

C.4.1 Work package 2

Workpackage number

WP2

Work package title

LIGHT POLLUTION: a transnational strategy for the valorisation of dark skies

Objectives

Please define one project specific objective that will be achieved by your project through the implementation of the work package. The specific objective should be:

- realistically achievable during the project lifetime;
- specific;
- be verifiable and measurable.

Project specific objective

WP2 aims at developing a transnational strategy to improve sustainable local development in a framework of reduced light pollution and using Astro-tourism as a driver for non-urban areas involving stakeholders in a strategic foresight participatory approach.

In addition, please define one or more communication objective(s) that will contribute to the achievement of the specific objective and include reference to the relevant target group(s). Communication objectives aim at changes in a target audience's awareness and behaviour.

Communication objective(s) and target audience

Communication is aimed at changing the attitude towards the issue of light pollution in policy makers (consider it in their planning and in their procurement criteria) tourist facilities owners (dark skies can be a competitive asset) and population/tourists (dark skies areas can be a destination for tourism and improve quality of life).

Activities

Please describe the activities foreseen in order to achieve the above project specific objective and related communication objective(s) considering also the involvement of the relevant target groups as identified in section C2.4.

Activity 2.1	
Title	Establishing working groups to investigate the future of dark skies
Start period	Period 1, 1 - 6

Activity 2.1	
End period	Period 1, 1 - 6
Description	<p>A framework will be drafted to guide step by step the work of the groups. The groups will be established based on interest, competences, expertise, and potential contributions of members:</p> <p>G1-SAFEGUARDING THE CENTRAL EUROPE NOCTURNAL ECOSYSTEMS (PP3+PP4+PP5+LP), investigating strategies related to biodiversity, interference between artificial lights and species well-being, astronomical observation (the increase in light pollution at night is becoming a serious threat to the observation of celestial bodies), etc..</p> <p>G2-TRANSFORMING DARK SKIES INTO A SUSTAINABLE GROWTH ASSET FOR TOURISM (PP2+ PP7+PP6), investigating the potential of astro-tourism as an innovative valorisation of natural and cultural heritage. "Mass tourism" will probably decrease and this means that tourism operators will have to re-think their offers. Astro tourism as conceived by DARKERSKY4CE can be an answer. A Lonely Planet study considers "dark skies" among 2019 travel trends: across the planet, travellers are now seeking out the world's last-remaining dark skies where they can get a clear, unpolluted view of the stars.</p> <p>G3-LOCAL PARTICIPATION AND TRANSNATIONAL COOPERATION in LIGHT POLLUTION REDUCTION (PP7+ PP6+LP), setting up a participative approach to discuss implications of light pollution and its reduction, based on the ES approach.</p> <p>The methodological framework is provided by strategic foresight planning, in line with the EC Strategic Foresight Network.</p>

Deliverables 2.1			
Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.1.1	List of members per group	List of members per group. Each group will be formed by some partners and will then enlarge participation to Associated partners and other stakeholders. Groups will be formed according to interest and competences as indicated above. Each group will then identify responsible partners and contributors	Period 1, 1 - 6
D.2.1.2	Operational guide for	Operational framework/guidelines for group work including methodologies for the strategic foresight planning: scenario	Period 1, 1 - 6

Deliverables 2.1			
Deliverable Number	Deliverable title	Deliverable description	Delivery period
	group work	setting/future labs, etc. This guide will be provided by PP2 with the intent of keeping the focus on the WP output, i.e. the transnational strategy	

Activity 2.2	
Title	Implementing working groups to shape the future of dark skies
Start period	Period 2, 7 - 12
End period	Period 3, 13 - 18
Description	<p>G1 will investigate how to better shape our future in terms of ecosystem protection: light pollution has negative effects on different species causing loss of habitats for many of them (e.g. birds) and night light has a strong effect on the body's production of melatonin.</p> <p>G2 will work on how Astro-tourism can become an asset for sustainable growth in non-urban areas: European tourism is confronted with many challenges and must quickly adapt to the digital revolution and environmental-friendly trends.</p> <p>G3 will consider the assessment of dark skies value intended as an ES, that can play a relevant role in sustainable strategic planning considering a territorial equalization between those territories that "consume" natural resources (including dark skies) and those that produce them. This equalization can be translated into a dialogue between conflicting stakeholders.</p>

Deliverables 2.2			
Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.2.1	Report "Safeguarding the Central Europe nocturnal ecosystems"	PP3+PP4+PP5+LP, APs and stakeholders will meet over a 6 months period, delivering a final report on findings and approaches used. A model report will be used as guide provided by PP2 in order to compare findings.	Period 3 , 13 - 18

Deliverables 2.2			
Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.2.2	Report "Transforming dark skies into a sustainable growth asset for tourism"	PP2+PP7+PP6, APs and stakeholders will meet over a 6 months period, delivering a final report on findings and approaches used. A model report will be used as guide provided by PP2 in order to compare findings.	Period 3 , 13 - 18
D.2.2.3	Report "Local participation and transnational cooperation in light pollution reduction"	PP7+PP6+LP, APs and stakeholders will meet over a 6 months period, delivering a final report on findings and approaches used. A model report will be used as guide provided by PP2 in order to compare findings	Period 3 , 13 - 18

Activity 2.3	
Title	Strategy development via strategic foresight for dark skies
Start period	Period 3, 13 - 18
End period	Period 4, 19 - 24
Description	<p>Merging findings deriving by single working groups, partners will develop a transnational strategy for light pollution reduction, using the ES approach as a guide, and strategic foresight as methodology. Its use as a sustainable growth asset will be highlighted, as it can be an interesting factor for economic operators.</p> <p>Strategic foresight seeks to embed foresight (the discipline of exploring, anticipating and shaping the future) into policy making. Strategic foresight will be used to anticipate trends, risks, emerging issues, and address their potential implications and opportunities to draw useful insights for strategic planning, policy making and preparedness. It includes the revision of existing policies. Strategic foresight is about exploring different possible futures and their challenges, and it can be of help in the process of shaping the most desirable future, changing the way we see it.</p> <p>The DARKERSKY4CE Sentinel Alliance acts as the community of practice able to build and use</p>

Activity 2.3	
	collective intelligence activated by the foresight approach in a structured, and systemic way to anticipate developments and set the roadmap to new models of local sustainable development. The strategy is the output of this WP as it represents an important tool that will be concretised with dedicated Pilot Demo Sites in WP3.

Deliverables 2.3			
Deliverable Number	Deliverable title	Deliverable description	Delivery period
D.2.3.1	Merging present and future of dark skies in CE	PP2 will elaborate a model to collect data on existing policies present on light pollution in CE and provide the main elements to deliver the Transnational Strategy for a dark sky macro-region in Central Europe (chapters and main content)	Period 3 , 13 - 18
D.2.3.2	The present of light pollution in CE	Report on desk-research on existing national, regional and /or local strategies for light pollution reduction in CE (and abroad) – current policies / actual situation pollution in CE	Period 3 , 13 - 18
D.2.3.3	Transnational Strategy: the future of dark skies in Central Europe	The Transnational Strategy focuses on identifying actions for light pollution reduction, safeguarding ecosystems and boosting astro-tourism as an economic asset for non-urban areas. The approach includes strategic foresight and bottom-up participation.	Period 4 , 19 - 24

Outputs

Please define the outputs which will be realised through the activities foreseen in this work package and link them to the related programme output indicators.

Output number 2.1	
Output title	Transnational Strategy: the future of dark skies in Central Europe
Programme output indicator	RC083_2.4: Strategies and action plans jointly developed
Measurement unit	strategy/action plan
Output target value	1,00
Delivery period	Period 4, 19 - 24
Output description	The Transnational Strategy focuses on identifying actions for light pollution reduction, safeguarding

Output number 2.1	
	<p>not only nocturnal ecosystems and boosting astro-tourism as an economic asset for non-urban areas. It facilitates joint planning and capacity building for local and regional authorities and tourism economic operators. The approach includes strategic foresight and bottom-up participation. The strategy is transnationally developed by partners and used as framework for Pilot Actions. (Ref. D.2.3.3)</p>

Investments