



NESOI
EU ISLANDS FACILITY

Global Renovation of Public
Lighting in Corsica

GRENPLIGHTC



 **CORSICA**

“ GRENPLIGHTC is a formidable project for enhancing the image of an innovative and forward-looking Corsica, confirming its pioneering character for the energy transition”



This project is supported by the EU Islands Facility NESOI. NESOI has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°864266

The European Islands Facility NESOI aims to unlock the potential of EU islands to become the locomotives of European Energy Transition. To do so, NESOI aims to mobilize more than €100 Million of investment in sustainable energy projects to give EU islands the opportunity to implement energy technologies and innovative approaches, in a cost-competitive way. NESOI has selected 56 such projects across the European Union and provide them with financial resources and technical support.



Global Renovation of Public Lighting in Corsica

ABOUT THE PROJECT

Project
Promoter



Agence d'Aménagement durable,
d'Urbanisme et d'Énergie de la Corse (AUE)



Stakeholders



Agence de la
transition écologique



EDF EDF Corse



Collectivité de Corse



Country France



Sector Public Lighting



PROJECT VALUE 20,000,000 €

DESCRIPTION

AUE is the public agency in Corsica responsible for defining, coordinating and implementing regional policy on urban planning, sustainable development, energy, air and climate. The project consists in amplifying AUE's approach in providing support to municipalities to renovate more than 20,000 lighting points by 2023.

AIM OF THE PROJECT

The renovation makes use of LED technology and of a specific management of night-time lighting profiles through power variation or extinction. The main aim of the project is to establish a Regional Public Lighting Chart based on the widest possible benchmark, an evaluation of the operations realized and a dialogue with institutional actors, professionals and associations.

FUTURE STEPS

First objective: complete renovation of Public lighting in Corsica by 2028.
Second objective: Dissemination of the charter, enforcement.
Third objective: Labels from International Dark Sky Reserve (IDEA - American association), from *Villages et Villes étoilées* (ANPCEN), more regular off-season tourism (astronomers).

HOW THE EU ISLANDS FACILITY NESOI SUPPORTS THE PROJECT

- 1 Analysis of AUE procedure and documents.
- 2 Proposals for better actions and evolution of AUE tools (technical perspective).
- 3 Feedback on global public lighting renovation at local, national and EU level.
- 4 Support in elaboration of consultations documents for ' the Regional Chart.
- 5 Feedback in economic, financial modelling and fund matching.
- 6 Support during Regional Chart elaboration.





INTERVIEW WITH

Cyrille Monti, in charge of electricity projects at AUE

Q: How was the project initially designed? Why choosing this specific sector?

A: The project was designed in the framework of Corsica's objective to reach energy autonomy by 2050. Improving the efficiency of public lighting is one of the levers activated by the island's authorities. Up to 70% of energy consumption can be saved thanks to a good public lighting renovation. Corsica is mainly made of rural areas, where the average number of light points per inhabitant is very high. On average, public lighting represents 50% of rural municipalities' energy bill.

Q: What is the project's impact on citizens and on the local environment?

A: The savings on the municipalities' energy bills will directly benefit to their citizens. There is also an improvement in comfort and health through better quality lighting. Fauna and flora also benefit from this renovation campaign: a test has shown that around renovated lighting points, trees are greener and higher; around non-renovated points, the light spectrum has prevented tree growth.

Q: Has the project an impact on the local economy?

A: Yes, in different regards. On one hand, limiting light pollution and reaching the highest standards for night sky quality can help attracting new kinds of tourists, for instance astronomers, during off-season periods. On the other hand, the project directly benefits local contractors involved in relamping activities, who have grown competencies as a result of the project. When the renovation campaign is over, more than 60 million euros will have been spent in renovation works. Furthermore, the project also benefits the national community: in Corsica (as in every French island), the extra costs for generating electricity is compensated by the state. Energy savings lead to a lower local production, in particular from expensive and carbon-intensive fuels, thus to a lower compensation provided by the state.

THE IMPACT

ON LOCAL COMMUNITY



- 1 **Local Economy**
The renovation of 20,000 light points should result in a local activity of about 100 full time jobs.
- 2 **Social Acceptance**
The numerous discussions during the study phase between the consulting offices and the municipalities, but also the projects that have already been carried out show that energy savings including a reduction in luminous flux are well accepted by the citizens.

Global Renovation of Public Lighting in Corsica – Technical Data

FOCUS ON LIGHT POLLUTION

Public lighting represents not only a major energy and financial challenge for Corsican municipalities (30 to 50% of the municipal energy bills); it is also one of the main sources of light pollution.

Over-illumination must be corrected by renovation projects. An adequate lighting approach responds to the needs, together with the setup of a specific management of night-time lighting through power variation or extinction.

A quality public lighting renovation can enable islands to become ambassadors of the night sky, promote specific tourist activities and favour biodiversity.

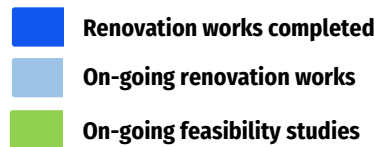
Territories with a high-quality night sky can apply to the International Dark Sky certification or to similar national labels (for instance, “Villes et Villages étoilés” in France). To learn more: <https://www.darksky.org/>



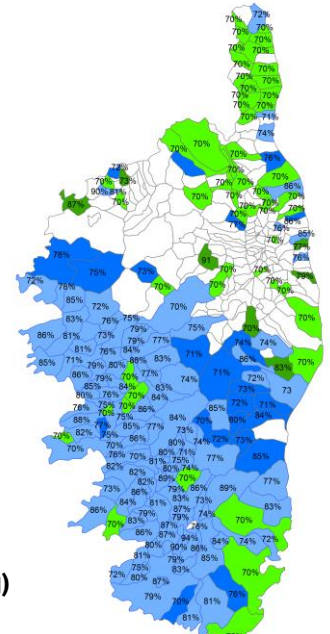
Quality of the night sky in Ajaccio's area
(Source: AUE)

EXPECTED ENERGY SAVINGS

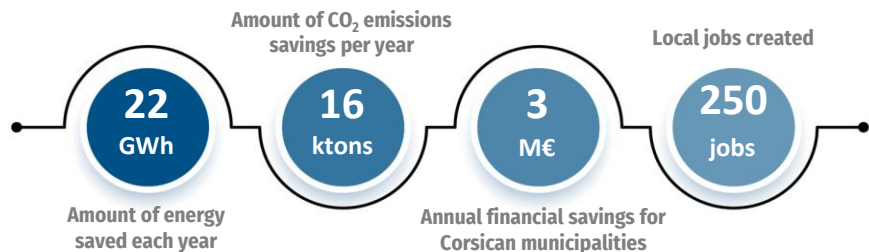
- 20,000 lighting points renovated by 2023, representing investments of more than 20M€
- Targeted reduction in annual final energy consumption (energy savings) by 2023 – Electrical Energy : 21,634 MWh/year.
- Targeted relative reduction in annual final energy consumption (energy savings) by 2023 – Electrical Energy : 76%.
- Targeted reduction in annual fossil fuel consumption (Primary): 19,948 MWh/year.



State of the art of the public lighting renovation process led by AUE (April 2021)



KEY NUMBERS OF THE PROJECT



REPLICABILITY IN OTHER ISLANDS

The approach implemented in Corsica could be replicated in many islands and territories on the mainland especially as public lighting is currently undergoing a period of major mutation. Within the project, a Regional Chart is being elaborated thanks to NESOI support to facilitate replication projects across Europe.