



# PROPOSALS ON ENERGY IN A JUST TRANSITION SCENARIO FOR THE TOURISM SECTOR IN THE CANARY ISLANDS



Tourism accounts for a third of the economic activity of the Canary Islands



# 1. INTRODUCTION

The economy of the Canary Islands is highly dependent on tourism. In 2019, the sector accounted for 22.9% of the GDP and 27.2% of employment. Considering the knock-on effect of tourism activities in other economic sectors, these figures rise to 33.0% of the GDP (15,597 million euros) and 36.5% of employment (310,956 jobs). These values are the result of a tourism model based on attracting large and increasing volumes of tourists at low prices, in order to compete with other destinations. This model is highly vulnerable to external factors such as geopolitical tensions, economic crises, pandemics and climate change. It also entails significant negative local externalities and a high consumption of petroleum derivatives owing to its close link to transport, especially air transport.

The commitments made in the Paris Agreement, and the increasingly evident reality of the climate crisis, call for an urgent, profound and accelerated ecological and energy transformation. This is particularly pressing in the Canary Islands, where there is a high dependence on fossil fuels and a tourism sector that is highly demanding in terms of material and energy inputs, with a strong impact on the environment. Thus, electricity generation corresponds mainly to thermal power plants, with an installed capacity of 2,696 MW in 2019 compared to approximately 609 MW of renewable energies. As for the tourism sector, in 2019, hotels and catering accounted for 15.9% of energy demand, and trade and services for 15.4%.

The declaration of a climate emergency by the Autonomous Community of the Canary Islands in 2019 should be the starting point for the necessary energy transition in the archipelago, and represents an opportunity to go further in the ecological transformation of the islands. It also opens up the possibility of introducing profound changes in the production model, diversifying economic activity, transforming tourism, generating more and better jobs and raising social welfare standards.

The purpose of the Instituto Sindical de Trabajo, Ambiente y Salud (ISTAS) is to provide CCOO Canarias with elements for the debate on measures for the transition of the Canary Island energy system towards de-carbonisation through the development of renewable energies and energy efficiency and sustainable mobility actions that foster job creation and help the transformation and sustainability of its tourism sector.



The most energy-demanding sector was transport



## 2. THE ENERGY SECTOR IN THE CANARY ISLANDS

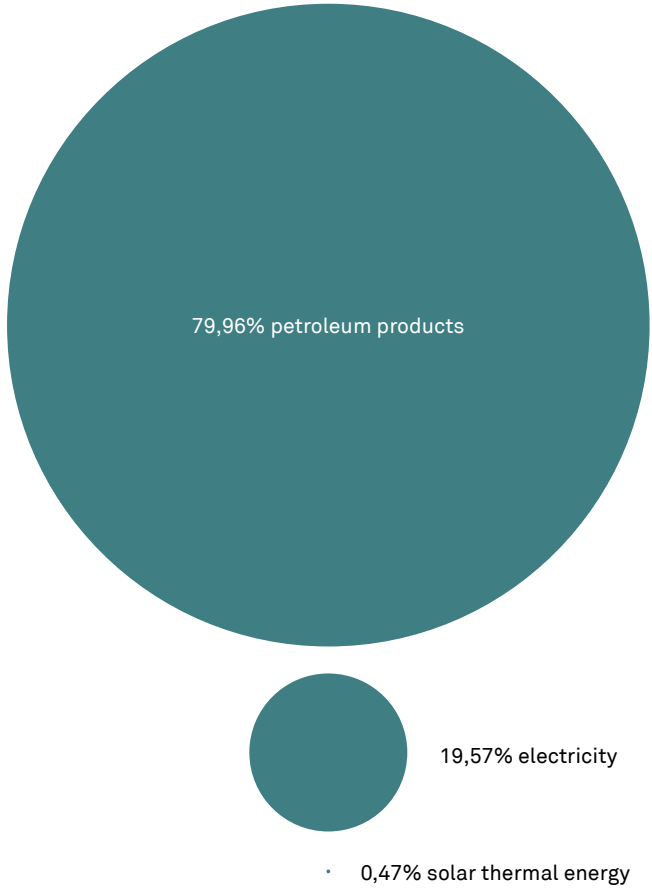
### Energy demand

In 2019 (a year not affected by the COVID pandemic), final energy consumption in the Canary Islands was 3,675,067 Tep, 79.96% of which corresponded to petroleum products, 19.57% to electricity and 0.47% to solar thermal energy. The consumption of petroleum derivatives exceeded the national average by 27.86 points.

The most energy-demanding sector was transport (74.66%), followed by services (11.8%) and residential (8.81%). The distribution of consumption by means of transport was land (33.7%), air (31.2%) and inland waterway (9.8%).

The volume of petroleum derivatives consumed amounted to 6,966,414 tonnes, 55.7% of which was for air and maritime navigation, 24.6% for electricity generation and the remaining 19.7% for other uses, with land transport accounting for almost 90%.

Electricity consumption reached 8,874.1 GWh, with the most demanding sectors being “domestic uses”, “administration and public services”, “trade and services” and “hotels and restaurants”.





## Electricity production

The interconnection difficulties between the islands of the Canary Archipelago mean that there are **six isolated electricity systems** which, together, had a total installed capacity of 3,305.8 MW in 2019. Eleven oil-fired thermal power plants accounted for 81.5% (2,696.4 MW) and the remaining 18.5% (609.4 MW) for renewable energies (mainly wind and photovoltaic). The thermal plants belong to the ENDESA group. These are installations commissioned between 1967 and 2007, fuelled by diesel and BIA fuel oil, some of whose generator units have been renewed over the years. The owner company plans to renovate seven of the power plants to make them suitable for the future use of green hydrogen as a fuel, upgrade the generator

units and hybridise them with the installation of batteries. Thermal power plants were responsible for 43% of GHG emissions during 2018, introducing 5,781,000 t of CO<sub>2</sub> eq. into the atmosphere.

Most renewable generation came from wind and photovoltaic installations with 413.3 MW and 167.7 MW respectively, out of a total of 609.4 MW installed. Renewable sources accounted for 16.4% of the electricity fed into the grid in 2019. The distribution of installed renewable power and the coverage of electricity demand with this type of energy varies greatly between islands. One extreme is El Hierro, with 63.6% renewable power and a 53.3% coverage of electricity consumption, and at the other extreme is La Gomera, with 2.0% of installed renewable power covering 0.2% of electricity demand.

**The most widespread renewable technology is wind power:** 403 MW distributed among 474 wind turbines grouped in 73 wind farms throughout the islands. The second most important technology is photovoltaic, with 168 MW installed and concentrated on the islands of Tenerife (61%) and Gran Canary (23%). Of the 290 GWh of photovoltaic energy produced in 2019, 96% was fed into the grid, with the remaining 4% being self-consumption. Self-consumption installations are found mainly in public administration, commercial and industrial infrastructures.

**The remaining renewable technologies are in the minority.** Mini-hydro is present with 2.02 MW, basically in Tenerife; hydro-wind has 22.8 MW in Gorona del Viento, in El Hierro; and biomass energy has 3.7 MW in the form of biogas installations in Tenerife and Lanzarote. In terms of low-temperature solar thermal installations, in 2019 there were 123,719 m<sup>2</sup> of panels totalling a thermal capacity of 86,603 kWt, 88% installed between the islands of Gran Canary, Tenerife and Lanzarote.

As an energy storage system that provides back-up for an essentially unmanageable renewable generation system, the Canary Islands have the Gorona del Viento hydro-wind power plant, equipped with a hydro-pumping system that stores surplus wind power production by pumping water into a reservoir, from which it can then be extracted by turbines. The Salto de Chira reverse-pumping hydroelectric power station is currently under construction on the island of Gran Canary, with a capacity of 200 MW and a storage capacity of 3.5 GWh. In addition to large-scale storage systems, the Canary Islands have several experimental facilities to explore the possibilities of other storage systems using batteries and hydrogen cells

The most widespread renewable technology is wind power



## Energy planning regulations and scenarios

The **declaration of a climate emergency** by the Canary Islands Parliament in 2020, and the Canary Islands Government's intention to bring forward the EU's objective of de-carbonising the energy system to 2040, mark a turning point in energy planning in the archipelago. Until recently, the Canary Islands had the Canary Islands Energy Strategy 2015-2025 (EECan25), a plan whose main strategic targets for 2025 included a 15% share of renewable energies in final energy use, reaching a 45% share of renewable sources in the electricity generation mix, the introduction of natural gas in electricity production to reach a 22% share, and a fleet of 107,000 electric vehicles. EECan25 will be displaced by the energy planning currently under preparation, based on the Bill for Climate Change and Energy Transition of the Canary Islands (LCCTEC). The LCCTEC includes two strategies: the Canary Islands Climate Action Strategy (ECAC 2040) and the Canary Islands Strategy for Just Transition and Climate Justice. ECAC 2040 will be developed through three instruments: The Canary Islands Climate Action Plan, the Canary Islands Energy Transition Plan (PTECan) and the island and municipal climate and energy action plans.

The PTECan is based on **eight strategies**: Photovoltaic self-consumption on buildings, energy storage, electric vehicles, geothermal, marine renewables, managed generation, green hydrogen and demand management and smart grids. The main energy transition targets proposed by this plan for 2030 are to reduce GHG emissions by 37% compared to 2010, achieve a 29% share of renewable energies in final energy consumption, improve energy efficiency by 27% compared to the baseline scenario, and achieve a 62% share of renewables in electricity generation.

Achieving these targets means that by 2030 the installed renewable energy capacity will be 3,410 MW, energy storage capacity will reach 4,339 MWh, the electricity interconnection between Tenerife and La Gomera will be completed, conventional thermal generation will be reduced to 1,440 MW, and 262,987 vehicles in the fleet will be de-carbonised.


The Canary Islands' energy transition plans are reinforced through the *Sustainable Energy Strategy in the Canary Islands 2026*, linked to the Recovery, Transformation and Resilience Plan (PRTR), and aligned with the measures established by the National Integrated Energy and Climate Plan (PNIEC) for the penetration of renewable energies in island territories. The various programmes it covers focus on the promotion of self-consumption, energy communities, distributed generation and energy saving and efficiency measures.

## Employment in the Canary Islands energy sector

Statistical data on employment in the energy sector do not differentiate between conventional and renewable sources. According to the Statistical Institute of the Canary Islands (ISTAC), the average number of employees in the Canary Islands within the "Supply of electricity, gas, steam and air conditioning" branch of activity reached 1,209 persons in 2020. The Association of Renewable Energy Companies, APPA, points out that companies in the sector in our country provided 92,930 jobs (58,824 direct and 34,206 indirect) in 2020. The deployment of renewables is low in the Canary Islands compared to the rest of Spain. However, the approaches taken by the different strategies underpinning the PTECan point to the need for a rapid and intensive development of the sector. The implementation of the electric vehicle strategy alone could lead to the creation of between 5,190 and 3,795 jobs by 2040 for the maintenance of fast and semi-fast charging points.







Canary Islands is the leading European region in terms of the number of overnight stays

### 3. THE TOURISM SECTOR IN THE CANARY ISLANDS

The tourism industry in the Canary Islands generated an economic activity of 15,597 million euros in 2019 (33% of the regional GDP) and provided employment to 310,956 people (36.5% of all employment in the autonomous community). The previous year it was the leading European region in terms of the number of overnight stays: 106.91 million. This position of pre-eminence is thanks to the development of its own tourism model with characteristics that differentiate it from other destinations: the lack of seasonality (due to a relatively mild and stable climate throughout the year), exploitation as a tourist attraction of exceptional natural and scenic wealth and, as a Member State territory, the standards of security and protection in terms of food, health, legal guarantees and public safety that are typical of the European Union.

However, the model also has features that reveal significant weaknesses: growth based on increasing the scale of production and volumes of visitors, occupying a subordinate position in the tourism value chain, and the inability to become the driving force of the Canary Island economy by providing better living standards for most of the islands' citizens. The influx of tourists has been accompanied by an increase in GDP but not by a redistribution of wealth or the creation of quality jobs. The increase in wealth has not led to a commensurate increase in per capita income. Strong competition between tourist destinations puts downward pressure on wages so that, even if corporate profits improve, they are not passed on to workers' wages in a proportional way. The situation of workers is often aggravated by the rising cost of living caused by intense tourist activity, which puts pressure on the resident population's purchasing power.

The limitations of the current tourism model in generating employment and distributed wealth are related to the way in which tourism expenditure is linked to production and the generation of revenue throughout the economic structure of the Canary Islands, which has significant weaknesses regarding the so-called tourism impact multipliers. This is joined by the fact that spending by tourists other than on accommodation—and, to a large extent by residents—, has a high import component that does not have an impact on other island activities.

## Current overview of the tourism sector

The upward trend in GDP and employment generated by the tourism industry up to 2018 underwent a certain decline in 2019 (almost 4 points in the GDP and 1.2 points in employment), which slumped in 2020 (a fall of the GDP in tourism of 56.4 points and in employment in the sector of 50.6 points) due to the COVID pandemic. This behaviour was also reflected in the number of accommodation places and visitors. Thus, the figures fell from 415,752 places and 15.12 million tourists in 2019 to 200,874 places and 4.64 million tourists in 2020. The numbers for overnight stays and the average length of stay also fell from 102.7 million and 7.35 days in 2019 to 31.2 million and 7.05 days in 2020. Following intensive vaccination campaigns, the pandemic situation has improved significantly and the outlook for 2022 points to a recovery of the figures for the sector to pre-pandemic levels.



## Plans and strategies

From 2008 until the COVID crisis, the tourism sector in the Canary Islands rested mainly on eight plans: “The Agreement for the competitiveness and quality of tourism in the Canary Islands 2008-2020”, “The Smart Specialisation Strategy of the Canary Islands 2014-2020”, “The Canary Islands Strategic Promotional Plan 2012-2016”, “Canary Islands Brand. Strategic Marketing Plan 2018-2022”, “Canary Islands Tourist Infrastructures Plan 2017-2020”, “Canary Islands Strategic Plan for Tourism (PECT) 2025”, and “Canary Islands Destination”. The aim of all of them is to offer lines of action involving different areas in order to make tourism an environmentally, socially, territorially and economically competitive industry. Closely linked to these plans are the territorial and urban planning instruments, which delimit, order and develop tourist areas. They include: Island Management Plans (PIO) (number of accommodation places the territory can sustain environmentally, socially and economically or in terms of landscape), Special Territorial Plans for the Management of Tourism Activity (PTEOT), and Plans for the Modernisation, Improvement and Increase of Tourism Competitiveness in the Canary Islands (PMM).

The Coronavirus pandemic marked a turning point in approaches to tourism strategies in the Canary Islands. Until then, actions focused on increasing the number of tourists and overnight stays, maintaining competitiveness with respect to other emerging tourist destinations, and progressively

incorporating environmental issues in response to the demands of increasingly aware tourist profiles. In addition to all this, the most recent plans were aimed at attracting and retaining visitors by diversifying the offer and promoting other market categories beyond the traditional “sun and beach”, such as tourism in natural areas, active tourism, congresses and events, weddings, cruises, sports, cultural, gastronomic and domestic tourism. The virtual paralysis of the tourism sector during the spring of 2020 as a result of the measures taken to contain the pandemic led to a profound reflection on the tourism model. The result of this rethinking is the Canary Island Government’s initiative “Canary Islands. Destination. The shared strategy for the transformation of the Canary Islands tourism model”, published in March 2021. “Canary Islands Destination” recognises two needs: in the short term, to recover pre-COVID tourism activity levels; in the medium and long term, to shape a new tourism model that does not depend solely on constant growth in the number of accommodation places and flights to the islands. This strategy is reinforced by a state-level plan, the “Strategy for Tourism Sustainability in Destinations”, integrated in the Spanish Recovery, Transformation and Resilience Plan (PRTR), whose aims are to support Spanish tourist destinations in their transformation towards tourism innovation poles that integrate environmental, socio-economic and territorial sustainability and develop resilience strategies, and to create connections between destinations in different regions.

## Employment in the tourism sector

In 2019, the tourism sector in the Archipelago generated 310,956 jobs, 9.6% less than the previous year. Although tourism employment fluctuates from year to year, it is important to underline that its growth does not keep up with wealth. Between 2008 and 2018, the GDP in the tourism industry grew from €11,820 million to €16,099 million, an increase of 35%. This was mainly the result of the steady increase in visitors from 9.4 million to 13.8 million during that period. The employment generated also grew, but ten times less, by 3.4%.

The current situation of tourism employment in the Canary Islands has certain characteristics that have a negative effect on quality: low wages in the hotel and catering sector, part-time contracts, inadequate or low qualifications, long working hours, high turnover, discrimination against women who, in general, are over-represented in the least qualified and lowest paid occupations.





## 4. ENERGY TRANSITION AND TOURISM IN THE CANARY ISLANDS

The intention of the Autonomous Community of the Canary Islands to achieve carbon neutrality by 2040 implies that all sectors of the Canary Island economy will have to incorporate measures that contribute to the energy transition. In some cases, this will entail radical changes in the very conception of their business models. Owing to its importance for the economy of the archipelago and its high impact in terms of energy and resource consumption and the environment, the tourism industry will have to take decisive action to transform itself.

### **The tourism sector in energy transition plans**

Recent energy planning has increasingly focused on the tourism sector. The Canary Islands Energy Strategy 2015-2025 considered the energy sector as a possible driver for the sustainable development of tourism. It therefore encouraged the adoption of good energy management practices, such as energy audits, and the implementation of energy saving and efficiency measures, as well as the installation of renewables in companies in the sector. Subsequently, the Canary Islands Climate Action Strategy (ECAC 2040) warns of the risks climate change may have for the tourism industry in terms of both supply and demand. It also considers the need to de-carbonise the sector and diversify it in a sustainable way. It proposes finding and evaluating the contribution of the tourism industry to GHG emissions, to reconvert tourist centres into zero-carbon destinations through savings, efficiency, the deployment of renewables, refurbishment, alternative means of transport, energy and water saving systems, environmental certifications, local activities and supplies and awareness-raising and training.

By 2040 all sectors of the Canary Island economy will have to incorporate measures that contribute to the energy transition



## Energy transition in tourism plans

Tourism plans in the Canary Islands focus generally on the issue of energy transition and environmental sustainability as competitive attributes aimed at attracting environmentally aware tourists. The Strategic Tourism Plan for the Canary Islands (PECT 2025) addresses de-carbonisation through five programmes: de-carbonisation, zero-plastic and circular waste management; energy efficiency and renewable energy; adaptation to climate change; sustainable mobility; and circular territorial metabolism. The pandemic gave rise to the “Shared Strategy for the Transformation of the Canary Islands Tourism Model”. Canary Islands Destination”, which is presented as a new focus of the sector on climate neutrality. Linked to this, the “Journey to De-carbonisation” initiative was launched in 2021 as a pilot experience that offers companies in the sector tools to understand their carbon footprint and design strategic management plans. The ultimate aim is to adapt to the profiles of increasingly demanding tourists in terms of the sustainability of their holiday destinations, making the Canary Islands tourist destination more competitive in the market.

## Situation and prospects for the de-carbonisation of the tourism sector in the Canary Islands

The importance of the tourism industry in GHG emissions has been underestimated in planning instruments until relatively recently. Detailed information on emissions caused by or attributable to tourism activities is not available. From the perspective of the transformation of the energy model, the de-carbonisation of the archipelago is an urgent priority to reduce climate change and is sufficiently important in its own right. The tourism perspective approaches its de-carbonisation as an element that will make the Canary Islands more competitive in the global tourist destinations market. There is a lack of concrete measures to be adopted urgently in an increasingly threatening climate scenario. While the energy plans recognise the close link between tourism and transport and the concern about the lack of carbon-free alternatives to maritime and air transport in the short term, the issue does not seem to be taken into account in the tourism plans. For all these reasons, it could be said that the process of bringing the Canary Island tourism sector into line with the state and targets of the climate emergency is still at a very early stage.







## 5. BENEFITS OF A JUST ENERGY TRANSITION SCENARIO FOR THE CANARY ISLANDS

For the development of the energy transition planned by the Canary Islands Government to have sufficient scope and depth, it should take into consideration complementary and additional measures that further the modification of the energy system, and contemplate sectoral and global policies aimed at transforming its production sectors, especially tourism. A broad and complex process that makes sense only if it takes place within the framework of a just transition.

The benefits of such a transition for the Canary Islands could come at different levels: employment, society, economy and the environment.



## Employment benefits

- Job creation.
- Stabilisation and improvement of the labour market.
- .

## Social benefits

- Reduction of energy poverty.
- Curbing of rural depopulation.
- Territorial rebalancing.
- Citizen empowerment.
- Community cohesion.
- Improvement to quality of life.

## Economic benefits

- Savings in the operating costs of the Canary Islands' energy system.
- Economic savings for public administrations.
- Economic savings for families that join the self-consumption scheme.
- Savings in costs for all consumers of the Spanish electricity system.
- Boost for the circular economy.
- Improvement of the competitiveness of the industrial fabric.
- Highlighting the geo-strategic nature of the Canary Islands on the world stage.

## Environmental benefits

- Maintenance of the natural integrity of the environment.
- Reduction of the pressure exerted by pollution due to land transport on the Canary Island ecosystems and the health of the population.
- Reduction of GHG emissions.
- Maintaining soil fertility and curbing erosion.
- Reduction of the ecological footprint.







## 6. PROPOSALS TO FAVOUR THE ENERGY AND TOURISM TRANSITION IN THE CANARY ISLANDS

The commitment to de-carbonise the Canary Islands by 2040 by reconfiguring the island's energy sector represents an opportunity to transform many aspects of the archipelago's economy, making it more resilient to climate change and more equitable in terms of wealth generation and redistribution. The change in the energy system is an opportunity to provide the Canary Islands with greater self-sufficiency in basic materials such as energy, water, agricultural products and manufactured goods, remodelling its productive fabric so that sectors such as the primary sector, industry and the fourth sector (knowledge) take on a greater role in an economy that is highly dependent on tourism.

The tourism industry has developed over the last decades by building a model that has exerted great pressure on limited resources and very vulnerable ecosystems, conditioning the physical organisation of the territory and its socio-economic structure. Increasing energy and material constraints, together with the effects of climate change, which are expected to be more virulent in coastal and island areas, and the pressing need to reduce greenhouse gas emissions, are forcing the tourism industry to move over to less overcrowded and input-intensive business models. The transition towards an energy model whose main components are renewable generation, demand management, energy saving and efficiency, implies the design and implementation of measures that affect all production sectors of the Canary Island economy.

The Canary Island Government's plans for energy transition propose a wide range of measures whose effectiveness could be greater if they are intensified, refined and complemented by other initiatives. It is important to underline that all proposals for action must take into account, both in their detailed design and in their implementation, one of the most distinctive features of the Canary Islands: their diversity.

The proposed actions are divided into five main lines of action:

- A) Cross-cutting
- B) Savings and energy efficiency
- C) Electricity system and renewable energies
- D) Mobility
- E) Tourism sector

The commitment to de-carbonise the Canary Islands is by 2040



## A) Cross-cutting measures

1. Promote the primary sector through a plan to boost agriculture aimed at the diversification of crops for self-consumption on the islands (promotion of zero km products that meet the needs of the population and the tourist sector) and the incorporation of renewable energies on farms.
2. Draw up a plan for the development of industry associated with the energy transition, analysing the capacities of the Canary Islands' industrial fabric and designing and implementing measures to strengthen less developed segments.
3. Promote research, development and technological innovation in the field of renewable energies by providing more resources to Canary Island research institutes and centres.
4. Promote training plans in renewable energy and energy efficiency competences, complementing and expanding those already available and extending them to all training areas.
5. Adopt measures aimed at streamlining and modernising the Administration in relation to the processing and resolution of projects related to the energy transition process, strengthening and updating its resources and simplifying formalities and procedures.
6. Include energy and water education across the board at all educational levels in order to guarantee a change in the habits and attitudes of Canary Island society to enable the energy and ecological transition.
7. Adopt measures for the development of the Blue Economy in line with the energy transition and the transformation of the tourism model, strengthening the diversification of the productive sectors related to the sea, always from the perspective of environmental sustainability.
8. Promote, accelerate and extend the measures of the Canary Islands Circular Economy Strategy (ECEC 2030) in the aspects most closely linked to the energy transition and the transformation of the tourism sector.
9. Promote a Green Fiscal Reform that includes a set of environmental taxes and a system of tax compensations and bonuses, adapting the Economic and Fiscal Regime to climate targets, in particular, the linking of the Canary Islands Investment Reserve to sustainable investments and the creation of green jobs.

## B) Measures relating to energy saving and efficiency

1. Promote housing energy rehabilitation programmes, with special attention and funding for neighbourhoods where families living in energy poverty are located, as part of comprehensive rehabilitation plans that respect urban biodiversity.
2. Restrictively regulate the lighting of buildings and advertising media. Through their by-laws, local authorities should consider raising awareness and promoting the reduction of energy consumption.
3. Incorporate intelligent energy management systems and communication campaigns to the public in the energy renovation plans for public administration buildings to reinforce their exemplary role.
4. Promote plans for replacing air conditioning equipment as part of coherent energy rehabilitation plans, thereby achieving maximum de-carbonisation.
5. Provide tax incentives for energy savings and efficiency in order to encourage home-owners to participate in energy saving and refurbishment schemes.
6. Encourage local administrations to draw up detailed inventories to prioritise and coordinate the approach to comprehensive building renovation work.



## C) Measures relating to the electricity system and renewable energies

1. Urgent territorial planning and management for the development of new renewable plants (wind and photovoltaic), making the development of projects compatible with agricultural areas and biodiversity.
2. Promote the development of marine renewable energies, undertaking measures to accelerate their implementation, such as the adaptation of Canary Island ports as platforms for the deployment of floating off-shore wind power and the preparation of emergency plans to reinforce the Administration's resources and address critical issues for the development of these technologies.
3. Promotion of biogas as an additional renewable source and a way to manage organic waste that cannot be used as an alternative, balancing the use of residual organic matter for compost production and the recovery of depleted soils.
4. Promotion of agro-voltaic energy, making agricultural activity compatible with the production of energy from photovoltaic panels that can be used to cover the various energy demands of the farm, such as water pumping, or to inject it into the grid.
5. Consideration should be given to modifying thermal power generation units, for which the possibility of replacing existing units with smaller ones, capable of working with alternative fuels, located far from urban centres in areas of no ecological value.
6. Promote the development of all forms of geothermal energy, supporting research and exploration in high enthalpy geothermal energy, and fostering plans for the use of low enthalpy geothermal energy in DHW installations in areas with greater availability of the resource.
7. Prioritise the deployment of photovoltaic energy in populated areas, especially in facilities and buildings whose main activity takes place during daylight hours, which allows for greater matching of supply with demand.
8. A census/registry of public and private buildings by the competent administrations, using technical inspections, to determine whether they meet the structural and location requirements for the installation of photovoltaic panels.
9. Continue the programme for the promotion of self-sufficiency of Public Administrations and the promotion of self-consumption contemplated by the Sustainable Energy Strategy in the Canary Islands, extending existing programmes over time and considering the creation of new ones.
10. Extend the measures to promote shared self-consumption in industry and business parks, especially through energy communities included in the Sustainable Energy Strategy in the Canary Islands.
11. Develop generic information campaigns and others focused on specific sectors and areas on the characteristics and advantages of self-consumption with renewables, especially promoted by local administrations, given their greater proximity to citizens and greater knowledge of their needs.
12. Improve the administrative management of procedures and the taxation of self-consumption, simplifying procedures and stimulating participation through tax incentives.
13. Put in place programmes to disseminate, accompany and support the start-up of Energy Communities, so that citizens and companies have the greatest possible facilities to access this form of generation.
14. Promote energy democracy, advancing energy sovereignty with a citizen-based, decentralised and participatory model, similar to the one being developed on the island of La Palma through the "La Palma Renewable" movement.




## D) Measures relating to mobility

1. Discourage the use of private motorised vehicles to achieve higher reduction rates than those proposed by the Canary Islands Electric Vehicle Strategy, shifting mobility towards a model based on coherent territorial planning in which priority is placed on proximity and the promotion of public transport.
2. To develop the Single Transport Authority on every island, so that it exercises its powers over regular public passenger transport (buses, metro, train, taxis, etc.), its infrastructures, facilities and value-added services, reaching collaboration agreements with private passenger transport companies to optimise available resources.
3. Develop railway projects in Gran Canary and Tenerife, accompanying them with a comprehensive mobility plan that links rail services with other means of sustainable mobility to connect train stations with other nearby towns and with tourist or business areas.
4. Plan sustainable mobility for work, developing specific plans for areas of productive activity (areas of tourist or hotel concentration, industrial or logistical areas, university campuses, etc.) promoted by the island councils and with the involvement of local councils, companies and trade unions in their preparation, implementation and monitoring.
5. Promote the electrification of vehicles for public use and those linked to productive activities through specific programmes adapted to the characteristics of each of these sectors (rental vehicles, company vehicles, public administration vehicles, taxis, urban delivery vehicles, hotel vehicles, etc.).
6. Develop and replicate local maritime navigation systems in Northern Europe based on the use of battery-powered vessels and hybrid systems.

## E) Measures relating to the tourism sector

1. Change in the tourism model, including extending the length of stay of tourists in the destination through measures such as: facilitating home-working, promoting senior tourism, offering tourism infrastructures with a zero energy balance, or diversifying activities under environmental sustainability parameters.
2. Effective limitation of the growth of hotel and tourist infrastructure in saturated destinations, introducing stricter regulatory measures and focusing on the refurbishment and restoration of existing tourist infrastructures that have fallen into disuse.
3. Draw up programmes for energy audits and energy management systems in hotels and accommodation establishments, with detailed planning, which include rigorous diagnoses and scheduled action measures, extending to environmental sustainability aspects as well as social and working conditions.
4. Promote training plans on energy saving and management aimed at the staff of hotel establishments, with a more specific and more in-depth part for workers assigned to maintenance and conservation tasks.
5. Implementation of plans to extend the incorporation of renewable energies and self-consumption in tourist and hotel establishments to replace conventional energy systems in coordination with energy audits.
6. Develop a specific energy refurbishment programme for the tourism sector to help achieve buildings with a net zero energy balance, coordinated with energy audit plans and including measures for technical, financial and fiscal support.
7. Specific mobility plans for tourist destinations and hotel areas promoted by transport authorities and local administrations, targeting both workers, tourists and visitors and promoting public and de-carbonised means of transport.



A landscape photograph showing a coastal area. In the foreground, there are several rectangular salt pans filled with pinkish-red liquid, bordered by low stone walls. In the background, two large white wind turbines with red-tipped blades stand on a hill overlooking the ocean under a clear blue sky.

Some of the experiences developed to date in the field of island de-carbonisation can be transferred entirely or partially to some of the Canary Islands

## 7. REPLICABLE EXPERIENCES TO ACCELERATE THE ENERGY TRANSITION IN THE CANARY ISLANDS

There are islands that have been working for decades on de-carbonising their energy systems and improving their environmental sustainability and self-sufficiency. In the case of the European Union, the Commission and the European Parliament have launched plans and initiatives in recent years to boost the deployment of renewable energies on its islands in order to provide them with greater autonomy and help them move towards low-carbon economies (“Clean Energy for EU Islands”, “SMART ISLANDS”, “RESORT”...). Some of the experiences developed to date in the field of island de-carbonisation can be transferred entirely or partially to some of the Canary Islands or even to the archipelago as a whole. The types vary.

On the Danish island of Ærø, the deployment of renewable energies has been ongoing for the past year, with electricity consumption now being covered 100% by renewable generation and the surplus being used to power the batteries of the region’s ferries. In Denmark’s Bornholm, biomass generated by its farms plays an important role in the renewable production mix. Orkney (UK) has a de-carbonised energy system characterised by diversification. These three territories share the strong presence of their communities in the planning and exploitation of their energy systems.

Other islands, which have not yet reached such high levels of de-carbonisation, are undertaking interesting initiatives to reduce their dependence on dirty energy and achieve greater sustainability. The French island of Martinique launched a successful solar thermal collector installation scheme that contributed to local job creation, and its Chamber of Commerce and Industry has a personalised advice system for businesses to support them in their energy transition. In Madeira (Portugal), biomass energy has been promoted through the creation of a local market that takes advantage of the island’s endogenous resources and the refurbishment of a hotel was completed in 2017, making it 100% energy self-sufficient. Nicosia, the Cypriot capital, has a system of green taxes with which it finances energy audits in the hotel sector.

All of them are experiences to be taken into account in the energy transition process undertaken in the Canary Islands.





[www.istas.ccoo.es](http://www.istas.ccoo.es)

May 2022