



# HOME OUTDOOR LIGHTING ASSESSMENT

Protecting the night sky starts at your front door



# Does your home protect the night?

Wherever you live, protecting the night starts at your front door. By following these four simple steps, you can reduce light pollution around your home and support a healthy nighttime environment for plants, animals, and people alike.

## 1 Learn about the need for quality lighting

Review the resources provided to better understand the impacts of light pollution and the need for quality lighting.

## 2 Assess your outdoor lighting

Using the provided checklist, assess the luminaires around your home and identify fixtures that need updating.

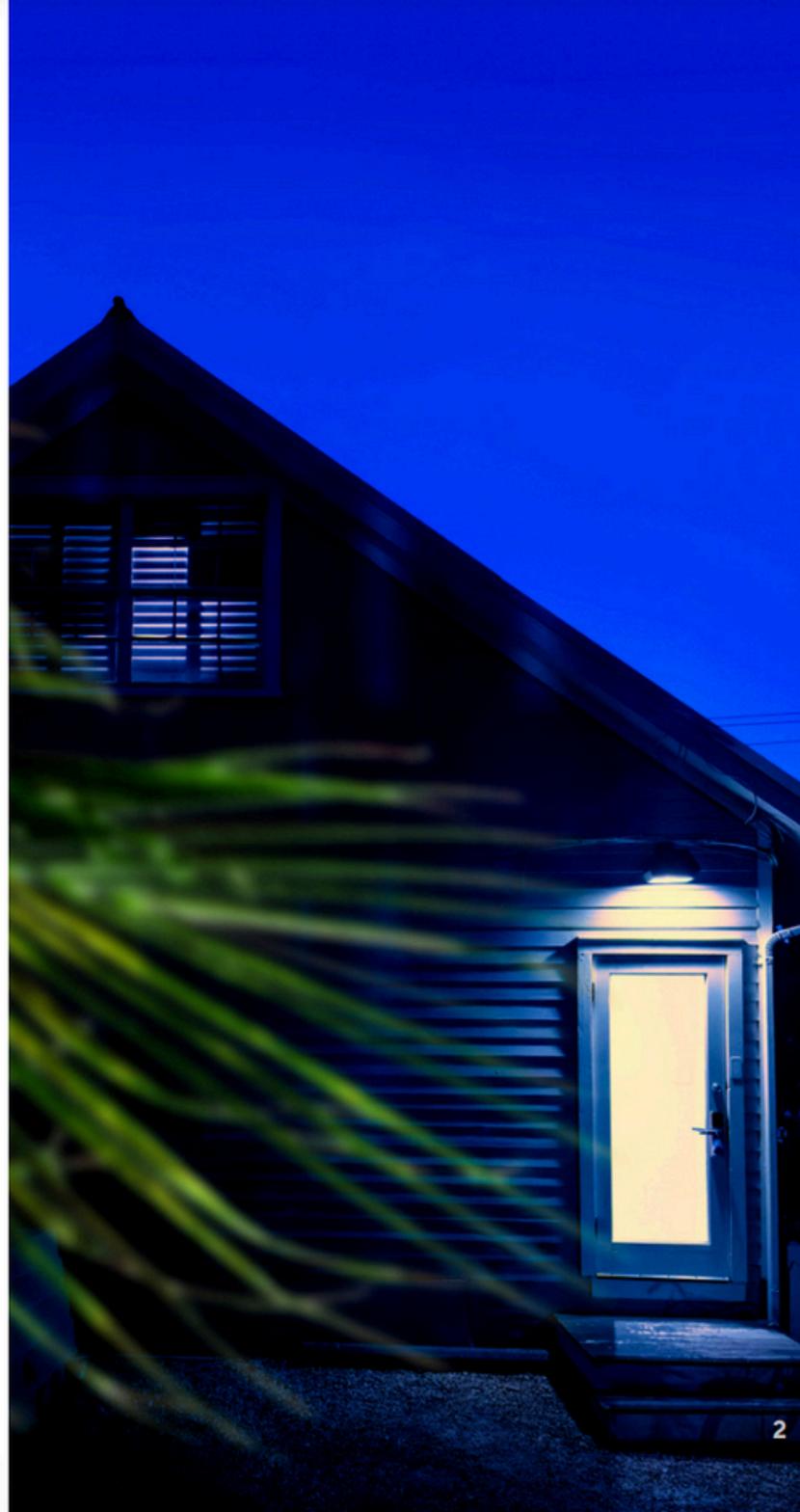
## 3 Replace or adjust outdoor light fixtures

Replace or adjust problematic light fixtures to comply with all Five Principles of Responsible Outdoor Lighting at Night.

## 4 Confirm your assessment by signing the pledge

By submitting photos of your lighting and signing the pledge to protect the night, you self-certify your home as dark sky-friendly.

*NOTE: We understand not everyone can modify the lighting around their home—especially if living in an apartment or rental unit. If possible, we encourage you to work with your property manager, use warm-colored, low-lumen bulbs, or turn off lights when not needed. This is self-certification activity centered on building positive awareness. Anyone engaging in meaningful action are welcome to participate.*



A recent study found that light pollution is increasing by approximately 9.6% each year.

80% of the world's population lives under sky glow. In the U.S. and Europe, this increases to 99%.

## What is light pollution?

Light pollution is the human-made alteration of outdoor light levels from those occurring naturally.

While light at night is essential in today's world, when we over-light, fail to use timers and sensors, or use the wrong color of light, we negatively affect the nighttime environment.



### Skyglow

Skyglow is the dome of brightness on the horizon that obscures our view of the night sky.



### Glare

Glare is when light enters our eyes at shallow angles, causing discomfort and restriction of the pupil, reducing visual acuity.



### Light trespass

Light trespass is when light is falling outside of the property boundary onto another property or home.

# The problem with bad lighting

Bad lighting at night not only disrupts the nighttime environment that plants, animals, and our communities depend on, it also reduces safety.

[Learn more about light pollution \(link\).](#)



Overly bright light at night and glare from unshielded luminaires create harsh contrast, impairing our vision, making it harder to see steps, or potential threats lurking in shadows.



Exposure to light at night can suppress the body's production of melatonin, a hormone that regulates our sleep-wake cycle, metabolism, and immune system.



Artificial lights can cause migrating birds to wander off course towards dangerous nighttime landscapes and cities. Millions of birds die colliding with needlessly illuminated buildings and homes every year.



Light pollution disrupts moths and other pollinators essential to healthy habitats and gardens, altering their behavior and contributing to population declines.

We're only beginning to grasp the impact of artificial light on habitats, with new research continually revealing more affected wildlife, including

Nocturnal animals, such as moths, birds (such as morepork / ruru), and mammals (such as the native bats / pekapeka). Seabirds, & little penguins.



- Insects
- Geckos
- Fireflies



## The importance of quality lighting at night

The key to protecting the night is quality lighting. Lighting that follows the Five Principles of Responsible Outdoor Lighting at Night ensures it's used only when and where it's needed, and in ways that reduce light pollution and its harmful effects on the world around us.

### The Five Principles of Responsible Outdoor Lighting at Night



#### Useful

All light should have a clear purpose. Use lighting only when and where it is needed.



#### Targeted

Shield and aim your light so it only falls downward and where it is useful.



#### Low-level

Light should be no brighter than necessary to save money and reduce glare.



#### Controlled

Lighting should only be on when needed. Use timers and motion sensors.



#### Warm-colored

Warm-colored light causes less skyglow. Use amber-toned lighting when possible.

Photo credit: Lampas / Jacob Due

# Home outdoor lighting assessment

Assess the outdoor lighting on your property. Give each luminaire a score and record what actions are needed to improve them.

- 
**1. Useful**
- 
**2. Targeted**
- 
**3. Low-level**
- 
**4. Controlled**
- 
**5. Warm-colored**

<b>Fixture name</b> <i>Exp. front porch</i>	<b>Principles checklist</b> <i>What principles are met?</i>	<b>Action needed</b> <i>What needs to be fixed?</i>	<b>Date of assessment</b>
Back Porch	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px; background-color: #4a69bd; color: white; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">1</div> <div style="font-size: 2em; color: black;">✓</div> <div style="border: 1px solid black; padding: 2px; background-color: #4a69bd; color: white; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">2</div> <div style="border: 1px solid black; padding: 2px; background-color: #4a69bd; color: white; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">3</div> <div style="font-size: 2em; color: black;">✓</div> <div style="border: 1px solid black; padding: 2px; background-color: #4a69bd; color: white; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">4</div> <div style="border: 1px solid black; padding: 2px; background-color: #4a69bd; color: white; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;">5</div> <div style="font-size: 2em; color: black;">✓</div> </div>	Light spills into neighbors yard. Light needs shield and timer.	1/25
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No uplight!

Fully shielded  
(80° from nadir)

Nadir



Warm Correlated Color  
Temperature (CCT)

✓ 2700 K

✓ 3000 K

✗ 4000 K

✗ 5000 K

✗ 6000 K

## Replace or adjust light fittings.

Now that you've identified the light fittings that need updating. It's time to replace or adjust them to ensure each outdoor fixture complies with all five principles. Before you get started, first ask if the light is necessary. If it is not, consider removing the light altogether. Here are some additional tips.

### Select adequate shielding

A quality light fitting does not allow light to spill into the sky. Choose a fully shielded fixture that directs light downward, no higher than 80 degrees from the nadir (direction light pointing too).

### Using timers and sensors

Even if a light fitting is located where light at night is needed, we highly recommend placing it on a timer or motion sensor to ensure it is only on when needed. This has the added benefit of saving money.

When choosing a light fitting or bulb for an outdoor fixture, select one with a warm or amber-toned correlated colour temperature (CCT). We recommend 2700K or lower for the most night friendly lighting.

If you must use bulbs with a higher CCT (such as 3000K) make sure they're well shielded, used only when needed (with motion sensors or timers), and aimed carefully to avoid light spill.

## Confirm Your Assessment & submit your photo

Once you've replaced or adjusted any problematic lighting, complete a final assessment to ensure each fixture meets all Five Principles for Responsible Outdoor Lighting at Night.

We want to see your hard work! We're always looking for great examples of lighting to share with others. Send your photo's to us at: [charlotte@wairarapadarkskynz.com](mailto:charlotte@wairarapadarkskynz.com)

**Thank you for your commitment to protecting the night**

We are thrilled you took the time to assess the lighting around your home. Keep the momentum going by spreading awareness and exploring ways to bring quality lighting to your community