



TENERIFE

"Sustainable Future"

WHAT WE OFFER:

Sustainable solutions for the Canary Islands: Water, waste, air quality, and economy



MY JOURNEY: FROM COMPANY CREATION TO SUSTAINABLE REORIENTATION

ABOUT ME AND MY COMMITMENT

I am Sandra Burkhardt, an entrepreneur with over 30 years of experience, 22 of which have been in the filtration technology sector.

In 2020/21, during the pandemic, I founded UNITEX Filter and Protection S.L. in the Canary Islands.

During the past two years, I dedicated myself intensely to obtaining the license for the commercial premises, a long and arduous process. This experience made me clearly see the structural deficiencies in administrative processes. For this reason, in the spring of 2024, I decided to temporarily suspend the company's activity to redirect my strategy.

Now, I am focusing my knowledge and experience on sustainable projects and solutions for existing problems before taking the next step towards production development. In September 2024, I launched a petition to make long-standing issues exacerbated by increased tourism visible and to drive change.

My goal is to contribute to improving the situation in the Canary Islands with my experience, putting personal interests aside to support the region in the long term.

01. Water: The Essence of Our Life

Outdated water pipes and inadequate wastewater treatment endanger the environment and quality of life. Urgent modernizations are needed.

02. Waste: Reduction Instead of Nuisance

The high volume of waste from disposable products affects the environment. Biodegradable alternatives offer a sustainable solution.

03. Air Quality: Protection Against Calima Dust

Saharan dust from Calima poses a health risk. Innovative protective products are crucial for keeping the air clean.

04. Economy: Diversification for the Future

Dependence on tourism is risky. Economic diversification creates long-term growth opportunities.

05. Transportation: Rethinking Mobility

Congested streets and high emissions require new transportation concepts. Efficient systems can provide relief.

06. Responsibility: Change Through Innovation

Decades of neglect require reevaluation. Those responsible must drive sustainable solutions.





URGENT NEED FOR ACTION: LOST RESPONSIBILITY AND THE QUEST FOR A SAFE AND CLEAN FUTURE

"FUTURE NOW: TAKING RESPONSIBILITY"

Years of neglect in infrastructure and environmental policy have presented significant challenges for the Canary Islands. Obsolescence in water and waste management, deterioration in air quality, and insufficient economic diversification require immediate measures.

To ensure a clean and safe future for the region, those responsible must act urgently and implement sustainable solutions.

"SHAPING GROWTH, FACING CHALLENGES"

Development Milestones: Population, Tourism, and Infrastructure in Tenerife



1960S

- **Tourism:**
- **Numbers:** Tourism in Tenerife began with only a few thousand visitors per year. The tourism industry was still in its early stages, and infrastructure was developing slowly.
- **Airport Construction**
- Tenerife North (TFN): Not yet inaugurated; the airport opened in 1978.
- **Number of inhabitants:** Approximately 500,000

1980S

- **Tourism:**
- **Numbers:** The number of tourists increased to approximately 1.2 million annually. It was a phase of significant growth in the tourism sector, accompanied by an expansion of tourism infrastructure.
- **Airport Construction**
- Tenerife North (TFN): Opened in 1978.
- Tenerife South (TFS): Inaugurated in 1983 to cater to the growing international tourism.
- **Number of inhabitants:** Approximately 700,000

2024

- **Tourism:**
- **Numbers:** Tenerife receives around 5 million tourists a year. The tourism sector is well-established but faces challenges such as overcrowding and environmental impacts.
- **Airport Construction**
- Tenerife North (TFN): Continues operating with ongoing improvements and expansions.
- Tenerife South (TFS): Expansion and modernization ongoing since 2020, with completion expected by the end of 2024.
- **Number of inhabitants:** Approximately 1.1 million

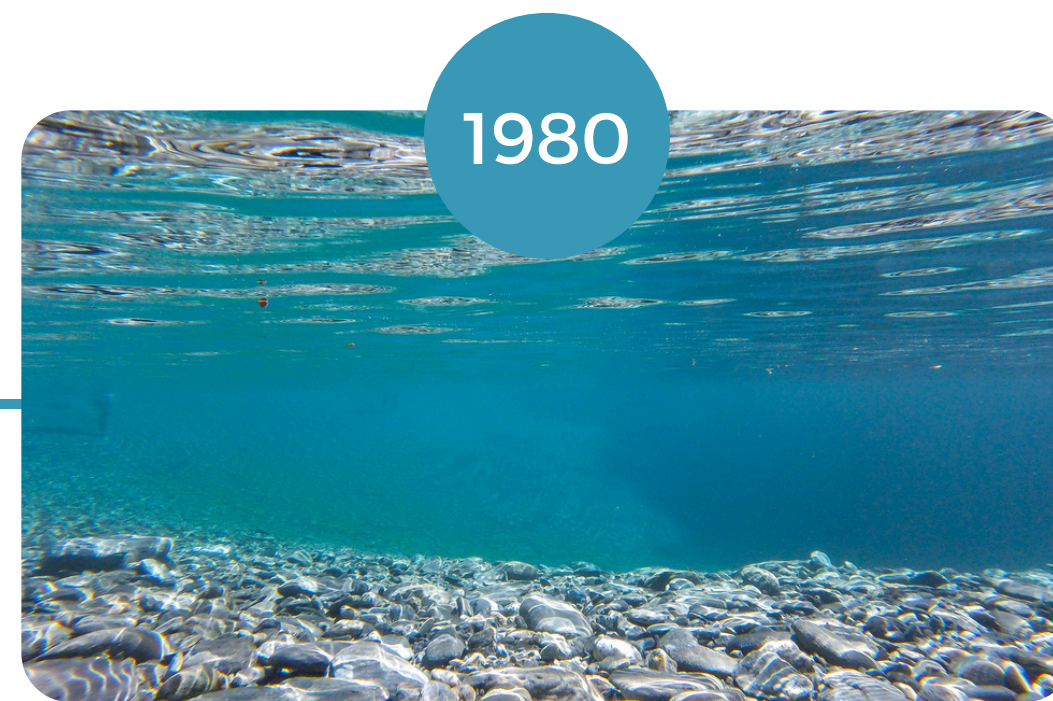
"CLEAN WATER, CLEAN FUTURE."

Wastewater Treatment Plants in Tenerife: Data and Requirements



1970S

- **First wastewater treatment plant**
Approximately 5 plants were installed.
- **Amount of wastewater:** Approximately 50 million m³ per year.
- **Necessary wastewater treatment plants** For a wastewater volume of 50 million m³, approximately 10 treatment plants would be needed (based on an average capacity of 5 million m³ per year per plant).



1980S

- **Expansion:** Another 10 treatment plants were built.
- **Amount of wastewater:** Approximately 80 million m³ per year.
- **Necessary wastewater treatment plants**
- To treat a wastewater volume of 80 million m³, approximately 16 treatment plants would be needed.



2000S

- **Modern wastewater treatment plants:**
- **Volume of wastewater:** Approximately 120 million m³ per year.
- **Necessary wastewater treatment plants:**
- To treat a wastewater volume of 120 million m³, approximately 24 wastewater treatment plants would be needed.

2024: THE CONSEQUENCES OF DECADES OF NEGLECT

Since the 1970s, the Canary Islands have lacked sufficient wastewater treatment plants to efficiently handle the increasing volumes of wastewater from both residents and tourists. For decades, insufficient measures have been taken to modernize and expand the necessary infrastructure.

Very few wastewater treatment plants: The root of the problem

- 1970s: The first wastewater treatment plants were built, but even then capacity was insufficient.
- 1980s and 2000s: Despite the growth of tourism and the increase in the number of inhabitants, the number of wastewater treatment plants increased only slightly.
- 2024: Tenerife lacks at least 10-15 modern wastewater treatment plants to properly treat annual wastewater of around 200 million m³. Existing plants are obsolete and much wastewater flows unfiltered into the sea.

Faulty pipes and broken pipes: a time bomb

For decades, sewer pipes dating back to the 1960s and 1970s have not been renewed. Constant wear and tear and lack of maintenance have led to massive pipe breaks. These faulty pipes discharge unfiltered sewage into the sea and coasts, where they endanger beaches and the ecosystem.

Danger to residents and tourists

- Health risks: Beaches have remained open to tourists despite the water quality, which has led to potential risks of infection. Swimmers are at particular risk because the water is contaminated with bacteria and contaminants.
- Beach closures: In recent months, beaches have had to be closed more and more frequently due to questionable water quality. Algae blooms, caused by nutrient overload and sewage, have flooded coastlines, a clear sign of the collapse of the marine ecosystem.

2024: The consequences of decades of neglect

Consequences for the environment and tourism

Algae blooms: The highly visible algae on the coasts of Tenerife are a direct indicator of increased pollution. Not only do these algae deteriorate the quality of the bath, but they are also a visible sign of the decline of the marine ecosystem.

Tourism boom in jeopardy: The steady influx of tourists relying on clean beaches could collapse dramatically due to negative headlines and beach closures. The national and international media are already reporting on poor water quality and ecological damage in the Canary Islands.

Long-term regeneration: Even if immediate action were taken, it could be years before the ocean fully recovered from environmental damage.

Fines and lack of commitment

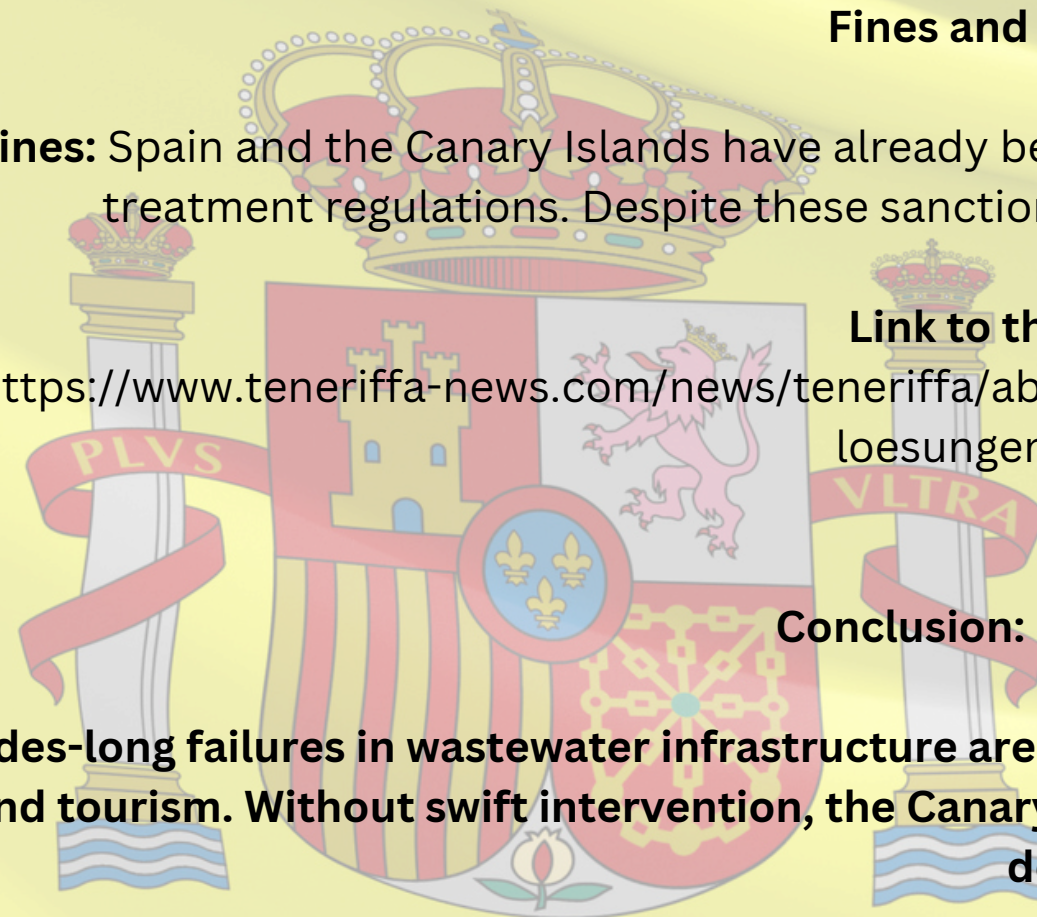
EU fines: Spain and the Canary Islands have already been fined almost €8 million for failing to comply with wastewater treatment regulations. Despite these sanctions, there have been no significant improvements so far.

Link to the journalistic note:

https://www.teneriffa-news.com/news/teneriffa/abwasser-vergehen-kanaren-zahlen-millionen-strafe-an-die-eu-loesungen-fehlen_28485.html

Conclusion: Urgent need for action

Decades-long failures in wastewater infrastructure are having serious consequences for the environment, public health and tourism. Without swift intervention, the Canary Islands could lose its position as one of Europe's top tourist destinations.





OUR VISION

01

CLEAN WATER FOR ALL

Our vision is access to clean drinking water and effective wastewater solutions through modern wastewater treatment plants and the replacement of old pipes.

01

SUSTAINABLE WASTE MANAGEMENT

Our goal is to minimize waste through recycling and eco-friendly materials and keep the islands clean.

01

SUSTAINABLE ECONOMIC GROWTH

Our vision is an economy that goes beyond tourism, creates new jobs and grows in harmony with nature.

OUR MISSION

CLEAN WATER & WASTEWATER SOLUTIONS

We use our expertise to implement innovative ideas for clean drinking water, effective wastewater solutions and sustainable water storage in the Canary Islands

01

ECO-FRIENDLY SOLUTIONS FOR WASTE

Our goal is to reduce the waste problem in the Canary Islands and protect the environment through sustainable waste and recycling concepts.

01

INNOVATING FOR SUSTAINABLE GROWTH

We want to bring our ideas and innovations to promote a diverse and environmentally friendly economy and support the region in the long term.

01



OUR SERVICE

"Sustainable solutions for a clean future: water, waste, air and much more"



SERVICE 1

With tailor-made solutions to optimize water use and effective wastewater treatment, we contribute to sustainable water management.

- WATER SUPPLY
- WASTEWATER PROBLEMS



SERVICE 2

Our service offers innovative strategies for waste reduction and efficient waste disposal to ensure environmentally friendly waste management.

- WASTE MANAGEMENT
- WASTE REDUCTION



SERVICE 3

We help companies diversify their economies while developing solutions to improve air quality, including measures to protect against haze dust.

- ECONOMIC DIVERSIFICATION
- AIR QUALITY AND PROTECTION AGAINST HAZE DUST

WATER SUPPLY AND SANITATION: URGENT MEASURES FOR THE FUTURE

In the Canary Islands, especially in Tenerife, the deterioration of the water and sewerage systems is causing serious problems. Every year, millions of liters of water are lost through outdated pipes, while unfiltered sewage enters the sea. This not only harms the environment, but also poses a threat to public health and tourism.

The solutions we propose include:

- **Renovation of water pipes:** In order to minimize water losses, it is urgent to modernize old and leaky pipes.
- **Efficient Wastewater Treatment Plants**
- Existing wastewater treatment plants need to be reviewed and maintained and supplemented with modern technologies to efficiently filter wastewater quantities.
- Construcción de plantas de tratamiento de aguas
- **Additional residuals:** In view of the growing demand, due to tourism and population growth, more wastewater treatment plants should be built to ensure the disposal of wastewater.
- **Protection of the population and tourists:** Clean water is vitally important for health. Water treatment measures protect not only residents, but also the island's many visitors.



BEFORE

Unfiltered wastewater: a danger to the sea and people.

PROBLEM



AFTER

Clean water is a source of life for people and nature.

SOLUTION

CLEAN SEA, HEALTHY FUTURE – STOP POLLUTION, PROTECT THE COAST!

Illegal wastewater dumping: decades of neglect and urgent need for action



**MARINE
WASTEWATER: AN
INVISIBLE DANGER**

**STOP ILLEGAL DUMPING – FOR CLEAN BEACHES AND
A HEALTHY ECOSYSTEM!**

Polluted sea, threatened ecosystem: it's time to act!



**ALGAE BLOOMS: A
VISIBLE SIGN OF
POLLUTION**

**POLLUTED SEA, THREATENED ECOSYSTEM: IT'S TIME TO
ACT!**

The cause of algae contamination must be investigated urgently. Responsibilities need to be clarified and quick solutions found.

The problem of illegal sewage pipes that discharge unfiltered sewage into the Atlantic Ocean is a serious environmental problem in the Canary Islands.

Unfortunately, there are no precise and detailed figures that capture all illegal pipelines or their development over the past few decades, but reports and research show that the problem has been around for many years and has worsened with tourism and population growth.

Below is a stepwise summary, based on available information and studies:

1960-1980: Beginning of mass tourism

- **Condition:** In the 1960s, mass tourism began in the Canary Islands, leading to a sharp increase in water consumption and wastewater volumes. Many wastewater treatment plants were inadequate or completely absent.
- **Illegal pipes:** During these decades, the construction of illegal sewage pipes began, which discharge unfiltered wastewater into the sea. The focus on the rapid development of tourism led to neglecting of wastewater disposal infrastructure.
- **Consequences:** First reports of environmental contamination and health risks due to inadequate wastewater. Tourism benefited from economic development, but the environment began to suffer.

YEARS 1990-2000: BOOMING TOURISM AND GROWING ENVIRONMENTAL PRESSURE

- **Condition:** With the sharp increase in the number of tourists in the 1990s, the sewage system became increasingly overloaded. There were attempts to modernize and expand wastewater treatment plants, but many areas remained inadequately supplied.
- **Illegal pipes:** In the 1990s and 2000s, the number of illegal sewer pipes increased even more. It is estimated that there are hundreds of illegal dumps, although the exact number is difficult to determine, as many pipes are difficult to detect.
- **Consequences:** Reports of polluted beaches and increased algae blooms ("red tide") in the coastal region. Water quality deteriorated significantly, creating a threat to marine fauna, flora and ecosystem.

2010s: EU pressure and first punitive measures

- **Status:** In the 2010s, the government of the Canary Islands came under pressure when the European Union began imposing sanctions. A key point was the improper disposal of wastewater and the high proportion of illegal discharges.
- **Illegal pipes:** Until the late 2010s, numerous illegal pipes were reported to be still active. Some of them were old plants that were never connected to the official sewer system.
- **Consequences:** The EU imposed heavy fines (almost 8 million euros) on Spain and especially on the Canary Islands because the wastewater problem was not solved. The pollution caused health risks for residents and tourists, as well as the deterioration of the image as a tourist destination.

2020s: Persistent Environmental Problems and Lack of Solutions

- **Condition:** Despite some efforts to build new wastewater treatment plants and stop illegal discharges, there are still many unapproved sewer pipes that lead directly to the Atlantic Ocean. Water quality remains critical in some areas.
- **Illegal pipes:** According to estimates, many millions of liters of unfiltered sewage are still flowing into the Atlantic. This is partly due to outdated or faulty systems, but also due to negligent control. New illegal pipelines were also discovered during this time.
- **Consequences:** Contaminated water increasingly endangers public health and harms the tourism industry. The beaches had to be temporarily closed to minimize the dangers of bacteria and pollutants. Long-term damage to marine ecology could take decades to regenerate.


Current effects and measures needed

- **Algae blooms:** Increased pollution favors algae growth, making coastal regions unsightly and dangerous. Algae blooms can be toxic and harm both marine organisms and tourism.
- **Risk of infection:** Residents and tourists are increasingly at risk due to contaminated water. Possible diseases such as skin infections, gastrointestinal problems, and respiratory diseases have already been reported.
- **Necessary measures:** To solve the wastewater problem in the long term, new wastewater treatment plants are required, and existing ones must be regularly maintained. Illegal pipelines should be tracked and shut down to prevent further environmental damage.

Summary: Urgent action in favor of the environment in the Canary Islands

The problem of wastewater in the Canary Islands illustrates decades of neglect. Despite the fines imposed by the EU, the situation has hardly improved. Failure to take concrete steps to modernise wastewater infrastructure risks long-term damage to the environment, tourism and residents' quality of life. It is time for sustainable solutions and the use of modern technologies.

For a clean future: Act sustainably before it's too late.



Water scarcity in the Canary Islands: urgent need for sustainable solutions

The Canary Islands are facing a growing water crisis. Obsolete pipes and inadequate water reservoirs lead to significant losses of valuable drinking water.

Every year, millions of liters are lost due to leaks in infrastructure, while demand increases.

There is an urgent need to invest in modern water reservoirs and the renovation of the piping system in order to ensure long-term water supply and protect the quality of life on the islands.

Securing water, preserving the future.

WASTE MANAGEMENT AND WASTE REDUCTION



TOURISM

Growing consumption, especially in tourism, is causing an increase in waste, both plastic and paper.

They are often ostensibly environmentally friendly, but they contribute significantly to pollution.



SHOPPING CENTRE



RETAIL

Our solution is to promote innovative and sustainable alternatives:

Biodegradable bags, such as those developed by UNITEX®, which decompose in a few months and can be used multiple times, help to reduce mountains of waste and protect the environment.



DELIVERIES

Sustainable waste management is key to tackling this problem and improving the quality of life in the Canary Islands.





AIR QUALITY IN THE CANARY ISLANDS: CHALLENGES AND RISKS



Air quality in the Canary Islands, especially in Tenerife, is affected by various environmental factors.

In addition to the daily air pollution caused by traffic and industry, Saharan dust, known as haze, poses a major health threat. This dust can drastically deteriorate air quality and has serious health consequences



Haze powder: protection with CALIMA STOP



Saharan dust, also known as calima, represents a serious health hazard. Our product, CALIMA STOP, provides a preventative protective barrier:

Preventative Protection: CALIMA STOP forms an effective barrier against Calima dust and keeps it out if used correctly. Especially recommended for bedrooms and children's rooms.

Airflow: The product allows for good air circulation while also repelling hazardous dust to improve air quality and minimize health risks.

STOP IN CALIMA It is ideal for use in homes, as well as in public facilities such as hospitals. It helps reduce the health risks of haze dust as a preventative measure. However, a complete guarantee of protection cannot be given.

Economic diversification and sustainable growth

The Canary Islands' heavy dependence on tourism poses considerable risks. In order to ensure stability and employment in the long term, it is essential to promote and develop alternative economic sectors:

- Health tourism: Take advantage of the unique climate of the Canary Islands for the treatment of skin and respiratory diseases. This area can be further strengthened through targeted investments and marketing.
- Industry and logistics: Implementation of production companies, assembly plants and logistics centres that benefit from the strategic location of the Canary Islands. This promotes economic diversification and creates new jobs.
- Agriculture and Naturopathy: Develop sustainable agriculture projects and naturopathy initiatives based on the island's natural resources and strengthen the local economy.
- Livestock and energy technologies: Establishment of livestock enterprises and investments in renewable energy that contribute to sustainable development and economic diversity.
- Service companies: Promotion of service sectors such as IT, finance, and consulting, which can provide additional economic opportunities and employment.
- Waste management: Improve waste management to create additional jobs and promote innovative solutions for waste prevention and resource conservation.

A comprehensive strategy of economic diversification is needed not only to promote tourism, but also to develop and establish new future-proof industries and services.

Transport and mobility in the Canary Islands: challenges and solutions

In recent decades, the increase in tourism in the Canary Islands has led to a massive increase in traffic. In the 1960s, the number of vehicles on the roads was still relatively low: around 40,000 vehicles were registered at the time. Today, with more than 800,000 vehicles in Tenerife alone, the roads are congested, which causes not only traffic jams, but also significant environmental problems.

Examples of development:

- **1960s:** There were hardly any traffic problems, as most of the population moved by foot or public transport. Less than 40,000 vehicles on the island.
- **1980s:** With the strong growth of tourism, private transportation also increased. The number of vehicles on the roads rose to about 200,000.
- **2020s:** Today, more than 800,000 vehicles are registered in Tenerife, leading to daily traffic jams and high CO₂ pollution. Around 80% of tourists use rental cars, which further aggravates the situation.

Sustainable mobility solutions for the future:

- **Promotion of car-sharing and park-and-ride systems:** In order to reduce the number of vehicles on the roads, the creation of park-and-ride centres should be strengthened. These allow commuters and tourists to park outside city centers and continue their journey by public transport.
- **Expansion of public transport:** An investment in an efficient and reliable bus system is needed to make public transport more attractive and reduce private transport. Improved cycle times and the integration of environmentally friendly electric buses could reduce traffic congestion in the long term.
- **E-bikes and cycling infrastructure:** Expanding the cycling network and encouraging e-bikes could ease traffic in cities like Santa Cruz and Las Palmas while also reducing CO₂ emissions.

Benefits for the environment and quality of life:

More sustainable mobility not only improves air quality and reduces CO₂ emissions, but also increases the quality of life for locals and tourists. Less congestion means shorter travel times and less exposure to noise and air pollution.

Conclusion: Sustainable future or missed opportunity?

Announcing the best weather and daily sunshine is not enough to cover up the deep-rooted problems in the Canary Islands. While new holiday destinations can be reached from Europe in less time and offer modern hotel facilities, the Canary Islands seem to be stuck in outdated structures and losing untapped potential. Instead of protecting the foundations of tourism, nature and the environment, it is being destroyed by neglected infrastructure, lack of innovation and pollution.

- **What happens if solutions are not found?**
- Who takes responsibility for the grievances?
- How can tourism grow when the sea is polluted and the beaches are unusable?
- Who will be willing to pay money for a vacation when bathing in polluted water and surrounded by waste and damage?
- What does the future look like on an island if tourists stay away because the environmental conditions have become unbearable?
- What will happen to the locals when unemployment rises and young people leave the islands?
- Who will want to live in the Canary Islands when water is scarce, polluted and the air is unbearable because of the Calima?
- How do you plan to solve the growing health problems that are exacerbated by inadequate sanitation, poor air quality, and lack of infrastructure?

How long can the Canary Islands continue to exist as an attractive destination if other regions with modern concepts and sustainable development attract tourism?

"To ensure the future, before tourism disappears".

It's time for a change. Only through concrete measures to protect nature and the environment can the Canary Islands create a sustainable future for locals and tourists alike.

"For a clean, healthy and sustainable future in the Canary Islands, before it is too late".

The Canary Islands are at a turning point. Decades of neglect of environmental and infrastructure issues have laid the groundwork for a future in which both the quality of life for locals and the attractiveness of tourists are massively threatened.

Failure to take immediate action risks long-term damage that weakens tourism and the islands' economy in the long term.

It's not enough to rely solely on the sun and the weather. To maintain the Canary Islands as a first-class destination and ensure the living conditions of future generations, a comprehensive and sustainable strategy is necessary. Modernising water supply, waste management, air quality and transport infrastructure are not only necessary, but are the foundation for a healthy and prosperous future.

The time to act is now, in the interests of the islands, their inhabitants and all those who want to continue experiencing the Canary Islands as a unique and natural holiday destination. Only by joining forces, innovating solutions and assuming a real commitment will we be able to face these challenges and ensure the future of the Canary Islands.



Thank
you! :)

FOR YOUR ATTENTION

Thank you for your attention.

We hope that our joint commitment will lead to positive change and that a sustainable and future-proof solution to the challenges of the Canary Islands will be found. Together, we can make the islands a better place for locals and visitors alike.

ORIGINAL
UNITEX®
MADE IN GERMANY



www.unitexmadeingermany.de