2021 TOP 100 GOOD PRACTICE STORY

Title of the Story: Dark Sky® Alqueva: A Star Destination

Destination Name: Dark Sky® Alqueva, Portugal

Country: Portugal

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Nomination Category: Tourism Reset & Recovery

Please find detailed information for the categories below in the Top 100 training module ‘Good Practice Story’.

☐ Localizing the destination supply chain
☐ Decarbonizing the destination supply chain
☐ Culture & Communities
☐ Environment & Climate
☐ Nature & Ecotourism
☒ Tourism Reset & Recovery
☐ Other

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In 2019 Dark Sky® Alqueva was prepared for a great year of 2020, as a result of all the work developed in previous years, the growing recognition of its strategy and the high rate of growth in demand. But when Covid-19 emerged and led to the confinement and consequent closure of all companies, organizations, destinations, everything that was not essential or associated with health services, we had to put into practice a part of our risk management strategy we would never want to use, the **Response to Major Changes**, which can include natural and man-made disasters. That part of the Dark Sky® Strategy was put into practice from March 2020, as we continued to develop our best practices associated with protecting the night sky. Because, in fact, to continue the work defined in the medium and long term, it was necessary to add and start the initiatives for Response to Major Changes.

Thus, we divided our good practice into two points that are actually inseparable, but their separation allows us to understand how the first one works and that allows the second to keep functioning without changing its essence.

1) The **Response to Major Changes** is part of the Dark Sky® Strategy and would only be triggered in case of major disasters or situations of serious risk, something that we would not like to put into practice. With the appearance of Covid-19 and later its passage to pandemic, it was necessary to revisit the actions and initiatives, as well as carry out the financial planning so that it was possible to maintain the team, honor the commitments, and continue to work on the Dark Sky® concept and brand with the same
commitment and strength, so that all the work developed to date would not be lost. We have noticed throughout 2020 and early 2021 that many organizations, companies and even governments do not have Risk Management strategies, whether for medium or severe risks.

As it was not possible to predict the end of the restrictions, our strategy within the Response to Major Changes implied the creation of three intervention scenarios: a) Grade One for six months; b) Grade Two for one year; c) Grade Three for two years, with the possibility of reaching Grade Six.

At this moment, Grade Three is activated, which includes resuming actions and redefining marketing actions.

2) Two thirds of the world’s population that lives in cities doesn’t have access to a night sky full of stars nor can even see the Milky Way, our own galaxy. Most of them already lost this link and mainly because the light pollution is increasing by around 10% per year. Europe is already increasing the level of light pollution and by looking at a night picture of the Earth taken from the International Space Station it is possible to see the extension of the problem. Apart from the small reflection, something between 5 and 10%, the rest of the light is being wasted to the sky. This represents millions of Euros wasted every night. It’s not sustainable, and above all, it can’t continue. Environmental and economic resources are more and more scarce so this is the time to stop and look at this problem and start implementing solutions. Nowadays many municipalities are switching old lights to LED under the assumption that they are more efficient.

Dark Sky® is a concept and a brand used to develop destinations. We started implementing this concept in Portugal in 2007 to develop destinations in a sustainable way having the night sky as it’s main differentiator element, using the thematic of astrotourism and having the mission of decreasing light pollution.
The first destination in Portugal dedicated to astrotourism was born in 2007, Dark Sky® Alqueva. Certified in 2011, it is the first Starlight Tourism Destination in the world as well as the first cross-border Starlight Destination in the World. It covers an area of 10,000 square kilometers around the Alqueva Lake, including Portuguese and Spanish council areas. Having had the quality of the sky certified, Dark Sky® Alqueva offers a diversity of daytime and night-time activities.

The Official Dark Sky® Observatory in Cumeada, a village near Reguengos de Monsaraz, is equipped with cutting-edge telescopes for solar and astronomical observations. These provide for a unique visual experience, from observing the planets to exploring the craters on the moon, moving on to the deeper sky with a cosmic journey among the nebulae, the galaxies and the swarms of stars which rise above us in one of the finest skies in the world. The wide open spaces around Alqueva also offer a wide variety of activities which supplement the pleasures of observing the skies – experiencing an incredible variety of sensations and tastes, such as relaxing at sunset as you enjoy a cocktail or taking part in a blind wine-tasting by starlight. Outdoors, surrounded by nature, you can go walking, enjoy horseback excursions by moonlight, or participate in astrophotography workshops, whether you are already passionate about it, or a beginner, or someone more experienced.

Beyond these activities, Dark Sky® Alqueva also has a network of partners – the Dark Sky® Alqueva Route – who are specialists in different areas and who ensure that a package of different activities can be tailored to the requirements of each client, to provide unforgettable moments from sunrise to the end of the most star-filled night in the Alentejo. Among these you can choose between activities as distinct as night-time canoeing, excursion by boat on, or by balloon above, the Alqueva, stand up paddle boarding, team-building, orientation, yoga and sports events, among many others.
The Network of Dark Sky® Destinations in Portugal has been created under the Dark Sky® concept and includes now: Alqueva, Aldeias do Xisto, and Vale do Tua, representing the South, Center and North of Portugal’s countryside, approximately around 13,000,00 square kilometers. Dark Sky Aldeias do Xisto and Dark Sky Vale do Tua are being developed in partnership with regional organizations, respectively ADXTUR and ADRV, joining the Dark Sky® concept with their important work and strong brands.

The main mission is protecting the night sky as a resource for destination sustainable development, but also and above all, to raise awareness of the importance of protecting this resource from the growing problem of light pollution, respecting and preserving it in a delicate way as a delightful heritage of humanity!

But what does this mission mean:
The mission of protecting the night sky implies fighting against the waste of energy, which in this case is assumed by fighting against light pollution. Light pollution has negative impacts on human health, the environment and ecosystems as well as at an economic level. Portugal, like the European Union, has opted for energy efficiency policies instead of policies to combat light pollution, forgetting the transversal nature of this form of pollution. This has led to the proliferation of LED technology, which in most cases has a harmful color temperature and, in addition to this problem, too much intensity is used. For example, the white LED has a blue peak, which has implications for human health by interrupting the process of producing melatonin, the substance that helps us prepare for sleep. The combination of the high intensity of public lighting and its inadequacy with poorly directed and too high luminaires and the existence of globes, it is easy to always have parasitic light at home. There are more and more studies on this topic that confirm the relationship between light pollution and health problems.

There is not a lot of national data that supports the daily waste due to light pollution but one of the latest scientific studies indicates that Portugal uses four times more intensity...
than what would be necessary and if we do a simple analysis, it indicates at least that we are also spending four times more than would be necessary. This is the article that points out some data: “Light pollution in USA and Europe: The good, the bad and the ugly” published on October 15, 2019, in the Journal of Environmental Management, volume 248. But this analysis does not take into account the exaggerated number of luminaires, neither the luminaires that are more than four times the appropriate intensity nor the globes that waste more than 80% of the light that they emit upwards and to the sides.

The protection of the night sky is not only an important resource to support and promote sustainable development in these regions but also a way to decrease a growing problem, the light pollution. But, the resolution of this type of pollution is a hard task due the low level of perception of its negative impacts. The huge waste of financial resources every day has not been enough to justify a change of mentality. The majority of this pollution comes from public lighting and in these regions people are urged to have more and more light, as a response to development. The idea of decreasing the number of lights or its intensity makes most of these communities think they are going back to the time without this resource - the artificial light. We still have a culture/tendency to believe that light represents the opposite to the darkness and the hard ancient times.

To change this mentality, we needed different approaches than to just demonstrate the high level of negative impacts. And it’s not enough to pass the message that development is compatible with a dark sky. We need to demonstrate and show it and create empathy for our cause as a way to change mentalities. But also to support the implementation of the right measures by all, public and private stakeholders.

Methods, steps and tools applied
So, to overcome the lack of knowledge and the belief of light and waste, Dark Sky® developed in its first destination, the Dark Sky® Alqueva, a list of objectives that need to be tackled in the strategy of protecting the night sky:

- To develop Dark Sky® Alqueva destination using a model of integrated sustainable development, which includes in its strategy the Response to Major Changes.

- To guarantee the involvement all stakeholders from all sectors, including a high level of involvement of the community (residents) and tourists.

- To raise awareness about the negative effects of light pollution and the proposed solutions.

- To demonstrate how strategic it is to choose tourism of quality instead of quantity: a message for communities and public stakeholders.

- To contribute to a positive impact in the destination at social, economic and environmental level.

- To raise awareness of how important it is to protect the night sky as it should be a Humankind Heritage.

- To raise awareness of the importance of scientific tourism for an equilibrated development of this destination.

- To raise awareness in the European Parliament and European Commission where many strategic policies for Europe are being made, many policies that continue to support a culture of light.

To achieve these objectives, Dark Sky® developed a series of projects and actions.
These are the actions and projects developed in Dark Sky® Alqueva:

- Development of activities and sessions of awareness made accordingly to each target: communities, public and private stakeholders from national to local level and from different sectors like tourism, environment, energy, and others, universities, colleges, schools and other relevant stakeholders and tourists. Also including stakeholders from the European Parliament and European Commission. These sessions are motivational and inspirational to permit a better perception of the problem and guarantee a better involvement. Using resources like the night sky when possible, bad and good lighting examples, or astrophotography, these sessions allow the audience to discover the benefits and how simple gestures can make the difference. During this year, we were able to develop a series of sessions about light pollution dedicated to public organizations and enterprises. The series of sessions were prepared according the audience and their needs: 2 hours for people already involved for long time in the Dark Sky®, and 4 and 8 hours for people that need more information and having the first approach with Dark Sky® now.

- Development of demonstrative projects like the one of Cumeada Village where the Official Dark Sky® Alqueva Observatory is located, where all public lighting was totally changed for Ambar LED’s the color temperature of 2700 kelvins. Dark Sky® requested for 2200 kelvins but to achieve 2700 kelvins was already a great step. All lights have individual management giving the opportunity to decrease the intensity during the sessions and in the most sensible areas, like the ones around the Observatory.

- Development of the Dark Sky® Patrol with Dark Sky® Guardians where children and their parents can work together to protect the night sky. The space and the night sky are a subject that can easily interest both children and parents. This action increases awareness, and empowers them in this journey. It involves local, regional
and national schools. This action is developed and in the summer it will be launched. It was supposed to be launched in 2020 but due the pandemic situation we decided to postpone. To develop this Patrol with the maximum of effectiveness we are establishing a protocol of cooperation with an association with more than 30 years of existence and devoted to environmental conservation.

- Development of a campaign in social media and press to raise awareness of the need to protect the night sky based in astrophotography and in the work of the astrophotographer Miguel Claro. This is a continuous work that started last year with more involvement but it is gaining more space. How was the good practice implemented? Click to add your text

**Key success factors**

Firstly and to allow us to maintain our mission of protecting the night sky and continue with the implementation of the Dark Sky® and ATT-Astrotourism concept at a time when the country and the world are going through a pandemic, it is only possible with the existence of a risk management strategy, previously thought out and created based on possible situations, but that somehow allow the assumptions to be always considered in the daily work strategy. Otherwise, it is not necessary to put it into practice if actions and initiatives are not in line with risk management and more precisely with the strategy of Response to Major Changes.

Relatively to the mission of protecting the night sky, the approach that was used reached the different stakeholders that needed to be addressed at the same time. When the problem has so many variables, lobbies involved, political issues, and social and cultural barriers, the only way to succeed is to implement tools that reach people from a different perspective.

The number of tourists deciding to travel to this area because of Dark Sky® Alqueva was increasing exponentially with a rate of 134% per year and that triggered the
attention of the stakeholders directly working in tourism and some public ones. Even last year, 2020, we had a magnificent response from the national tourism, with an increased demand from Portuguese tourists and other nationals living in Portugal. As soon as the government gave authorization to travel within the country, we immediately felt a huge increase in the tourism demand.

Dark Sky® Alqueva started to receive awards since 2013, mainly international awards, and that gave more reputation and recognition at national level of the work that was being done in the region.

The astrophotography helped to change many mentalities due the capacity of communicating our mission in a way that involves and creates empathy and emotions in the different targets. The levels of involvement obtained through astrophotography are indeed a special strength we have.

But this a continuous work and much more should be done to support the sustainable developments of these destinations where the protection of the night sky is one of it’s most valuable resources and the one that integrates the whole offer. And Dark Sky® Alqueva is getting reinforced by the new network of Dark Sky® destinations, the Dark Sky® Portugal Network. This gives more capacity to each and to the one that started this movement, the Dark Sky® Alqueva.

Lessons learned
Firstly, the first big lesson is that we must always have a risk management strategy thought out, designed and adapted to small risks but also large and sometimes unthinkable risks. But it cannot be a strategy that exists separately from the rest and that is triggered only with risk, as something apart. The big changes, the big risks, imply that there is an interconnection and preventive measures over time, which allow triggering risk management strategies. Naturally it requires more work, but this safeguard has allowed us to maintain our objectives and mission even in the face of something that no one thought was possible or would affect lives, companies, destinations so intensely, in such a short space of time.

Regarding the mission of protecting the night sky, to achieve a good result it’s not enough to have the knowledge and the right tools, sometimes more important than that is the capacity to understand your target and their unreasonable decisions and work the problem using a positive approach.

The system and timing of local and national elections is an obstacle for the development of medium and long term projects, especially the ones where some visible results have a longer time than four years to emerge. For example, 2021 is the year of elections at local level. We see already the political movements, the focus in activities that give political visibility and so on. But these elections will be in the end of September, beginning October, but we already feel that movements and how they affect our work.

The involvement of the maximum of stakeholders in a project that is traversal is the key factor of success, even if difficult to implement and to maintain the interest. To develop strong tools to evaluate internally the milestones and be able to make quick decisions about the correction of deviations or the need for new approaches. An international certification gives consistency, supports better communication and marketing actions but also supports the necessary national recognition.
This work can be described through these words: a long term vision and planning with flexibility, resilience, adaptability, high level of knowledge, empathy and respect.

Results, achievements and recognitions
In result of this work, many achievements where possible:
2013 - TOP 10 in 2013 of the World Stargazing Destinations
2016 and 2020 - TOP 5 of the World’s Best Stargazing Sites by National Geographic Travel.
And different awards from different organizations (excluded the nominations) given to the Dark Sky® Alqueva, to the organization or to the creator and developer of this destination brand:
2013 - Ulysses Award | 1st Runner-up attributed by the United Nations World Tourism Destination (UNWTO)
2016 - ETIS Social and Cultural Impact Achievers (ETIS - European Tourism Indicators System for Sustainable Destinations) attributed by the European Commission
2016 - Dark Sky Defender attributed by the American organization IDA
2019 - Bronze CTW Chinese Tourist Welcome Award, category Innovation attributed by COTRI China Outbound Tourism
2019 - I Internacional Starlight Awards, Recognition in the category of Astrotourism
and Business Development associated to the Protection of the Night Sky, attributed by Starlight Foundation

2019 - Europe’s Responsible Tourism Award attributed by the World Travel Awards

2020 - Europe’s Leading Tourist Destination attributed by Corporate Travel Awards

2020 - The Bizz Award and The Peak of Success Award attributed by WORLDCOB

2020 - ACQ5 Country Awards, as Portugal - Best Practice Operator of the Year, Astrotourism

2020 - Sustainability Award, Sustainability Leadership Award (organization), Business Intelligence Group

2020 - Sustainable Destinations Global Top 100, Green Destinations

2020 - ACQ5 Global Awards as Portugal company of the year (Astrotourism) and as Portugal Gamechanger of the Year (for Apolónia Rodrigues)

2020 - Europe’s Responsible Tourism Award attributed by the World Travel Awards

2020 - Europe’s Leading Tourism Development Award attributed by the World Travel Awards

2020 - World’s Leading Tourism Development Award attributed by the World Travel Awards

2020 - International Travel Award as Europe’s Best Emerging Destination
2020 - International Travel Award as Europe’s Best Emerging Attraction for the Official Dark Sky® Alqueva Observatory

2020 - Global 100 Award as Europe’s Leading Tourist Destination

2020 - European Award for Best Practices Gold Category attributed by ESQR European Society Quality Research

2021 - Travel & Hospitality Award as Learning Experience of the Year

2021 - Prémio Cinco Estrelas Regiões (Five Star Regiões)

2021 - Global 100 Award as Europe’s Leading Tourist Destination

**Additional references**
Provide links to further information. Pictures and videos should be available for download either from Youtube, Vimeo or other Cloud-based (Google/ One Drive) download URL.

On our website ([www.darksyalqueva.com](http://www.darksyalqueva.com)), and on our facebook page ([www.facebook.com/Alqueva](http://www.facebook.com/Alqueva)) it’s possible to see pictures of our destination and news about us.

The Dark Sky® Portal will be finished in Fall and will include Dark Sky® Alqueva, Dark Sky® Aldeias do Xisto and Dark Sky® Vale do Tua. In this moment, Dark Sky® Association is continuing developing an intense process of training including public and similar organizations (municipalities, regional and local authorities, associations), and for private enterprises or individuals who wish to be part of the Official Network of Partners or develop an specific activity. The degree, intensity and duration depends in the public and type of involvement. The first part was already concluded and 75 people where involved in the training.