

# Green Vineyards

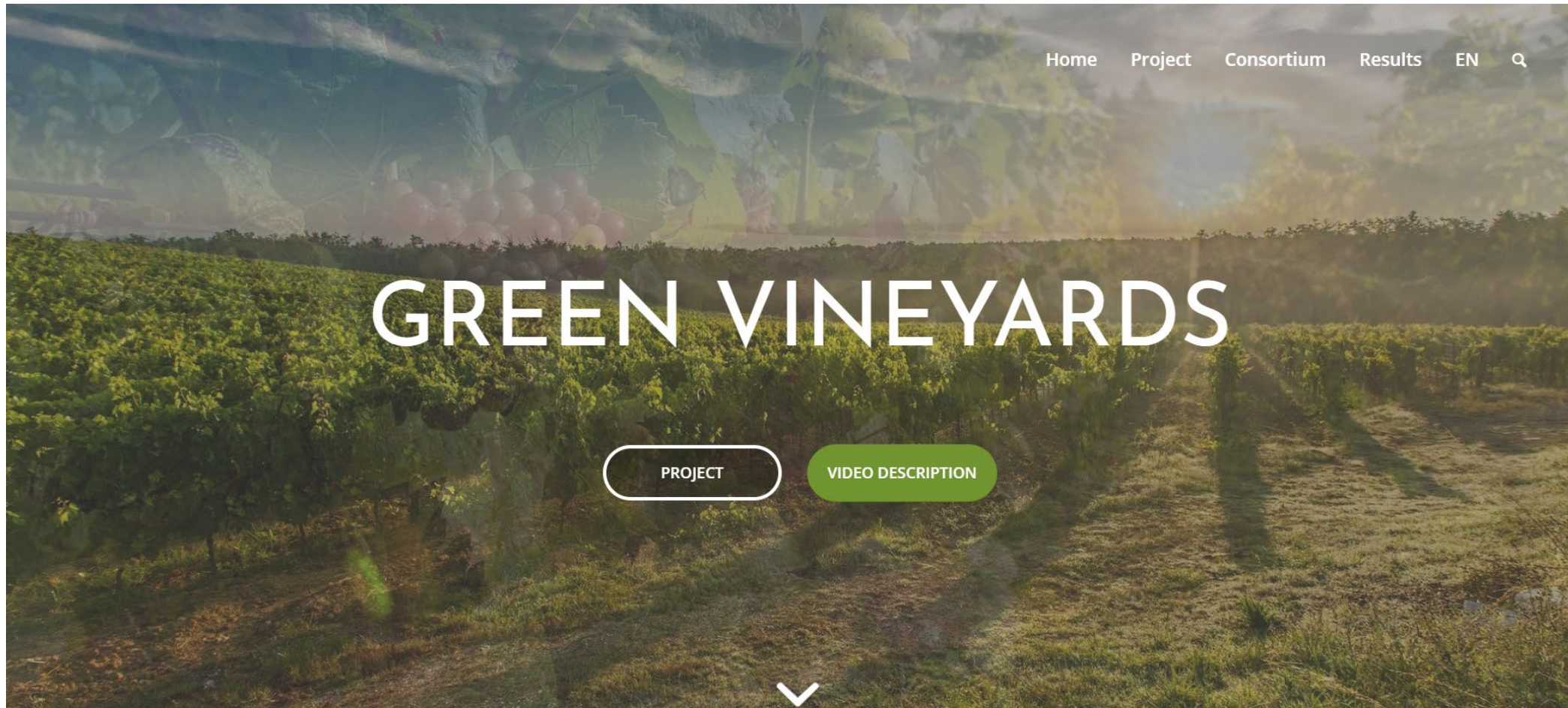
Upskilling wineries staff: Responding to the  
challenges of climate change

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# The Project



Website: [www.greenvineyards.eu](http://www.greenvineyards.eu) @green\_vineyards



# The Project: Some details



**Title:** Green Vineyards

**Ref:** 2021-1-ES01-KA220-VET-33311

**Duration:** 2022 – 2024

**Participants:** ESP, FRA, ITA, GER, NMA



# The Project: Some details

1. Universidad internacional de La Rioja (UNIR)
2. Institut français de la vigne et du vin (IFV)
3. Centro per lo Sviluppo Agricolo e Rurale (CeSAR)
4. Institute for Research in Environment, Civil Engineering and Energy (IECE)
5. Federación Española del Vino (FEV)
6. Lake Constanza Foundation (LCF)



- Agriculture still accounts for 10% of the EU's total greenhouse-gas emissions in 2016,
- The EU is the world's leading producer of wine. It accounts for 45% of wine-growing areas, 65% of production, 57% of global consumption and 70% of exports.
- Green Deal is the strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy.

**An economy based on such sustainable requisites cannot be achieved without a workforce to support it.**



The **objective** is to raise the knowledge, skills and aptitudes of workers in the wine sector, so that they can address the challenges of climate change.

Main outputs:

- Competence Framework & Best Practices Guide
- Course content and implementation
- Transferability tools

## Definition of the Competence Framework

### Overall knowledge about climate change



#### Climate change awareness

To understand the effects of climate change in the wine sector and viceversa, and to reflect on its impacts and potential consequences for future generations.

#### Climate change adaptation

To take action to prepare for and adjust to both the current effects of climate change and the predicted impacts in the future.

### Environmental management focused on climate change



#### Water management

To make efficient use of the resource, by reducing the water footprint and protecting its quality.

#### Soil management

To support the proper use and management of agricultural soils and implement measures to protect soils, improve their fertility and contribute to the natural sequestration of CO<sub>2</sub>.

#### Waste management

To understand that waste must be sustainably handled and disposed of.

#### Biodiversity

To have a broad understanding of agricultural ecosystems to protect them and build resilience to current and future threats.

#### Emissions reduction

To understand the impact of emissions, while implementing energy-efficient solutions to reduce the carbon footprint.

#### Energy efficiency

To have a broad understanding of energy sources and their impact.

### Wine culture and society from a climate change perspective



#### Local & historical knowledge

To acknowledge the historical importance of wine culture and its benefits for the local environment, society, and the economy.

#### Sustainable production

To identify sustainable wine production practices and implement strategies to achieve it.

### GreenComp competences relevant to the sector



#### Valuing sustainability

To reflect on personal values; identify and explain how values vary among people and over time, while critically evaluating how they align with sustainability values.

#### Systems thinking

To approach a sustainability problem from all sides; to consider time, space and context in order to understand how elements interact within and between systems.

#### Critical thinking

To assess information and arguments, identify assumptions, challenge the status quo, and reflect on how personal, social and cultural backgrounds influence thinking and conclusions.

#### Problem framing

To formulate current or potential challenges as a sustainability problem in terms of difficulty, people involved, time and geographical scope.

#### Futures literacy

To envision alternative sustainable futures by imagining and developing alternative scenarios and identifying the steps needed to achieve a preferred sustainable future.



## Validation of the Competence Framework

15 competences validated by:

1. Surveys: 181 responses in Europe
2. Interviews: 26 interviewees





Activity	Responses	%
Winery	92	51%
Farming	20	11%
Academia	32	18%
Other	36	20%
<b>Total</b>	<b>181</b>	

Competence	Total
Water management	4,53
Climate change adaptation	4,41
Climate Change Awareness	4,41
Soil Management	4,35
Energy efficiency	4,27
Biodiversity	4,22
Sustainable wine production	4,21
Emissions Reduction	4,18
Waste Management	4,17
Valuing sustainability	4,14
Critical thinking	4,02
Problem framing	4,01
Futures literacy	3,98
Systems thinking	3,98
Local & historical knowledge	3,90
<b>Average</b>	<b>4,18</b>

## Population of the Competence Framework

### 15 Competences described by:

1. Knowledge
2. Skills
3. Attitudes

Water management	
 <b>Descriptor</b>	To make efficient use of the resource, by reducing the water footprint and protecting its quality.
 <b>Knowledge</b>	<ol style="list-style-type: none"><li>1. Knows how daily activities may have an impact on water availability and quality.</li><li>2. Knows the impact of water availability and quality on grape growth and wine production.</li><li>3. Knows water conservation and efficiency practices in vineyards (irrigation methods, reduction of evaporation and evapotranspiration) and cellars (wine production processes).</li><li>4. Knows the principles of water treatment and reuse.</li></ol>
 <b>Skills</b>	<ol style="list-style-type: none"><li>1. Can recognise areas for action to reduce water footprint.</li><li>2. Can monitor and control water usage in the vineyard and the winery.</li><li>3. Can identify and address potential water contamination issues of viticulture and wine production.</li><li>4. Can understand weather patterns and their impact on vineyard water usage.</li></ol>
 <b>Attitudes</b>	<ol style="list-style-type: none"><li>1. Is willing to implement sustainable water management practices to reduce the environmental impact on water bodies.</li><li>2. Is committed to complying with water regulations.</li></ol>

## Identification of best practices

22 best practices identified

Vineyard Management with Extensive Sheep Grazing	
Location	Germany
Competences	Biodiversity, soil management, climate change adaptation
Keywords	Grass cover management, diversification, risk management, sheep manure, higher land use efficiency
Description	<p>Sheep can graze the vineyards, in the past especially in winter, but today they also graze during the growing season.</p> <p>Advantages:</p> <ul style="list-style-type: none"> <li>• Dual use of vineyards can provide additional products (wool, meat).</li> <li>• Manure from sheep can support vital soil life – typical of grazing.</li> <li>• Cheap clearance of the grape zone (ensuring the quality of the grapes)</li> <li>• Regulation of the accompanying vegetation makes the use of herbicides as well as some passes (mulching, tilling, understock maintenance with disc ploughs) superfluous.</li> <li>• Supporting biodiversity.</li> <li>• Reduction of erosion risk.</li> </ul>
Objectives	<ul style="list-style-type: none"> <li>• Regulation of the accompanying vegetation / cover crop.</li> <li>• Clearance of the grape zone.</li> </ul>
Tools	Extensive sheep grazing.
Additional information	<p>The animals should receive enough mineral feed, otherwise they will start peeling the bark on the trunk.</p> <p>The sheep can graze without damage from the pea size of the berries until the time when the first berries begin to taste sweet.</p> <p>Before the sheep are driven in, only fungicides approved for use in vegetable production with short waiting periods should be used. This ensures protection against peronospora and oidium.</p> <p><a href="https://www.hs-rottenburg.net/forschung/projekte-schwerpunkte/schafe-im-weinberg/">https://www.hs-rottenburg.net/forschung/projekte-schwerpunkte/schafe-im-weinberg/</a></p> <p><a href="https://www.lw-heute.de/?redid=17759">https://www.lw-heute.de/?redid=17759</a></p>

## Guide produce in English and translated to 5 languages

Competencias y Practicas Sostenibles en el Sector Vitivinícola – Executive Summary

Competenze e Pratiche Sostenibili nel Settore Vitivinicolo – Executive Summary

Competences & Pratiques Durables pour le Secteur Vitivinicole

ЗЕЛЕНИ КОМПЕТЕНЦИИ И ОДРЖЛИВИ ПРАКТИКИ ЗА ВИНСКИОТ СЕКТОР– Executive Summary

Grüne Kompetenzen und Nachhaltige Praktiken für den Weinsektor – Executive Summary

<https://greenvineyards.eu/results/>

# The Project



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