Driving Sustainable Growth

ROOTED IN HERITAGE. COMMITTED TO THE FUTURE.

A winemaking heritage dating back to 1857

1857 · LE VIN DU LIBAN ·

CHATEAU KSARA

Since 1857, **Château Ksara** has been shaped by its land, its vineyards and a winemaking tradition that has evolved across generations.

Today, sustainability is part of how we protect that legacy. Through responsible practices across our vineyards, winery, operations and communities, we work to preserve the resources that make our winemaking possible and ensure they remain available for generations to come.

A Living Heritage System.

CENTURY-OLD ENERGY-EFFICIENT TANKS

The winery's historic tanks were built with thick walls that provide natural thermal insulation. They have been dressed with a stainless-steel liner allowing a more water-efficient cleaning.

A LIVING WALL

Château Ksara's green wall enhances biodiversity, by creating habitats for birds and attracting pollinators, it also improves air quality, and helps regulate temperatures by providing natural insulation.

UNDERGROUND CAVES

Our natural underground cellars provide stable temperature and humidity ideal for wine ageing, reducing the need for artificial climate control. About 1,000,000 liter of wine are stored in the caves.

WINEMAKING BY GRAVITY

Our unique gravity-flow system allows wine to move naturally through the winery, reducing the need for mechanical pumping.

- Grape reception is located 70 metres above the bottling line
- Wine flows naturally from reception to bottling
- The system was initiated by the Jesuits and has been preserved until today

UNDERSTANDING OUR FOOTPRINT

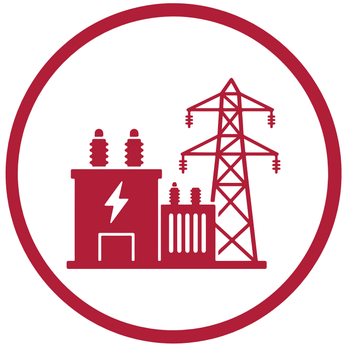
Commitment To Carbon Reduction

Château Ksara is a member of the **International Wineries for Climate Action (IWCA).** Our greenhouse gas inventory helps us understand where our emissions come from and where future reductions can have the greatest impact.

scope 1

18%

direct emissions from fuel and generators



scope 2

13.7%

purchased electricity

scope 3

68.3%

packaging, transport, waste and other indirect emissions

Silver Member of the (IWCA)

INTERNATIONAL WINERIES FOR CLIMATE ACTION

This assessment gives us a clearer basis for setting priorities and measuring progress.

GHG emission Intensity (KgCo2 e/liter of wine) = 2.19

ESMP
ENVIRONMENTAL AN SOCIAL MANAGEMENT PLAN

The ESMP provides a framework for continuing to identify, manage, and improve our environmental and social performance.

Packaging Innovation

LIGHTER GLASS. LOWER IMPACT.

Lighter 75 cl bottles

Packaging is an important part of our environmental footprint, particularly when it comes to glass.

We have introduced lighter-weight 75 cl bottles, reducing the amount of material required and the weight transported throughout our supply chain.

This initiative has already reduced shipping weight by **52 tonnes**, contributing to lower emissions from bottle production and transportation.

We continue to work with suppliers to identify further opportunities for reduction, with an additional **50-tonne reduction in glass weight expected in 2027.**

Every gram saved makes a difference.

Circular Economy, Year after Year

We look at waste as a resource wherever possible, finding ways to reuse, recycle, compost, or repurpose materials generated through our operations.

In 2024, reported results included:

350
tonnes
of organic waste composted

32 tonnes
of cardboard recycled

15,000
glass bottles
crushed for tiling applications

92
barrels
upcycled for furniture

118,140
natural corks repurposed
for biomass heating

Our Journey To Renewable Energy

SOLAR POWER:

Our transition towards renewable energy is an ongoing part of reducing the winery's reliance on conventional power sources.

With **347 kWp of installed solar capacity**, our solar generation currently produces approximately **502,600 kWh per year,** covering around **51% of the winery's electricity needs.**

We are continuing to explore ways to increase the share of renewable energy used at the winery. This includes evaluating a battery storage system that would allow excess solar energy generated during the day to be used at night.

LOW-IMPACT OPERATIONS:

We are progressively replacing fuel-powered vehicles and machinery with electric alternatives as part of our effort to reduce fuel consumption and associated emissions.
We are also working to improve the efficiency of our distillation operations. Installing a catalyst on the distillation boiler is expected to reduce fuel consumption **by approximately 15%.**

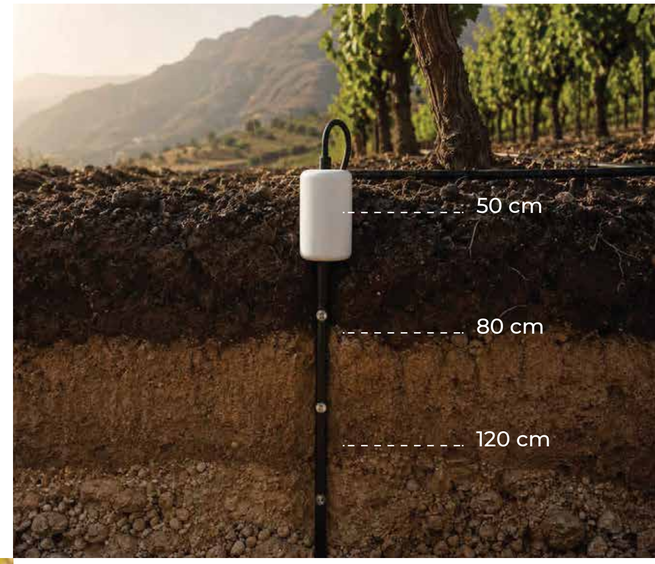
Sustainable Viticulture

CERTIFIED CCPB

An independent certification of our organic farming practices, supporting our commitment to soil health and biodiversity and reduced use of synthetic inputs.

REGENERATIVE AGRICULTURE

- Preserving and reintroducing indigenous grape varieties.
- 3.5 hectares of reforestation near the Barouk Natural Reserve, by planting native trees.
- Over 30 beehives dispatched around vineyards.



MANUAL VINEYARD PRACTICES

We use manual practices, reducing our reliance on herbicides and fuel.
E.G. Manual Weeding, Manual Pruning, Manual Harvesting.

SMART IRRIGATION SYSTEM

Vineyards are equipped with probes monitoring the soil humidity and supplying the vine with precise irrigation.

Water Management at The Winery

PROTECTING A VITAL RESOURCE

Château Ksara sources its fresh water from a natural spring and it is one of the resources on which our vineyards and winemaking depend most. Our approach focuses on using it efficiently, monitoring its availability, and finding opportunities to reuse it.

Our current system includes:

1- A biological waste water treatment plant with a treatment capacity of 72m3/day.

2- A tertiary filtration system allowing us to recycle water in periods of draft. In 2025, 359 m3 have been recycled.

Natural Spring

Biological Waste Water Treatment Plant

Tertiary Filtration System

Our People

SUPPORTING THE PEOPLE BEHIND THE WINERY

Sustainability extends beyond environmental performance. It also means creating a safe, fair, and supportive workplace for the people who make our work possible.

Our commitments include:

SUPPORTING FAMILIES

Permanent staff members receive coverage of %50 of school tuition fees for their children, supporting education.

HEALTHCARE

Private health insurance is provided to all permanent staff members and their families, complementing coverage through the National Social Security Fund (NSSF).

Education & Opportunity

INVESTING IN THE NEXT GENERATION

Our connection to the community also extends to education, training, and professional development.

Château Ksara welcomes 30+ interns annually and works with schools and universities to create opportunities for learning and practical experience.

Our university partnerships include:
USJ, USEK, University of Balamand, AUB, AUST, and the Lebanese University.

Through these relationships, we support employment opportunities, internships, research, and technical training across different fields.

Culture and Community Support

BAALBECK INTERNATIONAL FESTIVAL

Château Ksara has proudly supported the **Baalbeck International Festival** for over 20 years.

Held in the historic setting of the Temple of Bacchus, the festival brings together Lebanese and international artists and provides a platform for cultural exchange, artistic expression, and the celebration of Lebanon's heritage.

Our continued support reflects our belief that preserving Lebanon's cultural life is part of preserving the wider heritage to which we belong.

COMMUNITY SUPPORT

CAP-HO, Message de Paix, Batrouniyat, Saint Porphyrios Association, Rachit Kheir, Association CORM, Centre Mar Semaan, RAM – Walk of Hope, Restos du Cœur, Association de la Femme, Ayadina, Saint Vincent de Paul, Arc-en-Ciel, Basma, and Volunteers Together.

Looking Ahead

A LONG-TERM COMMITMENT

For us, sustainability means protecting the resources on which our vineyards and winemaking depend:

water, soil, biodiversity, and organic resources.

It means using these resources responsibly so that the land remains productive and healthy over the long term.

It also means recognizing that there is no single point at which this work is complete.

Our ambition is to continue building on what we have achieved. The realities of Lebanon shape how we move forward, but they do not change our commitment to continuous improvement.

“Our goal is simple: to protect the land, resources, people, and culture that have supported Château Ksara for generations and help ensure they continue to do so for generations to come.”

- Kamil Zafer Chaoui, *3rd generation family member*

CHATEAU
KSARA

This report has been made in 2026.

This report reflects Château Ksara's commitment to sustainability, ethical business, and the well-being of our community, people, and environment. We are proud of our progress and remain dedicated to building a more just and sustainable future.

www.chateauksara.com