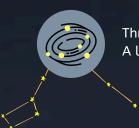


# LESS LIGHTING MORE STARS & MORE LIFE





Through light pollution, we lose our dark night sky. A lot of people have never seen the milky way with the naked eye ...



of the overall EU territory are artificially of the over



## WHY IS THIS A PROBLEM?

### BRIGHT NIGHTS?

The use of artificial lighting has increased so fast that nature and human beings could not adapt to it in due time!



Night-time exposure disturbs our circadian rhythm especially short-wave light ("blue light")! This can lead to sleep deprivation, depression, heart problems and cancer.



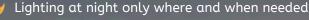
Plants and animals have developped a natural rhythm between bright days and dark nights over millions of years.

CIRCADIAN RHYTHM

Artificial lighting disturbs the life cycle of many nocturnal living things.

- Hunting and feeding become more difficult, orientation and mating habits are disturbed.
- 1/3 of all insects that are attracted by artificial lights at night die.
- Diurnal (daytime) animals may become active at night (instead of sleeping).
- Bright nights can postpone the period of growth for many plants.

## WHAT CAN BE IMPROVED?

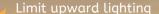


- Use of motion detectors & time switches.
- Shop windows, façades, trees in the garden why do the need to be illuminated?



Reduce the intensity of the lighting

Our eyes can easily adapt to low light intensity.



Unused light that is directed up into the sky adds to unnecessary light pollution and disturbs bats, insects ...



Use low colour temperatures ("warm light", ≤ 3000 Kelvin)





### How about **LED-lights**?

- Positive: long lifespan and energy efficiency (in comparison with older formats).
- But be careful: LED wave lengths have the highest percentage of "blue light" which contributes the most to light pollution and disturbs our circadian rhythm.
  - → **Therefore:** Be sure to use lights that are  $\leq$  3000 Kelvin.



Try to avoid lighting of vegetation and aquatic environments...

... and thus protect living organisms!





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