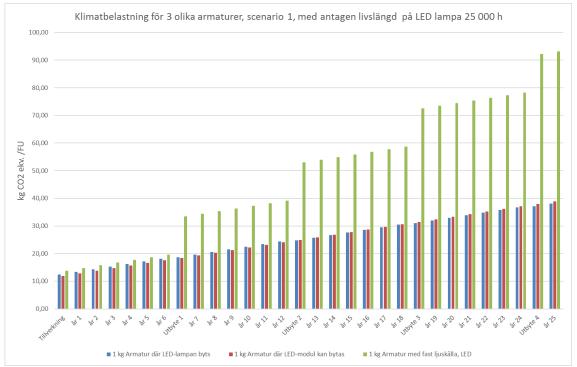
Villaägarna reveals unknown culprit of climate change:

Climate impact three times as great for disposable LED luminaires Lighting accounts for about 15 percent of the world's total electricity consumption. The lighting we use is therefore of great importance with regard to climate impact as well as to the household economy. Villaägarna's new report shows that the climate impact varies greatly between different types of LED lighting.

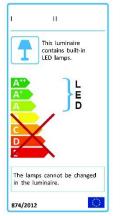
There are currently three types of LED luminaires on the market:

- Luminaires where the LED can be replaced
- Luminaires where the LED module can be replaced
- Luminaires with a fixed LED light source that cannot be replaced (disposable LED luminaires)



Scenario 1 with a burning time of the LED lamp of 25,000 hours shows the potential climate impact over time for the different luminaires. The result is reported per functional unit, FU, Luminaire (1kg) with LED lighting of 20 W for a study period of 25 years.

The comparisons in the report clearly show that aluminum outdoor lighting luminaires (LEDs), but also those made of stainless steel, with replaceable LED lamps/modules, have a potentially smaller environmental and climate impact over a 25-year period. The potential environmental impact of manufacturing, transport to the customer as well as operation and replacements can be three times as great for disposable LED luminaires (where there is no possibility of replacing the LED lamp/module).



Labeling for disposable LED luminaires

- These types of lamps are neither climate-smart nor wallet-friendly. Throwing away entire luminaires instead of exchanging light sources is unnecessary consumerism that does not belong in a modern and sustainable society, says Villaägarnas General Counsel Ulf Stenberg.

Initially, the climate impact is the same for the different luminaires, but over time the disposable LED lighting has a greater impact. The breaking point is the day the fixture needs to be replaced.

- Something that can make the climate impact even greater for disposable LED luminaires is if, for example, one of four façade lamps breaks and that type of façade lamp is no longer manufactured. From one day to another you no longer have uniform lighting and are then faced with the choice to also replace the luminaires that still work, says Ulf Stenberg.

Appendix

The report <u>"Comparative Lifecycle Analysis (LCA) on luminaires for outdoor LED lighting</u>" by Anna Pantze, Tyréns.

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