

Lighting Solutions

4th October 2022



The use of outdoor lighting

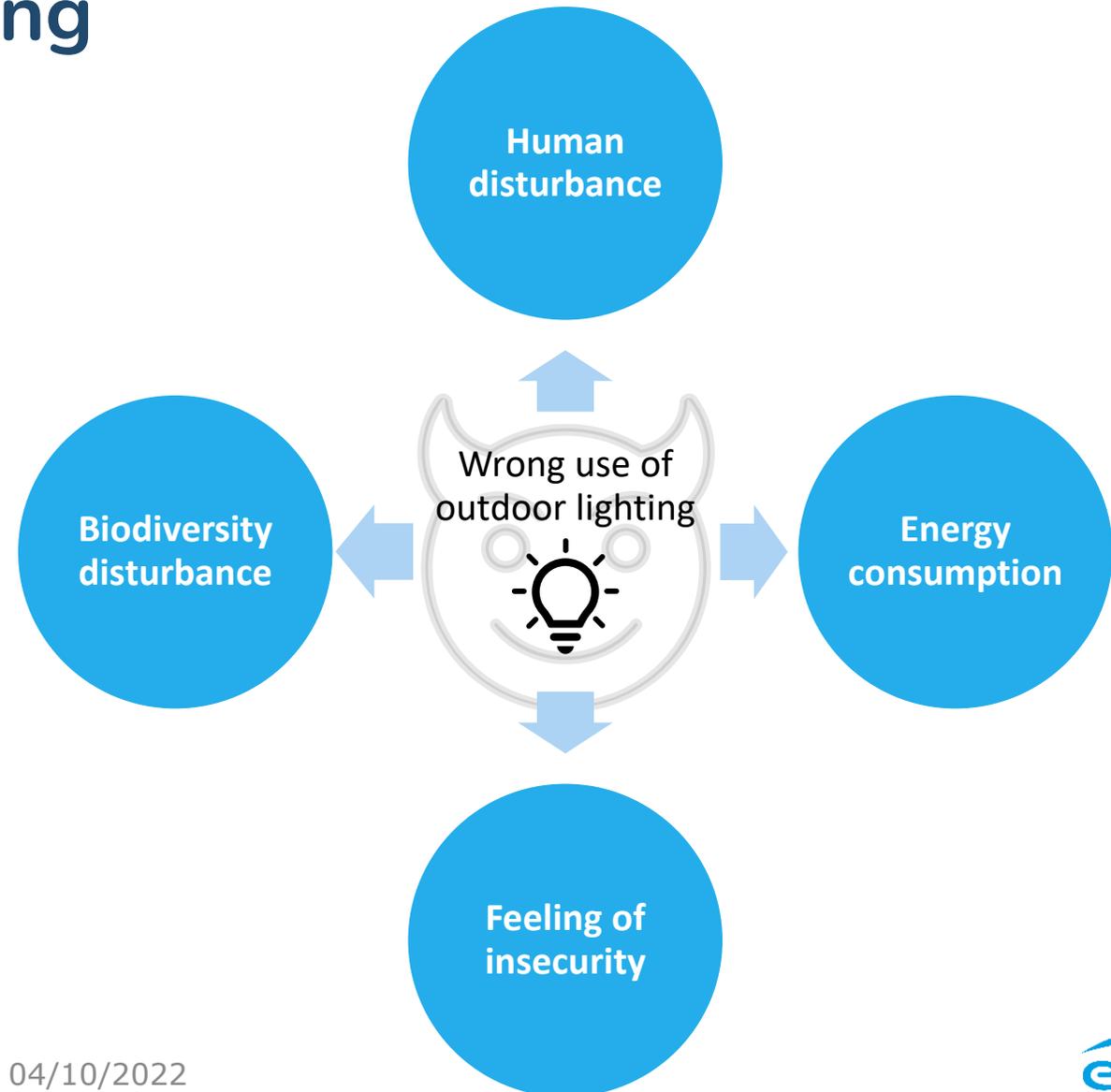
- To allow safe trips;
- To enhance the urban atmosphere;
- To make urban outdoor spaces available for all
- To provide additional services.

However:

→ The awareness about the impact of lighting at night on biodiversity and human health is growing;

→ Energy crises and environmental challenges are leading authorities to switch off the lighting at night;

But lighting is still a matter of security, feeling of safety, outdoor space appropriation, sense of belonging to a society...



Two types of lighting solutions:

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Lighting event



Lighting event following the “Guerrilla Lighting” concept

The “Guerrilla Lighting” concept was born in 2008 and “is an open source idea for creating magical moments of quality lighting that demonstrate the power of light to transform spaces.”

It is also “a protest against wasteful use of light but most of all, guerrilla lighting is about having fun and raising the awareness of the power of light.”

The created ephemeral and magical moments are recorded and used to increase public awareness, also instigating public action against bad lighting.

→ <https://www.facebook.com/GuerrillaLighting>

In the context of Las Palmeras, a Guerrilla Lighting would take the shape of a creative event involving the local community and which could bring a fresh look on the neighbourhood at nighttime.



Concept description

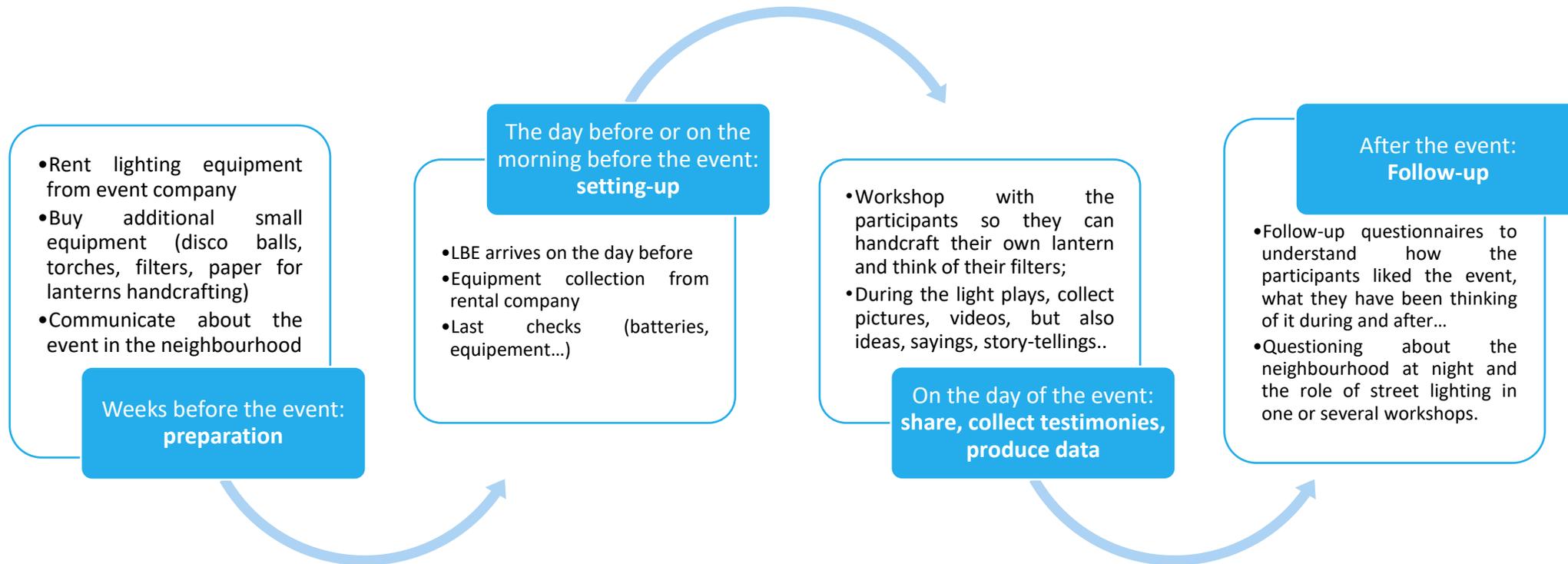
Steps of preparation

- Before the event day, the In-HABIT project partners are gathering some portable lighting fixtures (spotlights, stage or shooting lights...) and additional creative materials like filters, paper patterns;
- On the day of the event, the neighbourhood community is gathered in a creative workshop to design lanterns and other lighting objects that will be used in the evening light show;
- On the event night, the community is gathering again to play with the different lighting objects and to experiment how the light can change the aspect and atmosphere of the neighbourhood.

Expected outcomes

- A large amount of photos, videos and testimonies to document the evening;
- Reflexions about:
 - How lighting transforms the perception of a space;
 - How the night in the neighbourhood is experienced;
 - How lighting influences the nighttime experience.
- Baseline for further reflexion about the permanent lighting installations;
- A fun and creative evening event with the local community.

Timeline



Key Performance Indicators

Lighting event

Expected changes

- Improved social cohesion as a neighbourhood
- Improved social inclusion
- Improved sense of belonging to the neighbourhood
- Improved sense of belonging and satisfaction with the quality of the neighbourhood
- Increased perception of benefits from outdoor public spaces
- Increased quality of free time in public spaces

Impact indicators

- Satisfaction with personal relationships in the neighbourhood (not only within one's own patio)
- Contact with others in outdoor public spaces
- Social network support
- Sense of inclusion
- Sense of belonging to the neighbourhood (not only to one's own patio).
- Time spent in outdoor public spaces
- Moments of the day spent in outdoor public spaces (light/dark)
- Benefits from outdoor public spaces
- Perceived quality of free time in outdoor public spaces
- Participation in cultural activities within outdoor public spaces
- Satisfaction with one's surroundings and living environment

Return on experience from a committed lighting designer

Isabelle Corten: lighting designer, director of [Radiance35](#) and founder of [Concepteurs Lumière Sans Frontière](#)

Extract from an email received on 21st July 2022:

“What a great initiative! In Cordoba moreover...

You put your finger on the essential! :

“I am well aware that the co-creation workshops and the involvement of the users of the urban space were the key to the success of such an evening.”

Because, if guerilla lighting is a reproducible format, it is nevertheless inseparable from an approach specific to the territory concerned. All this in a very short time, because a good action is one that has an immediate effect (people believe in what you are doing and take ownership of the approach if it is quickly "verifiable").

I think that "only" the light party is not enough...”





“In any case, to answer your question, the essential tools in my opinion are:

- disco balls!*
- battery-operated LED projectors like Chauvet (to give a "background" with fishing)*
- more classic torches with filters*
- light sticks to make people participate in a "collective image at the end".*

Attached are some photos of a guerrilla lighting event in Grenoble... they show the pleasure exchanged via light! 😊”



Long-term lighting enhancement and additional services



Adding value for the residents via the lighting infrastructure

Lighting can enhance the outdoor experience of Las Palmeras in different ways.

Indeed, a light point is nowadays more than a pole that accommodates a lamp: it can provide features that have the potential to improve the citizens wellbeing and how they experience the patios.

Some smart city features are especially suggested in order to facilitate the everyday life of the neighbours and to increase the use of the main square, enhancing the attractiveness of the outdoor environment.



The Humble Light Post.

Source: European Commission Smart Cities Market Place

1st proposal: Las Palmeras Public Wi-Fi

Today, internet access is turning into a basic need for European populations. Besides its use for leisure activities, it is key to access information, perform administrative tasks and access professional activities: in a word, it is key to get included in the society.

Nevertheless, to get an internet connection can sometimes be of great complexity, depending on financial resources and purely material matters (lack of infrastructures, electricity, etc.).

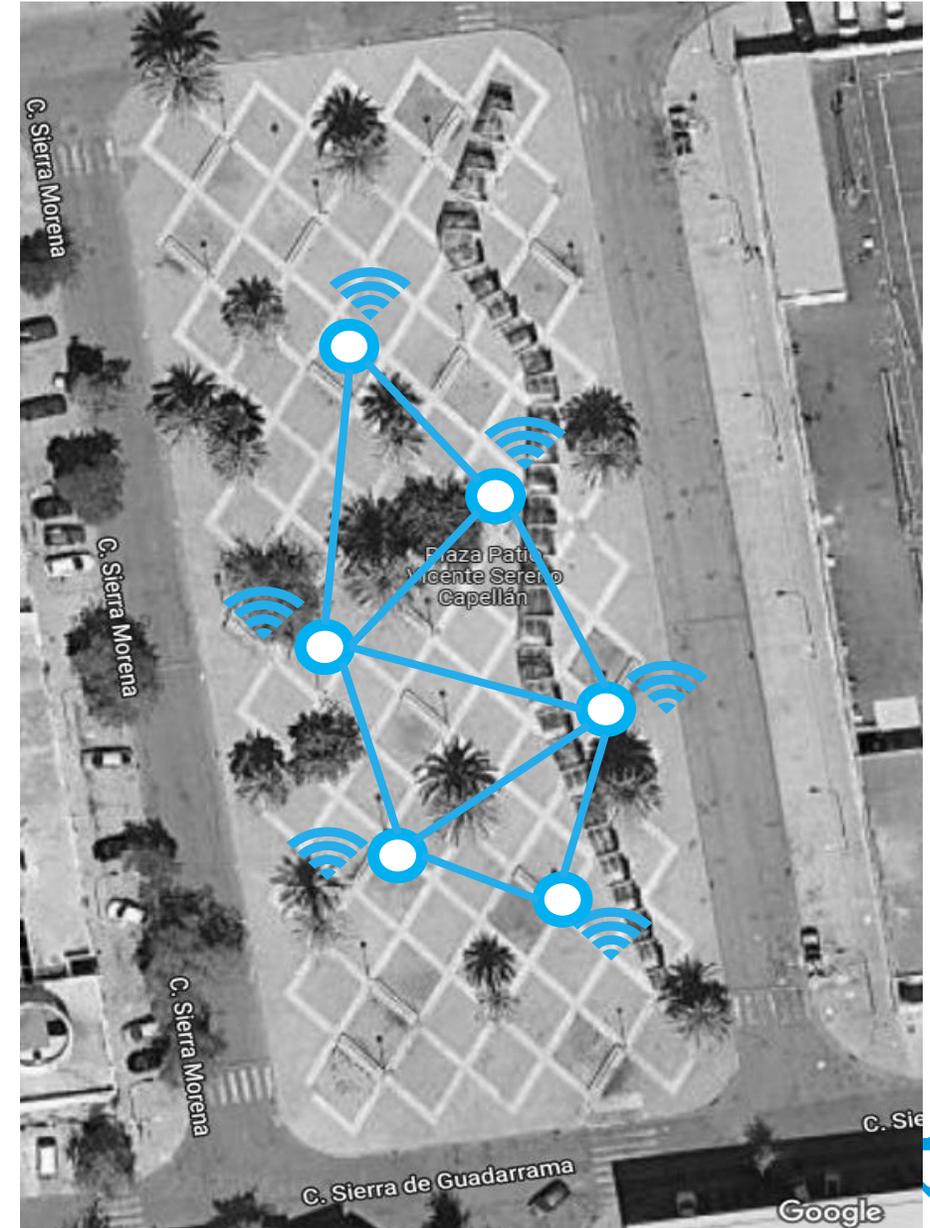
Implementing a free Public WiFi service on the Las Palmeras main square would ease internet access of all residents and potentially add side benefits such as increasing **the use of the outdoor public space**, improving **social inclusion** and providing an **extra communication channel** to the citizens.



1st proposal: Las Palmeras Public Wi-Fi

In a nutshell:

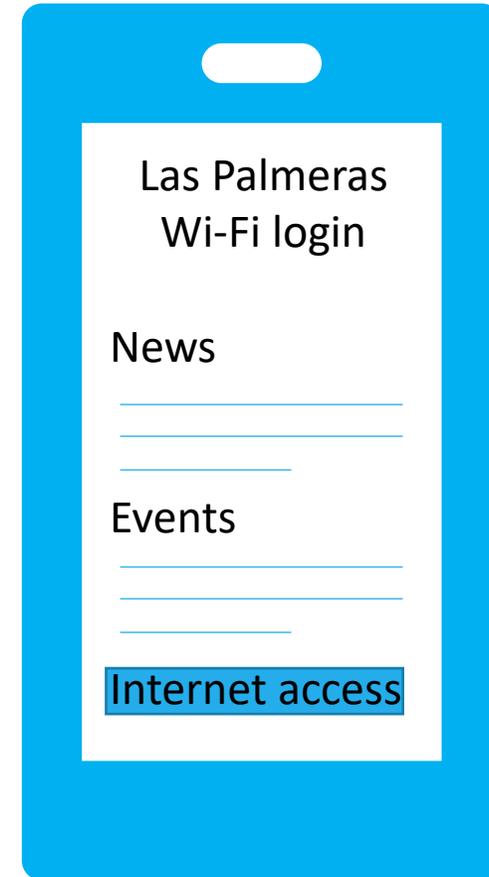
- Wi-Fi access would be provided **only on the main square**;
- It would be **free access**, but with some kind of login or registration;
- The login would provide a **“landing page” with community information on activities, events, etc.**;
- It would be a **MESH type of network** on the square (nr. of access points to be determined during engineering);
- **Technical Feasibility: rather easy.**



1st proposal: Las Palmeras Public Wi-Fi

Benefits:

- Inclusive internet access for all residents;
- Access is only provided on the main square, increasing potential social interactions;
- The system is an opportunity to provide information to the residents;
- Once the communication network is available, other connected features are very easy to implement;
- Relatively low operational costs (depending on internet access type);
- Less likely to be vandalized as damaging would destroy the free internet access.



Key Performance Indicators

Long-term lighting installations improvement

Expected changes

- Improved sense of belonging to the neighbourhood
- Increased satisfaction with one's surroundings and living environment
- Improved sense of belonging and satisfaction with the quality of the neighbourhood
- Reduced sense of discrimination as a group compared to the rest of the city
- Increased time spent in outdoor public spaces
- Increased perception of benefits from outdoor public spaces
- Increased satisfaction with one's surroundings and living environment
- Increased quality of free time in public spaces

Impact indicators

- Sense of belonging and perception of the neighbourhood
- Collective self-esteem
- Satisfaction with one's surroundings and living environment
- Contact with others in outdoor public spaces
- Freedom of personal contact
- Time spent in outdoor public spaces
- Moments of the day spent in outdoor public spaces (light/dark)
- Benefits from outdoor public spaces
- Perceived quality of free time in public spaces



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