



PHILIPS

LED lights



# Why Philips LED?

Because the **right light**  
is everything

# Why choose LED lights?

Switch to LED and experience instant, natural light. It reduces energy bills too, which is kind to your budget and the environment. Philips LED bulbs stay shining year after year. And some are dimmable, so you can set the atmosphere to match your mood.

## LED benefits



Warm or cool light



Light quality



Long lifetime



Energy efficiency



Familiar shapes



Dimmability



Environmentally  
friendly



Instant start



Warm or cool light

# Does all light look the same?

Depending on the colour temperature of a bulb, which is measured by units called Kelvin (K), the light can look very different. A colour temperature of 2700K, for example, is a warm cozy glow, while 4000K is a more energising, white light. Colour temperatures over 6500K are bluish white. Philips LED lighting is available in a range of different colour temperatures. You'll find these clearly highlighted on the pack.



2700K



Warm white



3000K

White



4000K

Cool white



6500K





Light quality

# What is the colour rendering index?

The colour rendering index (CRI) is the effect that a light source had on colour appearance. It is measured on a scale of 0 to 100. Natural light has a CRI of 100. Philips LED bulbs have a CRI above 80 so colours look vibrant and crisp.



60



Reasonable CRI

80



Good CRI

90



Excellent CRI




Long lifetime

# Light that lasts longer

LED versus other technologies

1x   
10.5W LED  
Lifetime  
15,000 hours  
each

1.9x 

20W Energy Saving lamp Lifetime 8,000 hours each

8x 

53W Halogen Lifetime 2,000 hours each





Energy efficiency

# Ways to save energy

## LED versus other technologies



LED bulb



Tornado CFL-i



Classic Halogen





Familiar shapes

# Familiar shapes you know and love

LED lustres



LED bulbs



LED spots



LED candles



LED tubes



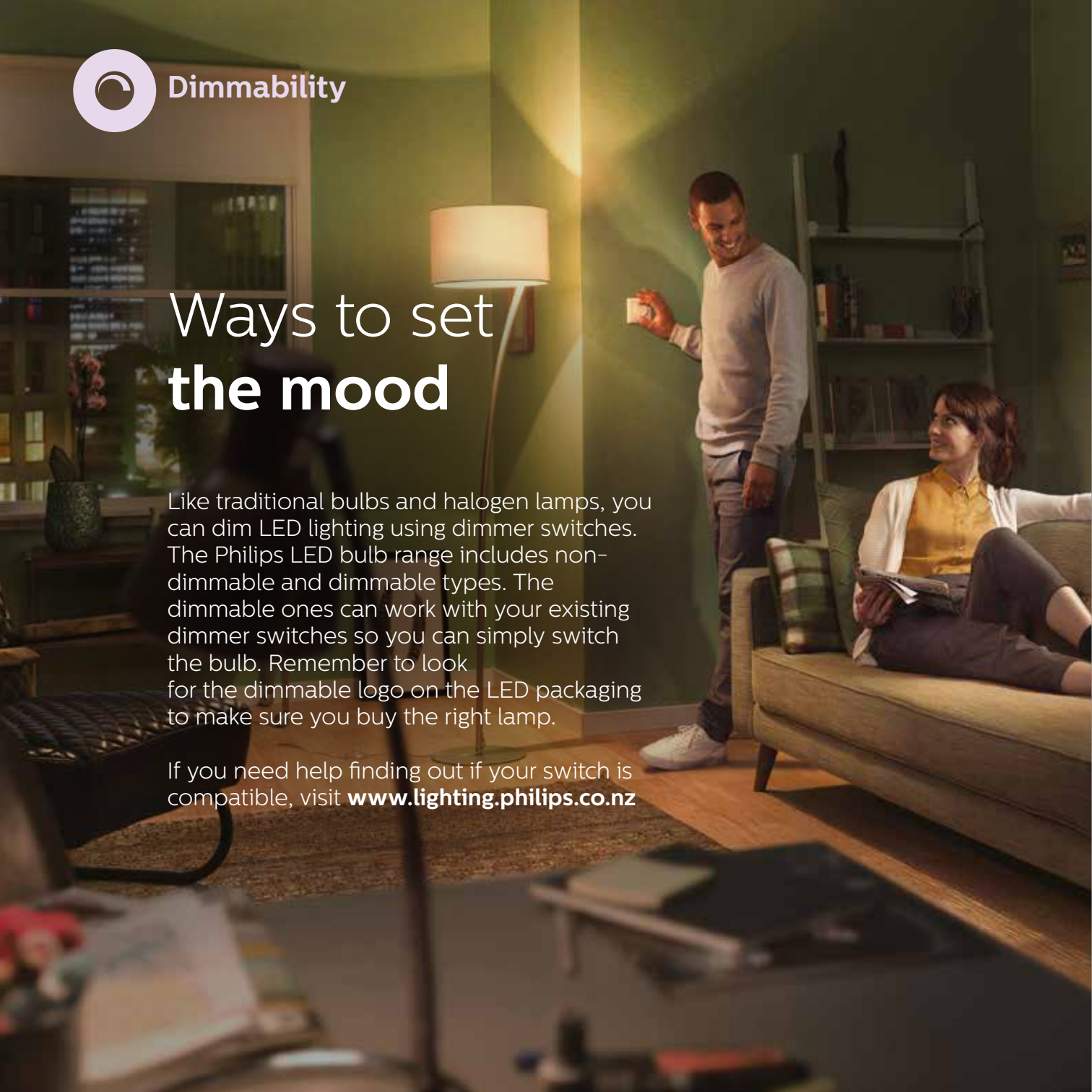


Dimmability

# Ways to set the mood

Like traditional bulbs and halogen lamps, you can dim LED lighting using dimmer switches. The Philips LED bulb range includes non-dimmable and dimmable types. The dimmable ones can work with your existing dimmer switches so you can simply switch the bulb. Remember to look for the dimmable logo on the LED packaging to make sure you buy the right lamp.

If you need help finding out if your switch is compatible, visit [www.lighting.philips.co.nz](http://www.lighting.philips.co.nz)







Environmentally friendly

# Clean light and clean at the end of its life

LED bulbs do not require special handling when you dispose of them or recycle them, unlike standard fluorescent and compact fluorescent lights that contain mercury. So they don't contribute to hazardous waste in the environment.

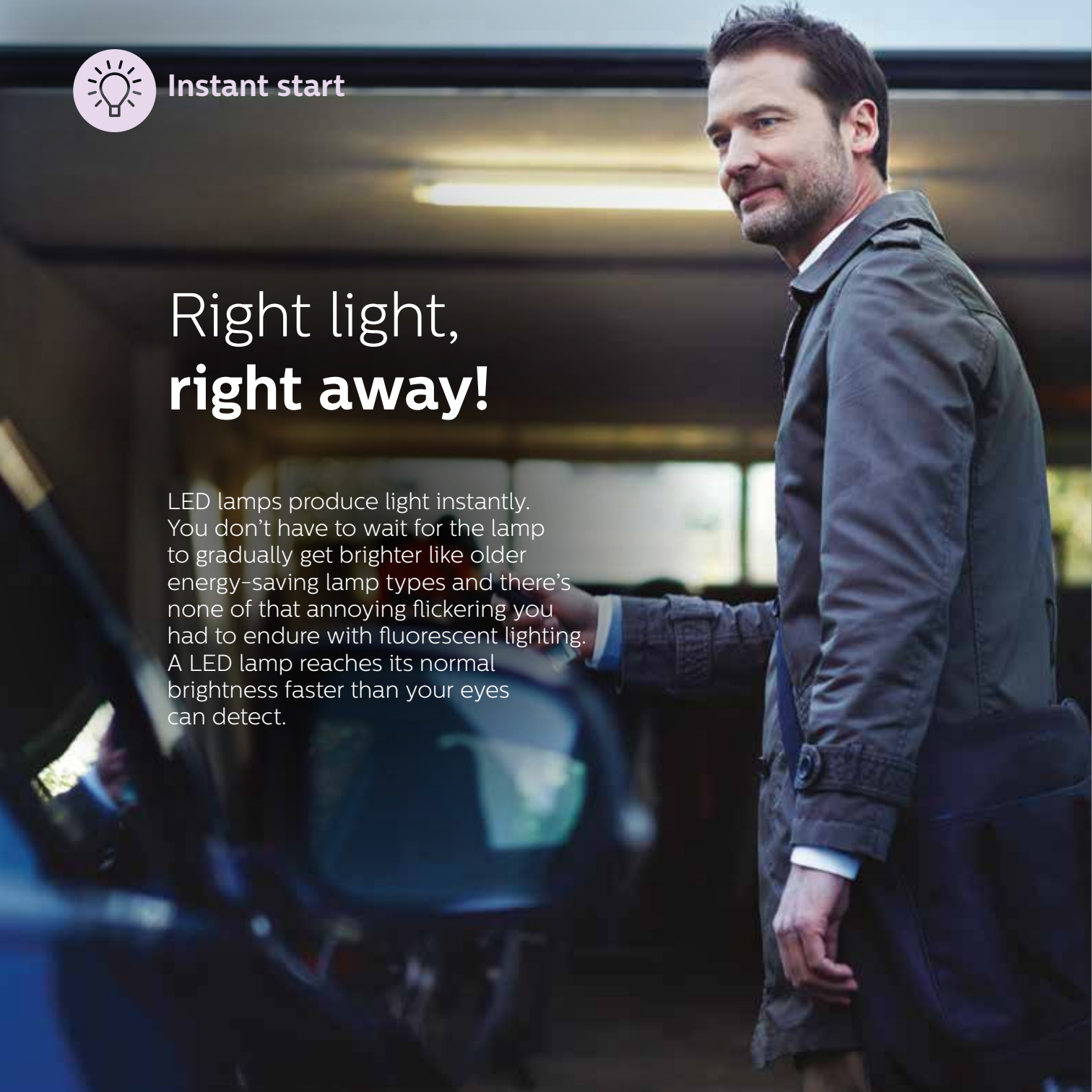




Instant start

## Right light, **right away!**

LED lamps produce light instantly. You don't have to wait for the lamp to gradually get brighter like older energy-saving lamp types and there's none of that annoying flickering you had to endure with fluorescent lighting. A LED lamp reaches its normal brightness faster than your eyes can detect.



## LED Innovations

New

Philips SceneSwitch LED

# One bulb two colour settings

Works with your existing switch

Wouldn't it be great to simply change the light colour to suit what you're doing. With the Philips SceneSwitch LED bulb, you can! Simply switch from warm and bright for a relaxing ambiance, to cool and functional for hobbies or work. And you can do this with your existing light switch so there's no extra wiring or installation needed.

innovation  you



Warm  
white



Cool  
white



Go to [www.philips.com/sceneswitch](http://www.philips.com/sceneswitch) for movies and more about this innovative product.

## LED Innovations

New

Philips SceneSwitch LED

# One lamp three light settings

Works with your existing switch

Sometimes you feel like a change in ambiance to suit whatever you're doing. With a Philips SceneSwitch LED lamp, you can easily change the setting from a bright light, to a natural light, to a cozy warm glow. There's no dimmer or extra wiring need, it's all done with your existing switch.

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Go to [www.philips.com/sceneswitch](http://www.philips.com/sceneswitch) for movies and more about this innovative product.





## LED Innovations

New

# WarmGlow:

# The more you dim the warmer the light

With the Philips WarmGlow dimmable LED bulbs, as you dim them, the light gets warmer. They let you create a perfect atmosphere from a cozy diffused light at 2200K to a whiter, more energizing 2700K.

As the light dims, it produces a relaxing ambience. In the past, this dimming effect was only available with halogen and incandescent lamps, now we offer it with LED bulbs. You can use them throughout the home wherever ambience is important.

The dimmable bulbs and candles are ideal for kitchens, living rooms and dining rooms. They fit perfectly in chandeliers, table lamps, and everywhere traditional light bulbs are used. Enjoy dimming your way!

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**Warm  
Glow**  
Dimmable Light



10% dimmed



50% dimmed



80% dimmed

A glowing Philips LED lamp classic bulb hangs from a cord in a kitchen setting. The bulb is spherical with a visible filament and is illuminated, casting a warm glow. In the background, a kitchen counter, a glass, and a hand holding a newspaper are visible, suggesting a cozy, lived-in environment.

LED Innovations

New

Philips LED lamps classic

# Designed to be seen

Do you still yearn for the familiar decorative style of incandescent bulbs and candles? Now you can have it with Philips LED lamps classic. Turn back the clock for a classic look, and at the same time, look forward to energy savings. The Philips LED lamps classic range is designed to be seen in your nostalgically styled, traditional and antique lamps where seeing the bulb adds to the magical atmosphere.

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## Looks good off and on

Available in the familiar pear and oval bulbs, candles and spotlights, Philips LED lamps classic use around 80% less energy than incandescent ones. It's what is inside that makes them different. You get the latest LED energy-saving technology that looks like incandescent. LED lighting lasts ten times longer than traditional light bulbs. In fact, it'll be around 15 years before you need to change the lamp, which saves also replacement costs.



## LED Innovations

New

Philips LED spot classic

It's what's inside that  
**makes the difference**

Perfect replacement for halogen spot

Philips LED spot classic is perfect for replacing your mains voltage halogen spots. It shines with the same colour and intensity as halogen, and with a glass front, it looks the same. And because these LED spots last longer and use a lot less energy than halogen, they'll save you money every time you use them. The **right light** makes the difference.

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## Common LED myths

Even though more and more people appreciate the benefits of LED lighting, there are still stories and misunderstandings going around. Let us shed light on the most common myths to give you a clearer picture of how LEDs can work for you.

### Myth 1:

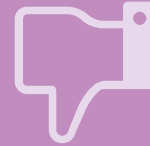
## LEDs don't get hot



LEDs do give off some heat, but much less than energy-saving sticks, twisters and traditional light bulbs. Just as importantly, when used in your light fittings at home, LEDs don't emit infrared (IR), only visible light. You can't see IR so it doesn't add to the brightness of the light; it just makes bulbs hotter and wastes energy. Another plus point is that LEDs don't emit ultraviolet (UV) light either.

### Myth 2:

## LED light quality is poor



No it's not. How well a light bulb reproduces colours in comparison to daylight is measured by what is called the 'Colour Rendering Index' (CRI). The CRI for white light LEDs is between 75 and 85, while the CRI for daylight is 100. The CRI of LEDs will continue to get higher, making them ideal for even more lighting applications. However, CRI is not the only way to judge the 'quality' of light. We've looked into how people choose light bulbs and discovered that they often preferred LEDs over halogen and incandescent bulbs based on overall colour and uniformity, not on the CRI value. This is why we also focus on creating high-quality LED bulbs with consistent light output. We have even developed our own way of measuring the light quality (we call it Optibin® technology) to ensure Philips LEDs meet your expectations.

### Myth 3:

## LEDs contain hazardous substances



LEDs do not contain mercury, lead or other toxic materials and are completely recyclable just like most other electronic devices.



#### **Myth 4:**

## **LEDs need time to warm up**

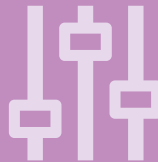
No they don't. Unlike fluorescent lamps and energy-saving twisters that come on slowly or even flicker, LEDs shine with their full light output almost instantly after switching them on. They can also be switched on and off continuously without shortening their lifespan.



#### **Myth 6:**

## **LED isn't yet value for money**

A Philips LED bulb has a lifespan of up to 15,000 hours, which at an average of around three-and-a-half hours on per day, means it'll be 15 years before you need to change the bulb. They also consume around 80% less energy than traditional lamps, so you'll soon enjoy savings in your energy bill. So yes, LED is already value for money, and as the price continues to come down, the added value will increase. Philips LED lamps are in fact, more effective than many 'similar' LED lamps with the same wattage and colour temperature, so you get brighter illumination for the same energy consumption.



#### **Myth 5:**

## **LEDs can't be dimmed and controlled**

Yes they can. Although LEDs are digital, which basically means they are either on or off, the light level can be set to different levels. This requires a dimmer switch. However not all LED light bulbs are designed to dim, so if you want to use a dimmer, please choose the lamps that show that they can be dimmed. Look for the dimmable logo on packs. In many cases, you can use your existing dimmer switches. Just remove your current lamp and replace it with a dimmable LED lamp. There's also an online list of dimmer switches (add URL) to help you make sure the LED is compatible.



#### **Myth 7:**

## **LEDs are harmful to the eyes**

LED lights are as safe to the eyes as any other artificial light source. They are not like lasers, the light is not focused to a single point, and the intensity is comparable to traditional bulbs and halogen lamps.



## Common LED myths

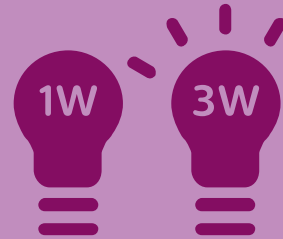
### Myth 8: LEDs last forever



LED bulbs do last a lot longer than the average light bulb, but no, they won't last forever. Like all light sources, they eventually fade over time. But remember that our LED light bulbs will keep shining almost as brightly as they did when you first fitted them, year after year.

### Myth 10:

## 3W LEDs are brighter than 1W LEDs



Not necessarily! In the past, we relied on wattage to give an idea of the brightness of a traditional bulb. But the number of watts (W) is just a measure of the power the bulb consumes. With LEDs, the number of watts does not tell you about brightness. Two different LEDs can consume the same number of watts but one may well be brighter than the other. When selecting LED bulbs, it's better to look at light output instead of power. The light output of a bulb is measured in a unit called lumens (lm), and this is indicated on the packaging. We also show the wattage of an equivalent traditional incandescent bulb that would give the same light output, but this is because we know you are still familiar with this.

### Myth 9:

## Switching to LED costs a lot

Although the initial cost of a LED bulb is higher than a traditional light bulb, in the long term you save money. The initial investment is more than paid back over the life of the bulb because the running costs are lower due to lower energy consumption and they won't need replacing for a very long time, typically around 15 years. And don't forget that the prices for LED lighting in 2015 are already lower than a few years ago, and are getting closer to the prices of traditional bulbs.



### Myth 11:

## All LED light bulbs shine with a very white light

The first LED bulbs were very white as this was the most effective way to use them, but today they are also available in an array of 'shades of white' from warm yellow through to cool blue. Look for the 'shade of white' indication on the packaging.





### **Myth 12:**

## **LEDs are not bright enough**

Yes they are. LED bulbs emit the same amount of light as traditional light bulbs, energy saving sticks and twisters. The main difference is that they use a lot less energy. For example, a 7W Philips LED bulb is just as bright as a 60W traditional light bulb or a 12W energy saving stick.



### **Myth 13:**

## **LEDs don't work in extremely cold environments**

LEDs actually become more efficient and last even longer when used in cold temperatures. Excessively high temperatures can shorten the life of electrical and electronic components (which is partly why traditional incandescent lamps don't last very long), so running a LED lamp in even the coldest climate is not an issue.

### **Myth 14:**

## **LEDs are not resistant to vibration**

There are no moving parts, filaments or fragile glass used in LED bulbs, so they are very robust. The Philips LED products all pass vibration tests according to internationally agreed standards (IEC), and in some cases, we use even tougher military standards to make sure our LEDs are going to last.





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