

Analysis and evaluation

Finding

BMW switched to LED lighting in all production areas in 2022 and has also reduced energy consumption by more than one gigawatt hour per year²¹. This will positively benefit BMW because energy costs can make up a significant portion of recurring monthly expenses. By using LED lights it will improve BMW's cash flow as the US Department of Energy estimates that between 5 to 30 percent can be saved on utility bills.²²

1A

The effectiveness of this strategy is shown where the total energy consumption of the BMW Group in 2022 was 6.3 million MWh. That is 2.8% less energy consumed than the year before²⁵. This shows me that BMW are effectively lowering their energy through the use of LED lights and other eco-friendly initiatives and therefore they are effectively working towards their sustainability aim for the BMW Group business model to be climate-neutral no later than 2050.²⁶

1E

2 marks

²¹ <https://www.bmwgroup-werke.com/steve/en/responsibility/sustainability-and-efficiency.html#:~:text=Switching%20to%20LED%20lighting%20in,several%20areas%20of%20mechanical%20production.> (BMW 6, 2024)

²² <https://www.energysage.com/energy-efficiency/why-consume-energy/> (Energysage, 2023)

²³ <https://www.iberdrola.com/sustainability/acid-rain> (Iberdrola, 2024)

²⁴ https://www3.epa.gov/acidrain/education/site_students/whyharmful.html#:~:text=Acid%20rain%20can%20be%20extremely,trees%20to%20take%20up%20water. (EPA, 2023)

²⁵ <https://www.bmw.com/mt/en/more-bmw/sustainability/vehicles-materials-production.html> (BMW 7, 2024)

²⁶ <https://www.bmwgroup.com/en/sustainability/goals.html#:~:text=We%20are%20focusing%20our%20effort%20neutral%20no%20later%20than%202050.> (BMW 8, 2024)