the Viticulture Durable en Champagne certificate. The Champagne Tange-Gérard paragraphs are our comments on how we interpretate and integrate the guidelines in the company.