



INTERNATIONAL ORGANISATION OF VINE AND WINE

GLOBAL VITICULTURE SOLUTIONS FOR SUSTAINABLE WATER USE

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14 October 2022

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OIV



- ✓ Scientific and technical reference organisation on the vine and wine sector
- ✓ Created in 2001 to replace the International Vine and Wine Office (1924), the OIV's main objectives are to:
 - 🍇 Inform its Member States of measures concerning producers, consumers and other players of the vitivinicultural sector
 - 🍇 Assist other international organizations, especially those which carry out standardization activities
 - 🍇 Contribute to the international harmonisation of existing practices and standards

+1000 Experts

Independent professionals of the sector that contributes to the research and publications

48 Member States

countries responsible most of the production and consumption of wine in the world

17 Observers

non-Member States, organizations, regions or territories





About the OIV



The OIV's essential functions:

Standards for the vitivincultural sector

Creation of internationally harmonized and accepted standards for the production of vitivincultural produce

Research and publications

The OIV works alongside an international network of experts to contribute to innovation and advances in the vitivincultural sector on certain subjects which are considered to be at the forefront of the sector

Databases, statistics and sector information

The OIV works with its Member States gathering data and producing statistical outlooks, and generating analytical reports on specific topics in the vitivincultural sector

Education and communication

OIV offers research grants, patronage, literature rewards and an immersive Master Degree level management program in the wine sector

rely on four units:



Viticulture



Enology



Economics and Law



Health and Safety

OIV



AXIS I

Promote **environmentally-friendly** vitiviniculture



AXIS II

Promote **economic activity** according to principles of sustainable development and of market growth and globalization



AXIS III

Contribute to **social development** through vitiviniculture

AXIS IV

Pursue the development of a **harmonized regulatory environment**

AXIS V

Facilitate the **digital transition** of the sector

AXIS VI

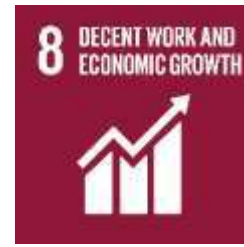
Consolidate the role of the OIV as a benchmark scientific, technical, and cultural organisation worldwide





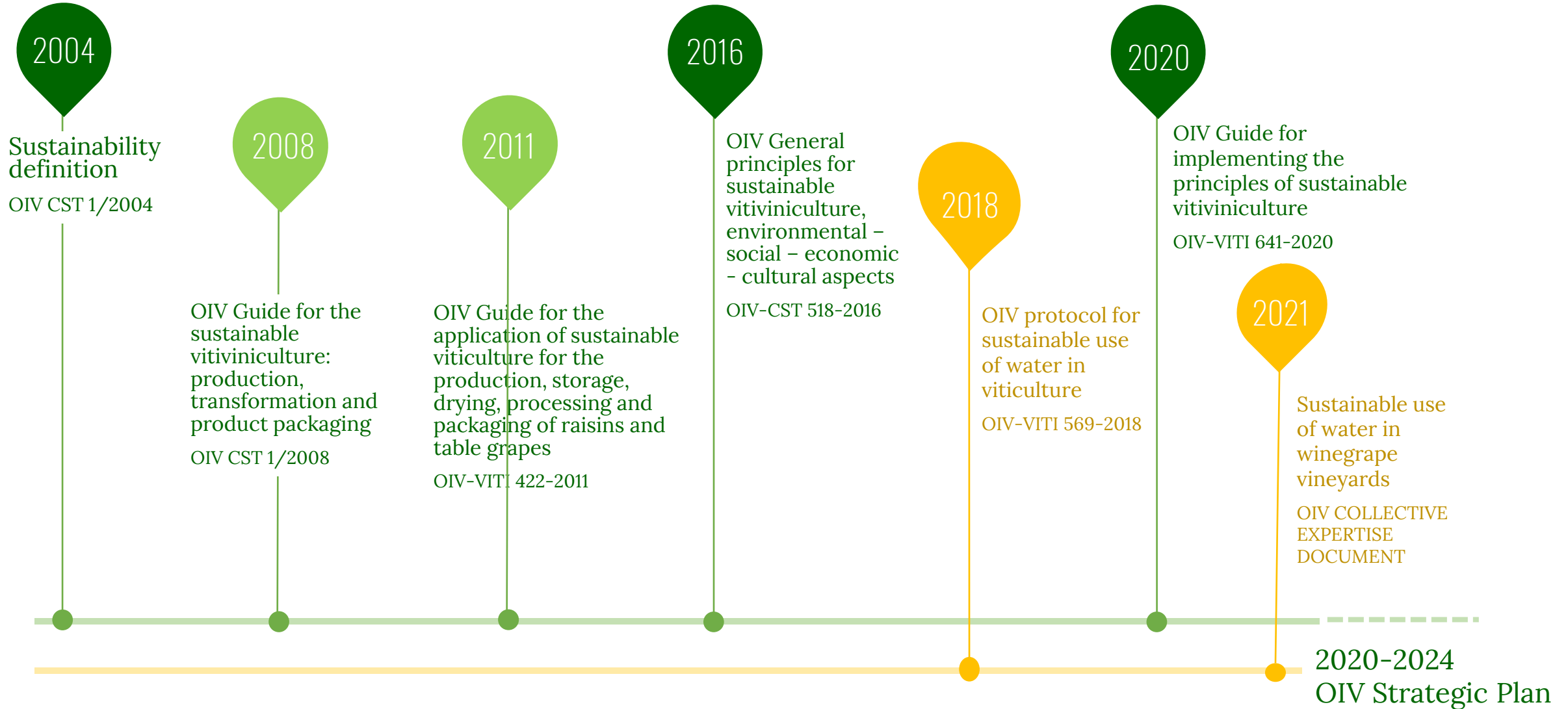
SUSTAINABLE DEVELOPMENT GOALS

of UNITED NATIONS → 13/17





OIV SUSTAINABILITY MISSION



A COMPREHENSIVE RESPONSE TO THE WATER-SUSTAINABILITY CHALLENGES THE OIV APPROACH



Environment

Atmosphere/weather/inter- and intra-seasonal variability; soil, its role as a store and mediator of water supply and general geography/topography; water resources, availability, reliability, competitive alternative uses;



Genetic foundations of the vineyard

Scion, rootstock attributes in terms of light/heat/drought tolerance and /or water use/ photosynthetic efficiency;



Management

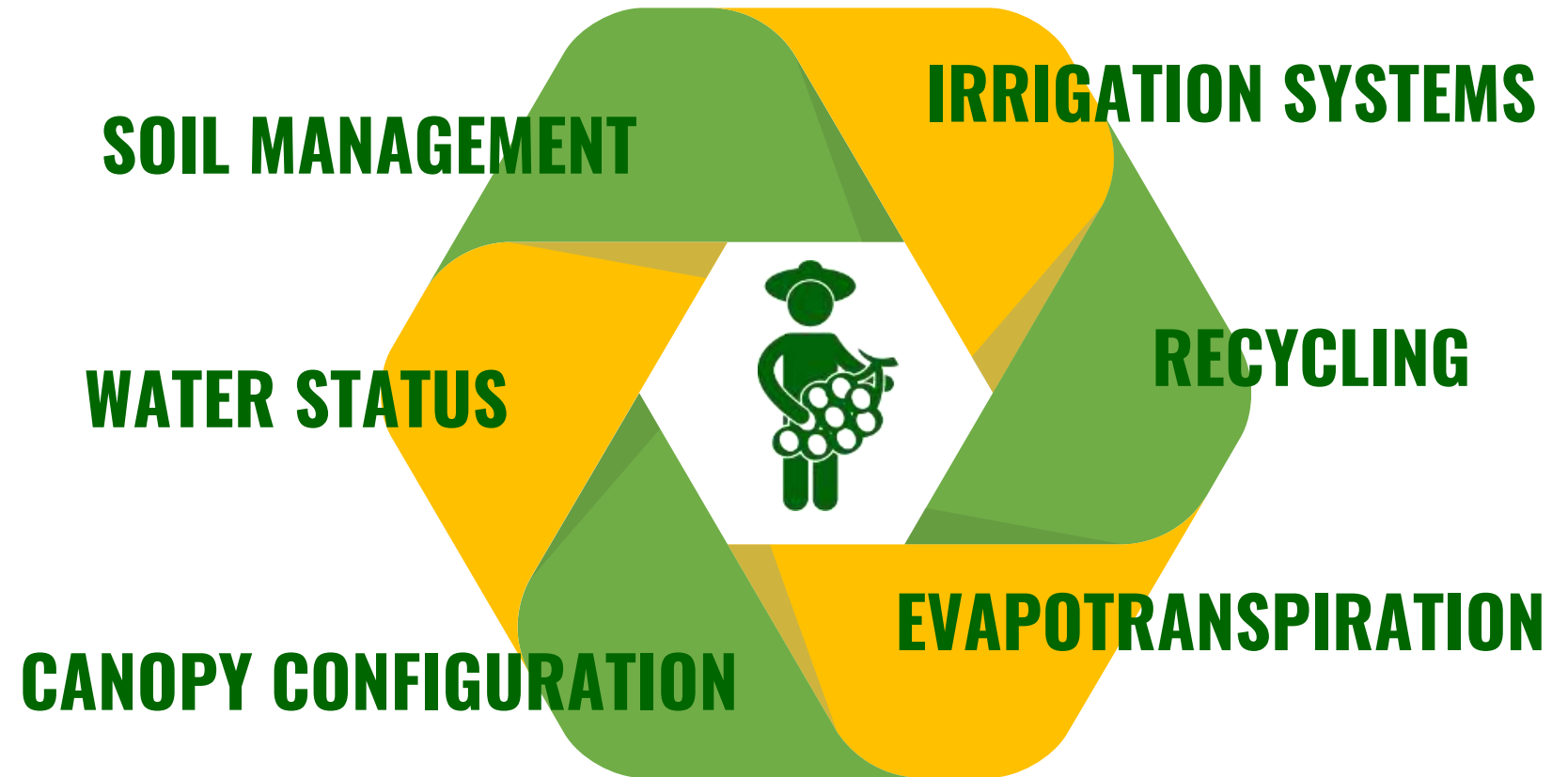
Vineyard design and viticultural practice, business management and marketing objectives;



Resource attributes

Water supply availability, delivery system, allocation and compositional constraints, water policy and basin management at the regional, national and international levels.

THE KEY AND UNIVERSALLY RELEVANT PRACTICES



1) SOIL TYPE, SOIL STRUCTURE AND SOIL MANAGEMENT INCLUDING GRASS CROPS, COVER CROPS



The sustainable use of water can arise from:

- ✓ **Density of plantation and type of plant material**
- ✓ **Modulation of irrigation in function of the evaporative losses**
- ✓ **Improvement of soil structure vs degradation and compaction**

1) SOIL TYPE, SOIL STRUCTURE AND SOIL MANAGEMENT INCLUDING GRASS CROPS, COVER CROPS



The sustainable use of water can arise from:

- ✓ Additional organic matter
- ✓ Cultivation practices
- ✓ Mulching and cover crops

2) IRRIGATION SYSTEMS AND TECHNOLOGIES FOR A LIMITED AND VULNERABLE RESOURCE

The sustainable use of water can arise from:

- ✓ Efficient micro- or drip-irrigation systems
- ✓ Interactive irrigation
- ✓ Monitoring and survey of the system
- ✓ The role of irrigation according to the production strategies

↳ Significant impact on the COSTS



3) MONITORING, SCHEDULING AND DEFINING THE REPLACEMENT VOLUMES OF WATER



The sustainable use of water can arise from:

- ✓ Monitoring of soil or grapevine water status
- ✓ Satellite remote sensing
- ✓ Visual assessment
- ✓ Complementary techniques (i.e., $^{12}\text{C}/^{13}\text{C}$)

3) MONITORING, SCHEDULING AND DEFINING THE REPLACEMENT VOLUMES OF WATER



The sustainable use of water can arise from:

- ✓ Water balance model
- ✓ The grapevine variety water requirement
- ✓ Timing vs evaporative demand
- ✓ Controlling the irrigation source

4) CANOPY CONFIGURATION AND MANAGEMENT OF THE VINEYARD

The sustainable use of water can arise from:

- ✓ Appropriate training and trellising systems
- ✓ Balancing the crop load
- ✓ Optimizing the canopy exposure



5) TOOLS FOR LIMITING EVAPOTRANSPIRATION DEMAND IN THE VINEYARD



The sustainable use of water can arise from:

- ✓ Physical structures or barriers
- ✓ Water-efficient planting material
- ✓ Foliar or soil application products

6) RECYCLING AND RE-USE THE WASTEWATER SOURCES

The sustainable use of water can arise from:

- ✓ Winery Wastewater
- ✓ Urban Wastewater
- ✓ Collective or national program



PERSPECTIVES FOR OTHER PROCESSES



Table grapes, raisins or for juice productions



Highest demand of water



Adaptation of the same principles



Extension of the OIV Expertise Collective Document



INTERNATIONAL ORGANISATION OF VINE AND WINE

**THANK YOU
FOR YOUR ATTENTION**