

NPA GLOW2.0 - Green energy technologies for tourism growth

GLOW2.0 Dark Sky Concept
(Output O3.1)



Interreg



Co-funded by
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GLOW2.0

Northern Periphery and Arctic

INTRODUCTION

Aims behind GLOW2.0 Dark Sky Concept development

Darkness and the different levels of twilight is an undervalued resource – a valuable resource of everyday life and wellness, and a condition that affects our lives in the North for almost half the year. Natural darkness plays a crucial role in the living environment and has positive benefits on people, animals, and the economy.

GLOW2.0 project aimed to support enterprises and public organisations in developing tourism flow during the dark winter and autumn months using night sky science, auroral tourism and the possibilities of darkness as additional benefits for diversifying own tourism offers. One way to support was via up-to-date information and multidisciplinary approach to utilizing darkness, to encourage them develop new programme services, and inspire enterprises, organisations and residents embrace best practices that support preservation of darkness values and benefits. A Good Practice template (project deliverable D3.1.1, herein Output O3.1 GLOW2.0 Dark Sky Concept) was developed.

The development work

The GLOW2.0 Dark Sky Concept was jointly developed by the GLOW2.0 project consortium consisting of Karelia University of Applied Sciences (Finland), The Gaeltacht Authority (Ireland), Federation of Regional Authorities NW Iceland (Iceland), Innovation and Management Centre WestBIC (Ireland), UiT - The Arctic University of Norway, and Federation of Northern Lapland municipalities (Finland) (Sodankylä, Inari, Utsjoki). The implementation and guidance were led by activity leads The Gaeltacht Authority (Ireland) and Innovation and Management Centre WestBIC (Ireland), and project Lead Partner Karelia University of Applied Sciences (Finland).

Developing the Dark Sky Concept involved several key steps, most important ones as:

- defining the purpose and target audience;
- evaluating the user needs;
- creating the content and refining the needs and usability;
- carrying out awareness activities plans to enhance uptake;
- choosing the appropriate venues to support uptake and post project access to materials.

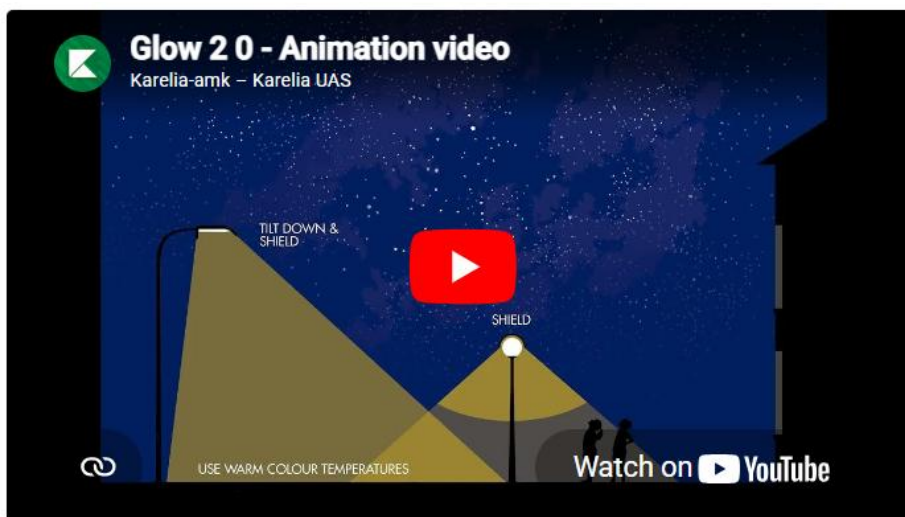
The user needs and expectations were identified via analysis of the survey results conducted during the first project period.

RESULTS

A. Promotional video:

For the (i) promotional video as part of GLOW2.0 Dark Sky Concept, the initial aim was to have one promotional video of our night skies. However, the results of the survey proved that there was varied levels in understanding of the themes and concepts. Project partners redefined the need for more visual elements - multiple videos over one based on the survey findings, e.g. low level of understanding of Dark Sky concepts, themes and possibilities across participating countries. For this reason, a series of videos offering varied illustrations and practical relatable examples was sought. The series of videos answer to:

- (i) what is darkness of nature and its connection to light pollution (video "GLOW2.0: Protecting Darkness"):



GLOW2.0: Protecting Darkness

Life on Earth has always followed a natural cycle of day and night — but artificial lighting has disrupted this balance. Light pollution now affects wildlife, ecosystems, human health, and even our view of the stars. This animation, part of the Northern Periphery and Arctic GLOW2.0 project, explains how light pollution is created, why blue light is harmful, and simple solutions like using warmer, downward-facing lights or switching them off when not needed. The night sky is our oldest heritage.

- (ii) what causes light pollution and how to prevent it (video "GLOW2.0: Light pollution"):



GLOW2.0: Light pollution

Light pollution is man-made artificial light that disturbs and possibly harms people, animals and plants. The light pollution animation explores the causes of light pollution, its effects and ways to reduce it. The animation was produced by third-year media students of Karelia University of Applied Sciences as a commission of the GLOW2.0 project. The project spreads the message of darkness in partnering countries Finland, Ireland, Iceland and Northern Norway.

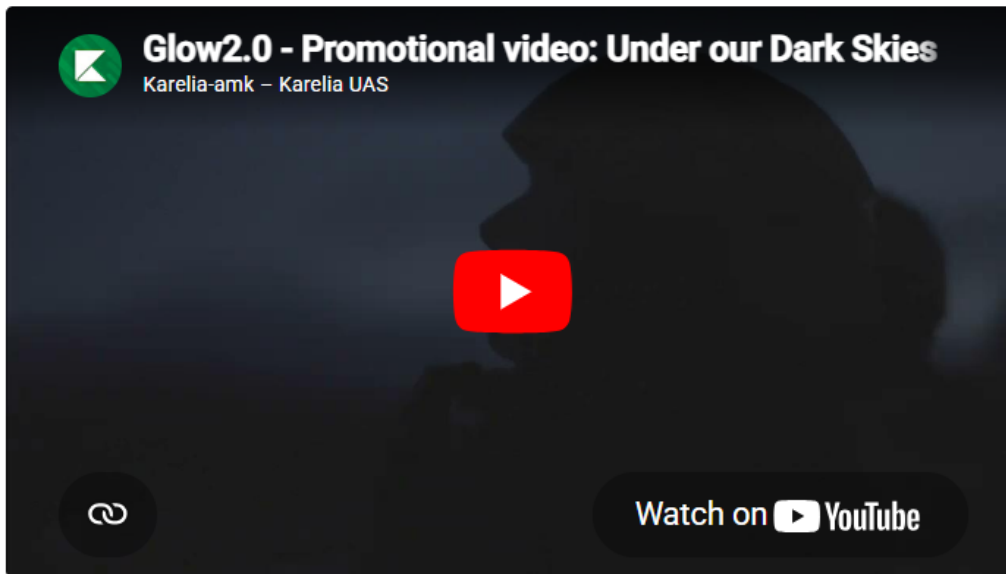
- (iii) what are the benefits and values of darkness of nature for business (video "GLOW2.0: Dark Sky Tourism in Finland"):



GLOW2.0: Dark Sky Tourism in Finland

Have you ever snowshoed in a forest lit up by northern lights, or ice-dipped under a clear starry night sky? Get a taste of what type of experiences Finland can offer for the Dark Sky Tourism.

- (iv) How to market/ enhance visibility of own darkness relevant products and offers (video “Promotional video - Under our Dark Skies”):



GLOW2.0 Promotional video: Under our Dark Skies

Experience the magic of rural landscapes beneath some of the darkest skies in Europe. Journey into Irelands Gaeltacht and rural communities where the night sky comes alive after sunset — part of the Northern Periphery and Arctic GLOW2.0 project linking with Iceland, Norway, and Finland. For everyone beneath the night sky — a timeless escape. For adventurers, photographers, and stargazers — a magical escape awaits.

Links to videos:

<https://www.interreg-npa.eu/projects/glow20/home/dark-sky-tourism-videos/>

B. Good Practice Framework incl. requirements for certification, energy saving applications and route to certification

For the (ii) a good practices framework and requirements for dark skies certification such as reducing light pollution, (iii) energy saving applications and changes to transport, and (iv) specification of the route to certification and integration with other Dark Skies members, the informations are combined in a cohesive whole to form The deliverable D3.1.1 Good Practice template, herein Output O3.1 GLOW2.0 Dark Sky Concept.

Link(s) to Good Practice Template:

- i. <https://urn.fi/URN:NBN:fi:amk-2025120532806>
- ii. <https://www.theseus.fi/handle/10024/904520>
- iii. <https://www.interreg-npa.eu/projects/glow20/home/resources/>
- iv. <https://www.interreg-npa.eu/projects/glow20/home/outputs-results/>

Template of Good Practices for Dark Skies Tourism (ENG)

This template outlines a set of good practices and criteria for attaining and utilising Dark Sky status as a driver for tourism and economic development. It has been developed as part of the Interreg Northern Periphery and Arctic project GLOW2.0 (2022-2025), which supports rural communities and enterprises in Iceland, Norway, Finland, and Ireland to grow sustainably through dark skies tourism. The template provides a practical set of best practices that destinations can adapt when developing tourism linked to night skies cultural and natural heritage. By integrating these good practices, destinations can create a sustainable dark sky experience that: • attract visitors during the darker winter months • strengthen local economies and create green business opportunities • support cultural and natural preservation and • raise awareness of the importance of protecting our night skies.

[Template of Good Practices for Dark Skies Tourism →](#)

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- attract visitors during the darker winter months
- strengthen local economies and create green business opportunities
- support cultural and natural preservation and
- raise awareness of the importance of protecting our night skies.

CONCLUSION

The template and series of videos are open access and available via GLOW project website <https://www.interreg-npa.eu/projects/glow20/home/dark-sky-tourism-videos/> (Dark Sky Tourism Videos), and <https://www.interreg-npa.eu/projects/glow20/home/outputs-results/> or <https://www.interreg-npa.eu/projects/glow20/home/resources/> (Template of Good Practices for Dark Skies Tourism). The template is also available via Lead Partner's pages via permanent link <https://urn.fi/URN:NBN:fi:amk-2025120532806> where it has almost 300 downloads.

FURTHER INFORMATION

GLOW2.0 - Green Energy Technologies for Tourism Project has been funded by Interreg Northern Periphery and Arctic Programme.

Link to project website: [NPA GLOW](#)

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