

CULTURE, NATURE, FUTURE.

Knowledge passed from Generation to Generation

Cork has protected, inspired and fascinated mankind for thousands of years. The discovery of cork's potential and excellence has led to various industries passing this knowledge on from generation to generation, without cutting down a single tree.

Synonymous with Good Wine

Cork has been the preferred wine closure for centuries and is chosen by over 70% of winemakers worldwide, for approximately 12 billion bottles produced annually.

100% Environmentally Friendly

Cork is a 100% natural, sustainable and recyclable material. Cork oaks have a unique ability to absorb CO₂ from the atmosphere. It is estimated that the cork oak forests can absorb up to 14 million tons of CO₂ per year.

Biodiversity Hotspot

The cork oak forest is one of the 35 global biodiversity hotspots and a habitat for some of the most endangered species on the planet. It helps to control erosion, regulates the hydrological cycle and contributes to fighting desertification and global warming.

Innovation, Technology and Quality

High-tech materials for the aerospace industry, polymer compounds for the transport sector, top-level sports equipment, benchmark architecture and design works are just a few examples of how cork is used which demonstrates the versatility of this complex material.

Added Value

Since there is no future without people, the cork industry is a truly social, environmental and economic pillar for the millions of inhabitants of the western Mediterranean basin. Thanks to the cork oak forest and products made from cork, it is possible to show that sustainable development may not be a utopia.





CULTURE,

4,000 YEARS OF HISTORY

The history of cork is inextricably linked with that of mankind. The Greeks, Romans, Egyptians, Chinese, Babylonians, Assyrians, Phoenicians and Persians all discovered the potential of cork oak bark (*Quercus Suber L.*), and used it to make an endless variety of everyday objects.

Long before Christ was born, it was used in shoes, buoys and fishing gear – nowadays it is transformed into valuable and unique fashion and design items and incorporated into cutting edge sports equipment. In ancient Egypt, it was used as a stopper for amphorae – today it protects fine wines, Champagnes and beers; it has shaped and named beehives and, many centuries later, has been used to prevent cells from cold and humidity – in contemporary life, it continues to insulate our homes.

In the 15th and 16th centuries, it was used in the caravels in which Portuguese navigators explored the world – today, it is used in space crafts in search of new worlds.

Cork is an invaluable resource for today's world in terms of historical, cultural and genetic heritage.

Natural Talent

In a society that wants to be more environmentally friendly and forward thinking, cork is the only material that is 100% natural, sustainable and recyclable, with a wealth of uses and properties, that no technology has been able to replicate to this day.





CORK AND WINE

Made for each other

Is there any romance as perfect and enduring as that between wine and cork? Innate qualities such as cork's unparalleled flexibility, impermeable structure, strength and capacity to manage micro-oxygenation, combine seamlessly and ensure the proper fermentation and maturation of wine, preserving its very essence. Small details make all the difference.

Making History Together

The stopper is the global ambassador for cork, elected by the best winemakers - the world's finest wines have always used cork stoppers. Dom Pérignon, the Benedictine monk, was the first to use it to seal his famous Champagne in the 17th century. This sparked the birth of an industry that currently holds a global share of 12 billion cork stoppers and accounts for almost 70% of the cork industry's revenue.

Proof of Charm

What is believed to be the oldest drinkable Champagne is protected with a cork stopper. For over 200 years, it remained lost in a shipwreck on the Baltic seabed, until it was discovered in the 21st century in a perfect state of conservation!

Cork also preserves the nectar of centuries-old bottles of Port Wine, of the world's oldest single malt whisky - Gordon & MacPhail's Mortlach 70 Year Old - as well as the most expensive whisky in the world, the Dalmore 64 Trinitas, which reached a price of £100,000 per bottle. Not forgetting the Raisin Blanc Champagne, which comes in a new bottle that combines modern design with the authenticity, prestige and timelessness of the cork stopper.

The versatile and majestic cork stopper also seals the world's most expensive beer and bottled water.



Premium Factor

The cork stopper is the prime choice of consumers and the superior option in terms of quality and sustainability. In addition, it creates value for producers like no other closure.

Recent studies carried out in the United States have demonstrated that wine brands using cork stoppers show higher annual sales growth and more stable prices than those using alternatives such as screw caps and synthetic closures*.

*ACNielsen in 2009-2010, CQC, EUA.



The number of cork stoppers manufactured worldwide each year could cover a distance equal to circling the Earth 15 times.

FROM BARK TO BOTTLE, A WORLD OF CHOICE

The thorough exploitation of the cork oak forest was driven by the development of the cork industry, almost three centuries ago. This would become - and remains today - the main destination of cork. Cork is used to seal bottles of all shapes and sizes, including table wines, sparkling wines, fortified wines, spirits, beer and mineral water among others. The cork stopper ensures technical efficiency and a range of different products are available:

- Natural **1**
- Multi-piece natural **2**
- Colmated natural **3**
- Champagne stoppers **4**
- Technical **5**
- Agglomerated **6**
- Capped **7**
- Micro-granulated **8**





ECONOMIC AND SOCIAL PILLAR

More Harmony, Greater Added Value

Cork is an indelible factor of social and economic development for Western Mediterranean countries. It combines centuries-old tradition with modern practices of a forward thinking industry and a leader in sustainability.

At the forefront of the sector, Portugal has the largest area of cork oak forest in the world (over 730,000 hectares) and produces 53% of the global average of cork. Nevertheless, it is also the largest importer: it transforms 70% of the world's cork into end-user products, primarily stoppers and building materials, of which 90% are destined for European markets (France, Spain, Germany and Italy) and the USA. This accounts for 0.7% of Portugal's GDP (market prices), 2.2% of its total Portuguese exports and 30% of its forest product exports.

**The cork oak forest
is a national heritage
in Portugal, and has
been legally protected
since the Middle Ages.**



More Forest, more Wealth, more Environment

The cork oak forest, a perfect example of a balanced relationship between Man and Nature, extends to over 2.2 million hectares in the Mediterranean basin. The value creation associated with the forest goes far beyond the concept of corporate financial performance. In Portugal alone, the cork oak forest provides ten thousand direct jobs in the industry and 6,500 in the field of forest development and maintenance. In the seven Mediterranean cork-producing countries, over 100,000 people depend directly or indirectly on this economy.

Thousands of jobs indirectly related to the Cork oak forest are also undeniably important: harvesting of medicinal plants and mushrooms, honey and beeswax production, coal production, hunting, cattle breeding, bird watching, sightseeing and horseback riding. An inexhaustible range of possibilities that attract investment, boost domestic industry, ensure jobs and help to encourage environmental awareness.

Cork harvesting is the best paid agricultural work in the world, due to the expertise and care it requires.



TESTIMONIALS

Francisco Almeida Garrett

Cork producer - Portugal

The cork sector generates jobs, income and regional and local stability. The unique Mediterranean ecosystem of the cork oak forest is highly valuable in terms of biodiversity. The cork stopper generates 70% of the value added, but only 30% to 40% of the raw material can be used for this purpose (...). It is up to us to develop and promote new uses for cork and exploit all the potential advantages of the cork oak forest, in order to ensure economic and ecological sustainability.

Steve Rued

Winemaker - Rutherford Wine Co.-EUA

Rutherford Wine Co. uses cork to seal its wines. We have also used synthetic closures and even screw caps, but as we are moving towards a more sustainable business, we have decided to go back to 100% natural cork. It is a great sealant and the fact that it is a natural product was one of the main reasons for our choice. Cork has several advantages for the general public, including its recyclability.





NATURE,

A SANCTUARY OF BIODIVERSITY

Unique and delicate, the cork oak forest is one of the richest ecosystems in the world, which environmental NGOs identify as one of the 35 global biodiversity hotspots, among natural wonders such as the Andes, Borneo, Africa and Amazonia.

It is home to more than 160 species of birds, 24 species of reptiles and amphibians and 37 species of mammals - some of which are highly endangered. In every 1,000 m², there are about 135 plant species, some with aromatic, culinary or medicinal properties.

It is a true example of conservation, possible only thanks to the economic, social and environmental value that the world assigns to cork.

A plastic closure emits ten times more CO₂ than a cork stopper and, in the case of screw caps, emissions are 24 times higher.



FROM ROOT TO LEAF.

The cork forests can absorb up to 14 million tons of CO₂.

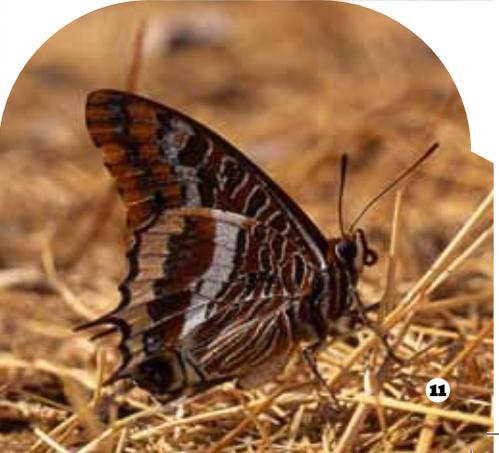
THE CORK OAK FOREST AS A BARRIER AGAINST DESERTIFICATION

The cork oak plays an unparalleled role in soil conservation, and the economic value of cork is a crucial incentive for the maintenance and expansion of cork oak forests.

Throughout its life-cycle, the cork oak absorbs nutrients from the depths of the earth, which it returns to the soil when shedding its leaves. In this way, it stimulates the production of organic matter that produces fertile soil, improves rainwater retention and replenishes groundwater.

The same leafy crowns that house several animal species also reduce wind speed, protecting the soils against wind erosion. Moreover, thanks to the insulating properties of cork, the cork oak is an important bulwark against forest fires.

- Iberian Lynx; **1**
- Cork oak leaves; **2**
- Stripping; **3**
- Juvenile - booted - eagles; **4**
- Rock-rose; **5**
- Bush Owl; **6**
- Toed Eagle; **7**
- Hoopoe; **8**
- Rosemary; **9**
- Mottled - triton; **10**
- Butterfly. **11**





It is only after the third stripping – when the cork oak is 43-years-old – that cork has the quality necessary for manufacturing natural cork stoppers.

If you add the wine maturation period, every time you open a bottle, you are holding a piece of cork that may be 50 to more than 100 years old.

CENTURIES-OLD VITALITY



To love is to preserve

Longevity and regeneration are unique properties of the cork oak. It is a noble tree that lives an average of 200 years, during which time it may be harvested 15 to 18 times. The first harvest of the cork – referred to as virgin cork – takes place when the tree is 25 years old and the perimeter of its trunk, 1.30 m above the ground, exceeds 70 cm. Any subsequent harvest is carried out every nine years, without harming the growth of the cork oak.

Cork production does not destroy the trees. In fact, after harvesting the cork oak undergoes a self-regeneration process unseen in any other forest species.





Nothing is wasted, everything is used

Cork is remarkably eco-efficient. Cork obtained from the first two harvests – not yet having the quality required for cork stoppers – is used in aggregates for construction and other materials. Later, the waste from the manufacturing of cork stoppers can be used to make innovative products with high scientific and technical value, such as absorbents, automotive parts or for railway and aircraft projects. Even used cork stoppers can be recycled and reused to manufacture footwear, sports equipment or fashion and design items. Even the smallest particles of cork dust can become fuel for cogeneration.

The cork oak is the only plant species capable of producing cork in a sustainable manner and with the necessary quality to ensure a dynamic industry which, in turn, is crucial to the maintenance of the Cork oak forest and preservation of the flora and fauna that make it their habitat.

TESTIMONIALS

Allen Hershkowitz

Scientist – Natural Resources Defence Council – USA

Climate change and global warming are a planetary emergency. Deforestation causes more global warming pollution than all the combined emissions of cars, trucks, buses, airplanes and ships in the entire world. The Mediterranean region has one of the world's richest cork oak forests in biological terms and trees are not cut down for cork production. Increasing people's awareness of something as simple and small as the cork stopper will make them start to reflect on other environmental issues. Stripping cork oaks in a sustainable manner preserves jobs and discourages the use of fossil fuel-based alternatives.

Charles Philip Arthur George

Prince of Wales – UK

"...Even something as apparently simple as the decision by some winemakers to use plastic stoppers instead of the traditional cork can have far-reaching impacts. Quite why anyone should want to encounter a nasty plastic plug in the neck of a wine bottle is beyond me! Yet this growing practice is causing major changes in the dehesas of Spain and Portugal."

(Excerpt from speech at the event "2002 Euronatur Award", Germany)





FUTURE.

MISSION: TO INNOVATE

Avant-garde Industry

The cork industry has made modernisation and quality its pillars. It invests in R&D and uses the most advanced technologies in the different manufacturing stages and processes. It implements rigorous quality systems. All products undergo thorough laboratory tests. It enhances workforce development.

The cork industry sets the standard as a modern, forward thinking industry both in Portugal and abroad.





PROOF OF QUALITY

Certification that encourages competitiveness

Certification ensures competitiveness and is a key to success. For companies, it is an incentive for continuous improvement and, for customers, it provides confidence in the product. The cork industry invests in certification in its widespread drive towards quality and modernisation. Over 70% of companies certified by the International Code of Cork Stopper Manufacturing Practice are Portuguese. Stoppers, flooring, wall coverings and other products made from or with cork can use the international Cork Mark symbol. This distinction requires compliance with strict regulations and is synonymous with authenticity, excellence and prestige.

International Certification

- International SYSTECODE Certification (Confédération Européenne du Liège)
- Forest Stewardship Council
- Programme for the Endorsement of Forest Certification Schemes
- ISO 14001 (Environment)
- ISO 9001 (Quality)
- ISO 22000 (Food Safety)
- Hazard Analysis and Critical Control Points (Food Safety)
- OHSAS 18001 and PN 4397 (Occupational Health and Safety)

Portugal has been a pioneer in environmental legislation for the protection of the Cork oak forest and is currently the leading legislator in this matter.



FROM CONSTRUCTION TO DESIGN

Sustainable Efficiency

Recognition of cork's capabilities has opened the doors to an unlimited world of uses. In civil engineering, its thermal, acoustic and vibration insulation capacity is exploited in building walls and floors. From floor to roof, in walls and windows, cork provides comfort, is non-allergenic and durable. Its benefits extend to improved energy efficiency in an increasingly environmentally friendly society. Owing to its unique properties, cork is also used in lightweight concrete and expansion joints for roads, bridges, railways, dams and airports. A masterpiece of Nature used to engineer the future.

ECO-DESIGN AND CORK

A BOUNDLESS RELATIONSHIP.

There are many reasons why architects, designers and decorators worldwide are choosing more natural and ecological materials. These include low environmental impact, energy efficiency, quality, durability and reusability. It is the realm of eco-design, an increasingly widespread and innovative futuristic trend, where cork is distinguished by its unlimited potential.

As far as the imagination goes

- Handicrafts and jewellery; **1**
- Clothing; **2**
- Umbrellas; **3**
- Footwear; **4**
- Cork wool to stuff pillows and mattresses;
- Furniture and furnishings; **5**
- Bags, wallets and fashion accessories; **6**
- Soccer ball and cleats; **7**
- Aerospace material;
- iPod, iPhone and iPad cases; **8**
- Portugal Pavilion at Shanghai Expo 2010; **9**
- Office supplies. **10**

Cork is one of Portugal's most famous ambassadors and is in vogue all over the world. During the NATO Summit in 2010, prominent political figures like Barack Obama, Hillary Clinton, Angela Merkel and other NATO leaders were presented with fashion items and accessories made from cork. The U.S. President also received a second gift - a collar for his Portuguese water dog, Bo.



© Björn Holamp



© DyeCork



© Kbrinka





TRANSPORT AND AVIATION

Technology, Nature and Comfort

The revolution is just around the corner. A car seat made from cork, reduces its volume by half and is three times lighter than a traditional seat. Yet it provides the same comfort and is recyclable. This is a Portuguese project that has already conquered the world's leading automotive parts manufacturer, Magna International Inc. Now imagine a car with its doors, roof, gearbox, handbrake, steering wheel and dashboard lined with cork. This vehicle already exists in a Mercedes-Benz prototype. Cork is also used on bicycle handlebars, on the floor of public transport and even in motor vehicle engine head gaskets.

Towards the stars

NASA and the European Space Agency found cork to be the perfect partner for their space missions. Its thermal protection, the friction strength and lightness are placed in the service of aviation in the surface tiles of space shuttles.

Cork is also used on bicycle handlebars, on the floor of public transport and even in motor vehicle engine head gaskets.



ENERGY

No limits

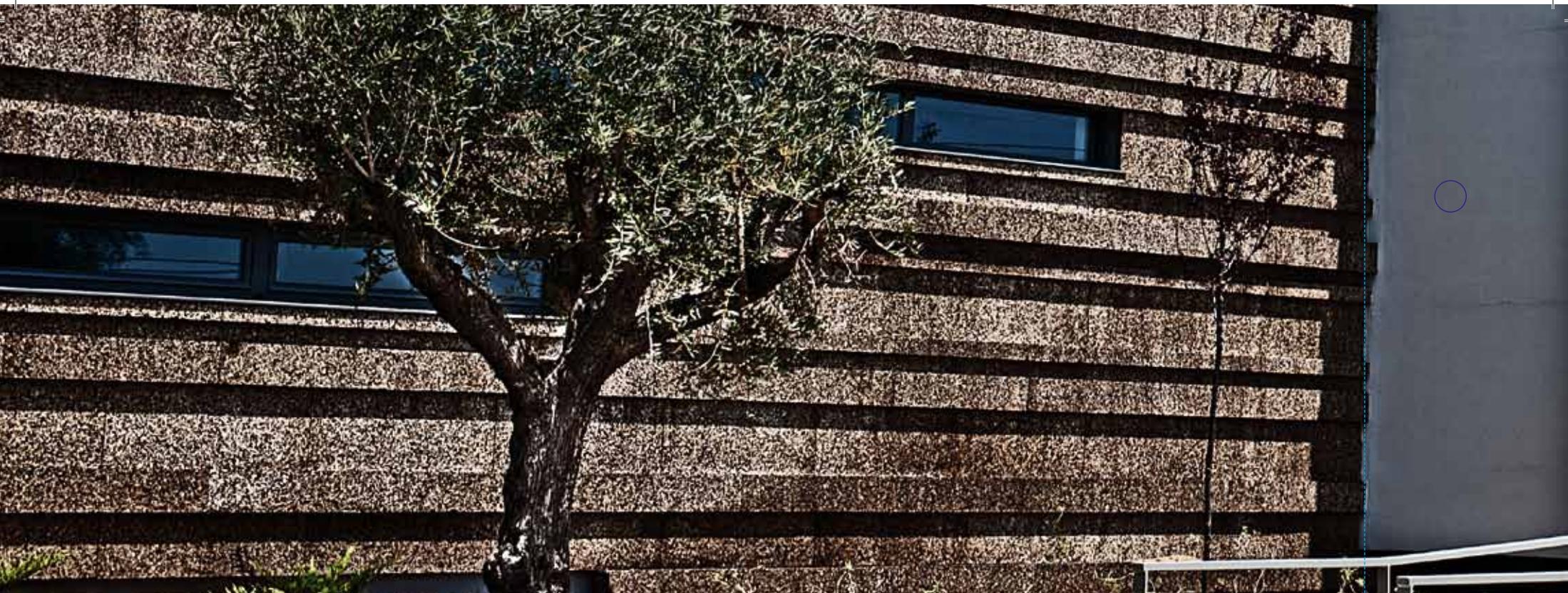
Using cork generates energy. Cork dust is used in the cogeneration of electricity, contributing to improved energy efficiency, which in some companies can reach 60%. The lightness and acoustic insulation capacity of cork are also exploited for wind power by being incorporated in the turbine blades. Cork is also used in absorbents to control oil, hydrocarbon or organic solvent spills in industrial, aquatic and road environments.

100% NATURAL

Good for Health

When in contact with wine, the cork stopper forms antioxidant and anti-carcinogenic compounds that may reduce the risk of heart and degenerative disease. The amazing potential of cork is constantly showing up where least expected! Invisible, it can be present in pharmaceutical and cosmetic products through hydro-acids generated by the chemical reaction of some constituents of cork. Imperceptible, it is used in compounds made from by-products of the cork industry, which are incorporated in vaccine adjuvants to enhance immune system response.





ECLECTIC CHALLENGE

In sports and leisure

Cork is a sports champion. It maximises the performance of hockey, baseball and golf balls, badminton shuttlecock bases, table tennis rackets, dartboards, Olympic kayaks and surfboards. Cork is also making an impact in the football industry, with cork fabric now being used in the manufacture of footballs and cleats.

In music, it makes the difference in wind instrument parts. Thanks to its waterproof properties, it provides a good seal and favours fine-tuning. Research on this raw material gives rise to surprising uses on a daily basis: cork fabric, cork paper and, currently under development, cork thread - in different colours - for knitting.

GREATER EFFICIENCY

In conservation

Cork waste particles sprayed by compressed air allow the cleaning of materials exposed to environmental pollution. This procedure is used in power plants, electrical insulators for high voltage poles, monuments or building facades. It has countless advantages: it can be done regularly, as it exists in large quantities and does not change the properties of materials. It provides clear results and avoids having to replace components after short periods of exposure or service interruption.



TESTIMONIALS

Daniel Michalik

Furniture designer – USA

I started using cork in 2003 and discovered that this amazing material had great potential. It is easy to clean, healthy, natural, warm and beautiful. Moreover, people are becoming increasingly attentive to natural materials and growing weary of shiny plastic. And cork is perfect! It is totally non-toxic, mildew resistant and waterproof. I'm interested in different models of material resource use and production. The way to do this is to reconsider the natural resources we use and how we process them. I believe that cork is a great model and contributes to a healthier environment.

Candice Olson

Interior designer – Canada

Cork flooring is ideal for those seeking beauty, comfort, durability and sustainability. It's one of the few that are 100% sustainable. I love its versatility. It's soft, comfortable, warm, hypoallergenic, mildew resistant, waterproof, and has insulating properties, especially for noise. Therefore, it can be used in any room. The variety of design options fascinates me. There is a wide range of colours, patterns, textures, endless possibilities... and no tree is cut down. On the contrary, the cork oak self-regenerates after stripping, which is done every nine years throughout its life, which can reach 250 years. It's a sustainable history!



CORK INSPIRES ME

IN THE 4 CORNERS OF THE WORLD

Decoration and household goods

- Lamp, Bleach Design; **1**
- Fup Pouf, by Ana Mestre, Corque Design; **2**
- Corqui Chair, by Pedro Silva Dias, Corque Design; **3**
- Ice Bucket, Ana Mestre, Catarina Galvão, Fernando Miguel Marques, Corque Design; **4**
- Cork Candlesticks, Fernando Brizio, Corque Design; **5**
- Lavatory, Simple Forms; **6**
- Alma Gémea Collection, at the Museum of Modern Art (MoMA), New York.

Works of Art

- Onion Pinch, by Caterina Tiazzoldi and Eduardo Benamor Duarte;

- “Escultura Habitável” (Habitable Sculpture), by Miguel Arruda; **7**
- Kasper Jorgensen Structure, at the Louisiana Museum of Modern Art.

Sports

- Nelo competition kayaks, M.A.R. Kayaks (inside). **8**

Buildings

- Portugal Pavilion at Expo Shanghai 2010 (wall covering), Carlos Couto, Shanghai, China; **9**
- Quinta do Portal (wall covering and thermal insulation), Siza Vieira, Douro, Portugal; **10**
- Portugal Pavilion at Hannover Expo 2000 (wall covering), Siza Vieira and Eduardo Souto Moura, Coimbra, Portugal; **11**
- Nezu Museum Gallery 4 (flooring), Tokyo, Japan; **12**
- Cork shelter - Guggenheim Museum Prize - David Mares, Palmela, Portugal;
- Cork House (wall covering, thermal and acoustic insulation), Arquitectos Anónimos, Esposende, Portugal; **13**
- House in Arruda dos Vinhos (wall covering, thermal and acoustic insulation), Plano B Arquitectura, Portugal;
- Eco-hut (wall covering, thermal and acoustic insulation), Flavio Barbini and João Silva, Cascais, Portugal; **14**
- Abu Dhabi Guggenheim Museum (flooring), Frank Gehry, United Arab Emirates;
- Cork Oak and Cork Observatory (wall covering), Manuel Couceiro, Coruche, Portugal; **15**
- Fallingwater (wall covering), Frank Lloyd Wright, USA;
- Adobe Office (flooring), Seattle, EUA;

- Sagrada Família Cathedral, (flooring) Jordi Boneti Armengol, Barcelona, Spain; **16**
- Library of Congress, USA (flooring), Washington - EUA;

Fashion

- Christian Dior – Bags and Accessories
- Stella McCartney – Sandals
- Christian Louboutin – Sandals;
- DOLCE & GABBANA – Shoes;
- Steiger – Shoes;
- Lena Hasibether – Clothing and Accessories;
- Luís Buchinho – Butterfly Handbag.





José Mourinho

**Soccer coach
– Portugal**

The cork stopper is a product that has raised Portugal to the rank of world leader in the industry, so it should be promoted by all Portuguese.



Paul Morrison

**Producer of the BBC documentary
“Cork – forest in a bottle”
– UK**

The cork oak forest is Portugal's “rainforest” and one of the most important habitats in Europe. It preserves an ancient rural culture that coexists perfectly with nature, but which will only survive if cork maintains its value as an international product.

Everyone should visit the cork oak forest, awaken their senses and absorb the surroundings. Then, each time they take a cork stopper out of a bottle, they will always hear the rhythmic sound of bark stripping or the melody of a bird echoing in their minds. A unique taste for a glass of wine!



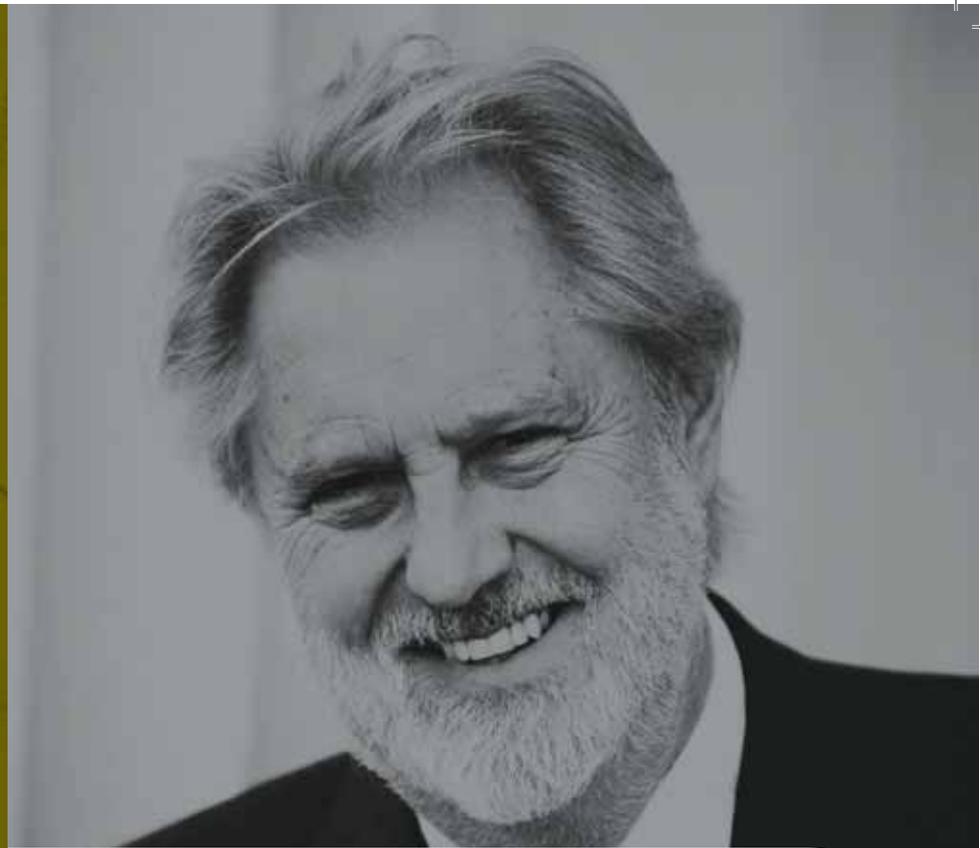
Siza Vieira

**Architect
– Portugal**

I have been working with cork for a long time. When I was designing the Portugal Pavilion at the Hannover Expo 2000, together with architect Souto Moura, studies were made on the use of cork for exterior coverings coating and in mixed cork and cement flooring.

We considered them both to be innovative and excellent uses, also in terms of colour and texture. Cork as an exterior covering was first used outdoors here and, since then, both we and other architects have used it. It is a natural material of unique properties.

Its use and research on its possibilities currently have very favourable prospects, regaining and enhancing the attractiveness it had decades ago.



Lord David Puttnam of Queensgate

**Film producer and politician
– UK**

Cork is produced by and for the welfare of a significant community in Europe. As humans, we have the obligation to ensure the survival and continuity of the life of these communities whenever and wherever possible, especially when it comes to a self-sustaining product. Cork is human. It is part of us and we are part of it.

CORK ALSO FASCINATES

Rob Schneider
Actor - EUA;

Mark Selby
Professional snooker player - England;

Roland Joffé
Film-maker - England;

Yann Arthus-Bertrand
Photographer, journalist, environmentalist - France;

and many more...
including you!



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