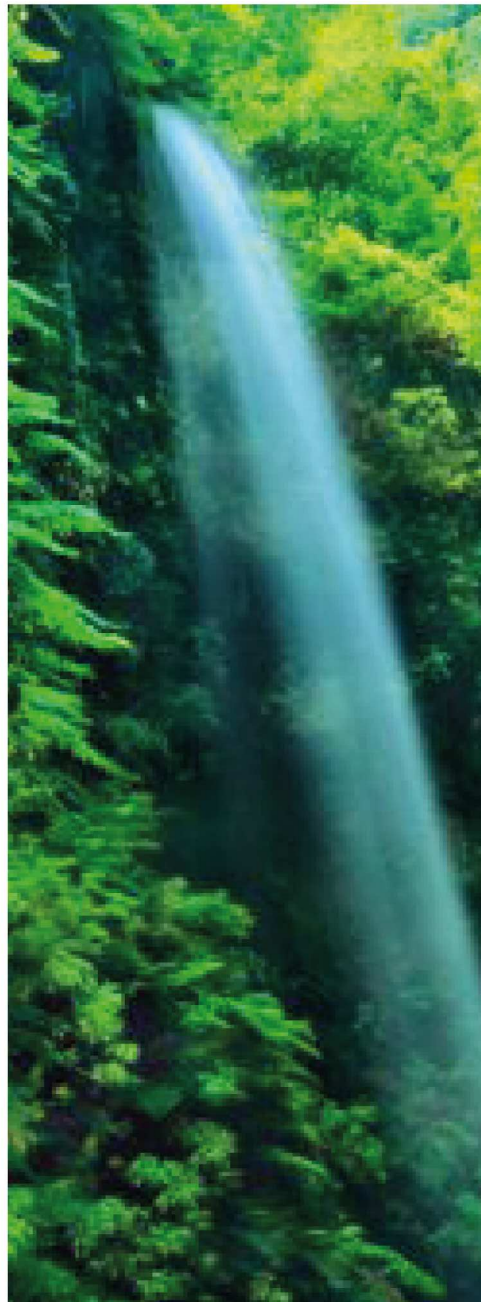
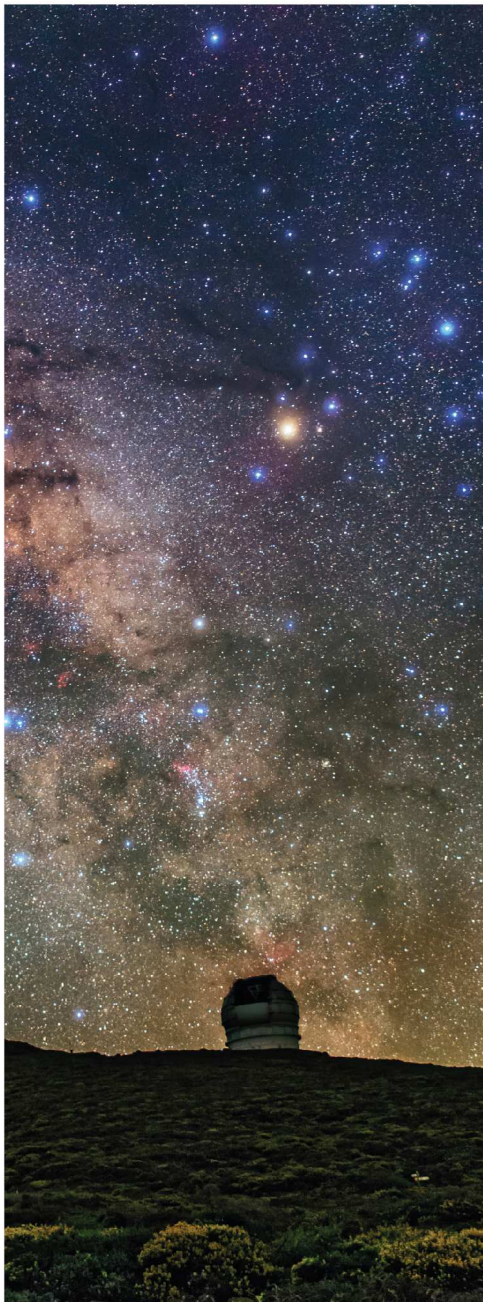


ACTION PLAN

LA PALMA *Night Light*





NIGHT LIGHT PROJECT

“Improving regional policies to reduce light pollution and protect and valorise dark night skies”

ACTION PLAN OF LA PALMA ISLAND GOVERNMENT

La Palma

December 2019

ACTION PLAN LA PALMA

Night Light

A photograph of a starry night sky, likely the Milky Way, with dark silhouettes of people or structures in the foreground.

Action plan template

Part I – General information

Project: NIGHT LIGHT

Partner organisation: LA PALMA ISLAND GOVERNMENT (CABILDO INSULAR)

Other partner organisations involved (if relevant):

Country: SPAIN

NUTS2 region: CANARY ISLANDS

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Part II – Policy context

- The Action Plan aims to impact:
- Investment for Growth and Jobs programme
 - European Territorial Cooperation programme
 - Other regional development policy instrument

Name of the policy instrument addressed:

EDRF Regional Operational Programme of the Canary Islands 2014 – 2020 (Programa Operativo Regional FEDER – Canarias 2014 – 2020).

Details on the policy context and how this action plan will contribute to improve the policy instrument:

The island of La Palma has protected dark skies of the highest quality in the world, making the island a suitable location for astronomical observation and exploration of night-time nature. The Island currently hosts some of the world's largest telescopes, including the Gran Telescopio de Canarias and 17 other internationally owned telescopes at the Observatory of El Roque de Los Muchachos.

The Insular Government of La Palma, the Instituto de Astrofísica de Canarias (IAC) and other stakeholders have been working since the late eighties to protect the quality of clean skies and low lighting needed for carrying out astrophysics, combined with the growing interest of tourists for stars' observation. In 1988 a pioneering national law was adopted to protect the dark skies and regulate artificial illumination on the islands La Palma and Tenerife.

The whole island of La Palma was declared a biosphere reserve by UNESCO in 2002. The dark skies along with the biosphere landscapes are among the Island's competitive advantages. In 2007 La Palma, together with UNESCO and the UN World Tourism Organisation initiated the Starlight Initiative for the protection of unpolluted dark skies and the promotion of astro-tourism. In 2012 La Palma became one of the first designated Starlight Tourism destinations under this initiative. Since then astro-tourism services have started to emerge on the island.

With funding from the European Energy Efficiency Fund (EEEF, 2013), La Palma introduced cutting-edge public lighting systems on the island (smart, adaptive, remote controlled LED lighting), with the dual aim to further reduce light emissions and energy use. La Palma has been working intensively with the private sector in tourism and other industries to valorize the economic potential of the islands dark skies, while maintaining the sustainable protection of the dark skies as key natural assets of the island.

The S3 of the Canary Islands proposes socioeconomic development of all the islands build on the technological infrastructures of the Instituto Astrofisica de Canarias (IAC) on the Island with the aim to exploit the privileged conditions on the Island for sky observation.

For la Palma the S3 envisages a specialization as an astronomical tourism destination and a privileged site attracting technological companies for knowledge and innovation transfer in astrophysics, space and related sectors.

With this policy, ERDF Regional Operational Programme of the Canary Islands 2014 – 2020 (R.O.P), the island government of La Palma has been working with the priority 6.3.2 of the R.O.P. addressing, under the Thematic Objective 6, the protection, development and promotion of natural areas, in particular those of touristic interest.

The Island Government is improving the implementation of such priority by defining measures to valorise and exploit the competitive advantages it has in sectors requiring clean dark skies, such as tourism, sky observation and astrophysics' R&D related activities.

The S3 of the Canary Islands, as well as the ROP, envisages for La Palma to focus on the opportunities of growth arising from astronomical tourism and astrophysics R&D related activities, building on the islands asset of protected dark skies of exceptional quality. The ROP under priority 6.3.2 strive to protect and exploit this natural heritage of the island.

The Island Government and the involved stakeholders aim to improve the implementation of this part of the 'Regional Operational Programme' through new projects to be supported. The stakeholders have established a guidance framework (action plan) for the region to ensure synergic interventions for valorising La Palma as an astronomical tourism destination and a privileged site where to establish astrophysics related activities. With this framework we have planed concrete actions which currently are being translated into projects exploiting the opportunities of regional economic development arising from the protection of dark skies (e.g. infrastructures for astro-tourism, specific initiatives for promoting astro-tourism).

The Island Government together with IAC and other stakeholders celebrated the 10th Anniversary of the Starlight Declaration with a wide range of activities related to the dark sky preservation: astro-photography exhibition, drawing contest for children, several astronomy talks, star observation during the "Turn the light off and turn the stars on" activity in the 14 municipalities.....pointing out as most important the International Scientific Congress "Preserving the Skies". The environmental, sustainable development and scientific international organizations created a document to re-enforce the Starlight International Declaration of 2007.

La Palma has also benefited from interaction with the partners for the definition of local actions to strengthen dark sky protection and develop astro-tourism initiatives.

Apart from the direct link to the policy addressed, there are several projects that include related topics to astro-tourism/dark sky tourism and public and private awareness and engagement on light pollution and dark skies:

- Smart Island La Palma: This project is managed by the Island Government and the IAC. It includes the use of new technologies that permit a more efficient use of resources, services and infrastructures. Up to 40 sky quality meters will be

installed all around the island to be able to measure light pollution, helping the OTPC make an island light map to control the parameters of maintenance of the Sky Law and also determine the best sites for sky observations/star gazing.

- La Palma Renewable - Electron Manifesto: The aim of this project is to reach a 100% renewable energies for La Palma Island: transition from fossil/fuel energy to renewable energy. With a new energetic culture, the Island is walking towards a 100% renewable energy, sustainable mobility, and energy saving and efficiency (light consumption and intensity control in public lighting). This arises due to a popular manifesto claiming renewable energy for the Island and this manifesto led to the “La Palma Renewable” project. With this project La Palma was chosen by the European Union in February 2019 as one of the 6 pilot island for the “Clean Energy for EU Islands” project. (<https://www.euislands.eu/clean-energy-islands>).
- Clean Energy for EU Islands - it establishes an agenda for the transition to clean energy in the Island.
- Proyecto “Antares” - There are two main issues concerning energy and dark skies considered in this project:
 - Energy efficiency in public outdoor lighting
 - Sustainable energy in both generating and storing renewable energy

In order to accomplish the objectives defined within the projects and make use of the value and potential of lessons learnt through the interregional learning process including the regular discussions with regional stakeholders, several actions have been defined to adapt the selected good practices and peer review results.

Part III – Details of the actions envisaged

ACTION 1. Improving lighting quality protection.

This action is dedicated to improve the protection from light pollution that we give our sky. Although La Palma has the Sky Law as an exemplary political and technical precaution to reduce light pollution, there is still work to be done in this field. Both public and private awareness needs to increase.

1. The background

The action has been generated on the basis of a good practice identified and presented in the project and the main findings of the peer review held in La Palma in October 2018:

- ◆ Good practice “The Climate Pact”, of Luxembourg: -although there are still missing a specific sky law, a good lightning guidance has been published. The relevance that this has for La Palma is that in their case all municipalities have been involved with interest in energy- and emissions-related optimization of the lighting infrastructure in the municipal territory.
- ◆ Lessons learnt through the visits that took place in Policy Learning Seminar at Fryslân: when visiting Ameland in the sustainable and ecotourism experiences shared with the group we learned about the green light they used to prevent bird disorientation at night-time



- ◆ Lessons learnt through the Peer Review at Luxembourg in May 2018.



- ◆ Recommendation of peers in the Peer Review event at La Palma in October 2018: -The recommendations related to the below mentioned actions are the following:

- The Sky Law was originally created to protect the sky and the money invests at the Observatory high on the mountain. But a second aim should be added to the Sky Law: preserve the best possible sky for all La Palma inhabitants to increase the feeling of proudness.

- Core areas and intermediate areas should be defined for differentiated level of protection against bad lighting and increasing light pollution.

- Installation of a sky quality measuring network spread over the island at low to medium altitude level to sense variations/ increase of light pollution at their roots. Operation and responsibility of network at OTPC.

2. Action

- A1.1 Sky Pact committee creation
- A1.2 Sky quality meters installation
- A1.3 Establish local rules for light pollution control in astronomical observation sites and astronomical view points.
- A1.4 Calendar for meetings with all the municipalities

3. Players involved

- The Island Government
- IAC (Canary Astrophysics Institute) - OTPC
- La Palma World Biosphere Reserve Foundation
- Municipalities representatives
- Starlight Foundation
- ADER La Palma (Association for rural development)
- Rural houses tourism association Isla Bonita
- Astronomic activities island enterprises

- Astronomic association for La Palma
- Night photograph association

4. Timeframe

January 2020 – November 2021

5. Costs

- Catering fees for 14 reinforcement meetings : 1.000€
- Creation of measurements statistics. Data creation basis: 2.000€

6. Funding sources

-The Island Government – New technologies department, within the “La Palma Smart Island” project in collaboration with the OIPC and the Madrid Complutense University.



ACTION 2. Education and Awareness Raising

Action 2 is dedicated to improve and increase target groups in what the science of stary sky refers to. There is a need to define target groups in an efficient way and also for adequate education and marketing experts to be able to have the best results.

1.The background

The action has been generated on the basis of a good practice identified and presented in the project and the main findings of the peer review held in La Palma in October 2018:

- ◆ Good practice – awareness raising campaigns at schools developed by Ávila: Peer Review Ávila in April 2019.



- ◆ Recommendations of peers at La Palm Peer Review on October 2018 to precise the approach when dealing with education and promotion: different audiences need really different approaches (storytelling should be brought into focus):
 - identify and profile target groups
 - evaluate their specific character
 - position the different tools to reach them efficiently

2.Actions

- A2.1 Calendar for meetings with all the municipalities
- A2.2 Local population awareness calendar “Apagón”
- A2.3 Painting contest for school children
- A2.4 Dynamization with local amateur groups
- A2.5 Telescope handling workshops
- A2.6 Astronomy day at school
- A2.7 Organised visits to the Roque de Los Muchachos Observatory
- A2.8 Astronomer workshop



3. Players involved

- The Island Government
- IAC (Canary Astrophysics Institute)
- La Palma World Biosphere Reserve Foundation
- Municipalities representatives
- Starlight Foundation
- ADER La Palma (Association for rural development)
- Rural houses tourism association Isla Bonita
- Astronomic activities island enterprises
- Astronomic association for La Palma
- Manolo Blanik Art School and Education community of the Island
- Education Department for Canary Islands Government
- Youth Department of the Island Government

4. Timeframe

January 2020 – November 2021

5. Cost

- For de development of all the above activities – 23.000€

6. Funding sources

- The Island Government
- IAC (Canary Astrophysics Institute)
- Municipalities representatives
- Youth Department of the Island Government

ACTION 3. Engaging Public Sector/Linking politicians and population

Action 3 is dedicated to the need of making all actors/policy makers/decision makers of public administrations understand the necessity to work considering all other administration levels. The need for all of them to be aware of the importance of fighting against light pollution and the loss that the ignorance of this factor can cause.

1.The background

The action has been generated on the basis of a good practice identified and presented in the project and the main findings of the peer review held in La Palma in October 2018:

- ◆ Good practice “The Climate Pact”, of Luxembourg: -although there are still missing a specific sky law, a good lightning guidance has been published. The relevance that this has for La Palma is that in their case all municipalities have been involved with interest in energy- and emissions-related optimization of the lighting infrastructure in the municipal territory.



- ◆ Recommendation of peers at the Peer Review event in La Palma October 2018 concerning the need for a commitment with preserving the island's sky. On the 29th of October 2018, the Island Government approved unanimously “La Declaración Institucional de compromiso de la Isla de La Palma con la preservación del cielo” (Institutional Commitment Declaration of La Palma Island with the preservation of the sky), coinciding with the 30th Anniversary of the Sky Law, that concludes with “We therefore recognize this document and express our firm commitment to move towards a new model of tourism development based on the principles of sustainability, cultural diversity and social responsibility, sharing a common future and defining a series of strategic actions aimed at achieving “The Sky Pact” certification”.



2. Action

- A3.1 Calendar for meetings with all the municipalities to spread the preservation of the sky.
- A3.2 Coordination with municipality representatives for astro-tourism events development
- A3.3 Stimulate the creation of new dark areas for stargazing

3. Players involved

- The Island Government
- IAC (Canary Astrophysics Institute) - OTPC
- La Palma World Biosphere Reserve Foundation
- Municipalities representatives
- Starlight Foundation
- ADER La Palma (Association for rural development)
- Rural houses tourism association Isla Bonita
- Astronomic activities island enterprises
- Astronomic association for La Palma
- Night photograph association (Afoto La Palma)

4. Timeframe

January 2020 – November 2021

5. Costs

- Catering fees for 14 re-enforcement meetings: 1.000€

6. Funding sources

- The Island Government



ACTION 4. Astrotourism and its marketing for economy

By building and working together for years in the Starlight Foundation network, Stars Island La Palma has produced a wide range of astrotourism products. This linking of the common interests to the preservation of a naturally dark night sky is reflected in the diversity of the current tourism offers with astronomical context: e.g. G-Astronomy, starlight gadgets, jewellery, astronomical equipment of country houses, astro-guides and -seminars, access to the observatory, cultural or sporting events, fashion collections, tourist infrastructure (hiking paths and signage, observatory visitor centre), etc., etc., etc.

Action 4 arises due to the need for the astro-tourism sector to constantly reinvent itself, maintain and emphasize itself as a tourism niche, and do justice to the development of the European or global tourism market. La Palma has the best conditions and a high level of potential for further investment in the development and commercialization of the economic niche of sustainable tourism and thus of astrotourism.

1.The background

The action has been generated on the basis of a good practice identified and presented in the project and the main findings of the peer review held in La Palma in October 2018:

- ◆ Good practice: The theatrical representation at night about the constellation mythical representation organized by to Matera (Italy) to attend the meeting of the NIGHT LIGHT Policy Learning Seminar, held from February 11 to 15, 2019. It was very interesting to understand the importance of the storytelling element into the tourism sector.



- ◆ Recommendations of peers at La Palma Peer Review on October 2018.
 - integration of the astrotourism sector in the field of sustainable "green" tourism.
 - Link the offer of astrotourism with storytelling for marketing a "sustainable" Star Island La Palma
 - investment in publicly accessible infrastructures directly related to astrotourism



2. Action

- A4.1 Create a catalogue for astrotourism thematization
- A4.2 Course for astro entrepreneurs about story telling with the outcome of a catalogue
- A4.3 Promoting La Palma through international events: Reventon Trail, Stars Festivalito, international astro photography contest, Starlight International day, Astrofest, scientific congress....
- A4.5 Propose new infrastructures and also boost the finishing of those that are already under construction.

- The Science Stars Walk
- Visitors Centre Roque de los Muchachos
- Touristic observatory at Mendo
- Hut astronomical observation
- Universal View point
- Astronomy history Museum

3. Players involved

- The Island Government
- IAC (Canary Astrophysics Institute)
- La Palma World Biosphere Reserve Foundation
- Municipalities representatives
- Starlight Foundation
- ADER La Palma (Association for rural development)
- Rural houses tourism association Isla Bonita
- Astronomic activities island enterprises

- Astronomic association for La Palma
- Night photograph association (Afoto La Palma)

4. Timeframe

January 2020 – November 2021

5. Costs

- Catalogue for astrotourism thematization: 3.000€
- Course for astro entrepreneurs about story telling with the outcome of a catalogue of stories about the sky: 6.500€
- Promoting La Palma through international events: 100.000€

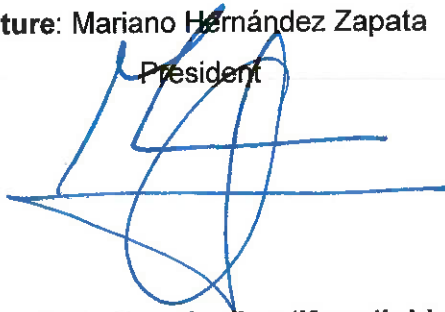
6. Funding sources

- The Island Government
- FEDECAN
- Tourism Ministry
- Canary Islands Government
- FEDER



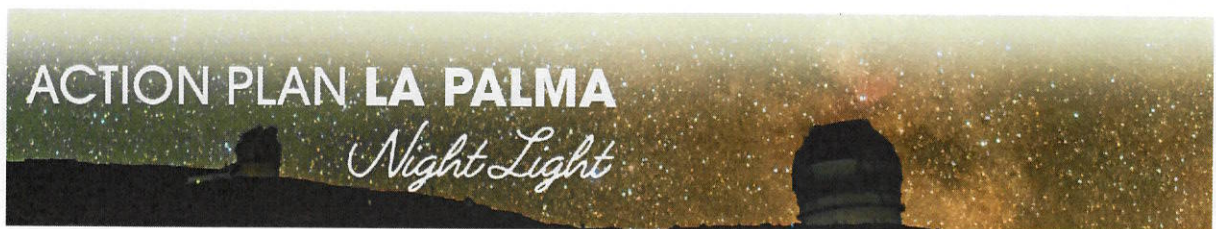
Date: December 16th 2019

Signature: Mariano Hernández Zapata
President



Stamp of the organisation (if available): _____





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