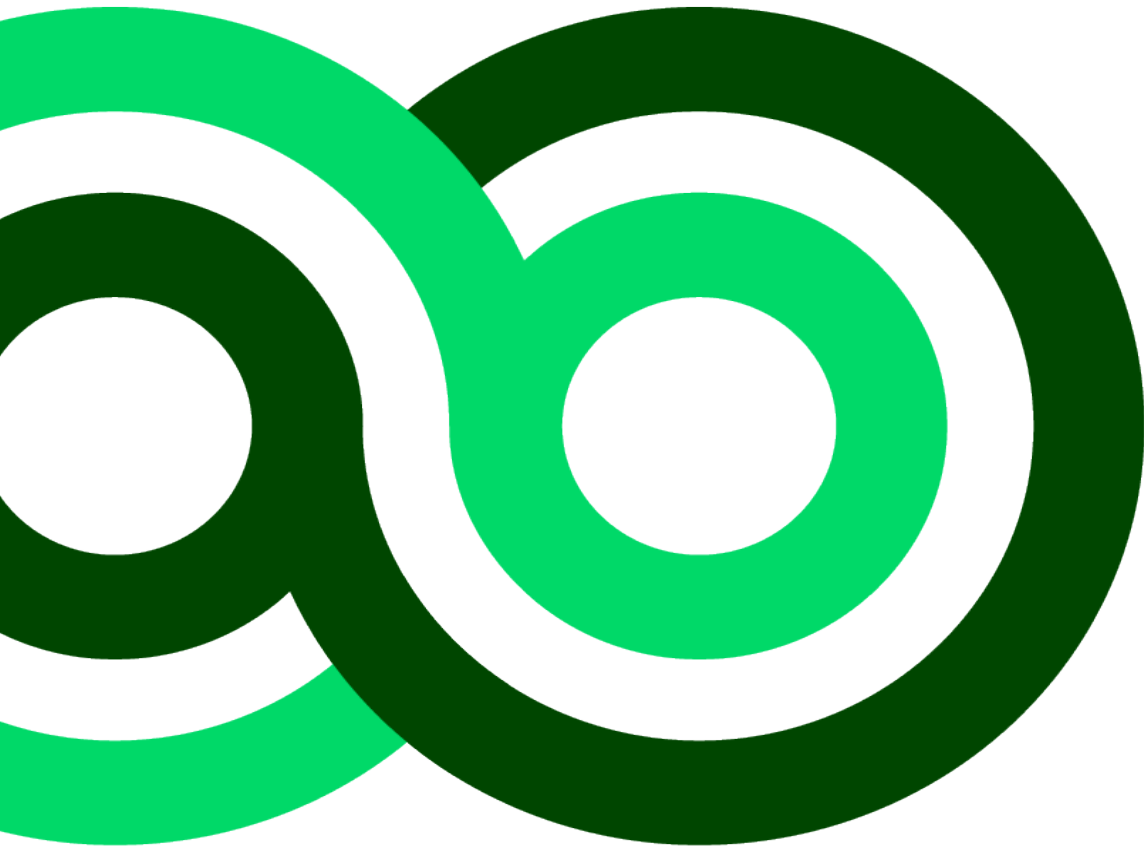


Greener Choice: LCA Award

Calculation Rules and Criteria





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1. INTRODUCTION

Green NCAP's Life Cycle Assessment (LCA) Award "Greener Choice" was launched in October 2023 and is used to highlight cars with the lowest impact on the climate over their complete vehicle life, including all relevant life cycle phases. This means that, in addition to minimising the output of greenhouse gases during use, the negative impact of these cars on the environment is further reduced by lower emissions from production, maintenance and end-of-life treatment. A visual stamp is used to create a clear recognition of the environmental value that the award represents.

The criteria for the award summarised in this document are based on Green NCAP's European LCA results, that are available online for every vehicle tested since 2022.

2. AIM

Since 2019, Green NCAP's star ratings have provided consumers with an easy way to compare the on-road environmental performance of new cars under identical driving conditions. LCA information complements the rating as it assesses the vehicle's complete environmental impact, taking into account factors like production, energy supply and end-of-life. With the introduction of the "Greener Choice" LCA Award, Green NCAP aims to help consumers make an informed and greener choice about the true sustainability of their cars, as it is believed to be a true differentiator for the wide choice of cars currently on offer. Moreover, it is hoped that the award will act as a catalyst for the industry to innovate and accelerate its development of more sustainable cars. Green NCAP strongly encourages manufacturers to recognise the life cycle as a critical part of vehicle development and to share detailed information relating to their own vehicle production.

3. CRITERIA AND APPLICABILITY

LCA Awards are given throughout the year to cars tested by Green NCAP that meet the following conditions. To be eligible for the Green NCAP LCA Award cars must

- a. be on sale in European union and/or UK;
- b. have been rated by Green NCAP since 2022 and have achieved 5-stars against the Green NCAP protocols in use in the year of publication;
- c. have estimated total life cycle greenhouse gas emissions equal to or less than the threshold, calculated on the basis of the Green NCAP methodology (see below for more details).

4. METHODOLOGY AND LIMIT

Green NCAP publishes greenhouse gas and primary energy demand life cycle assessment results of each tested vehicle in so called LCA-Fact Sheets, available for review and download in [LCA Information – European LCA Results](#) on Green NCAP's website. To allow for a general comparison between cars, the analysis assumes a vehicle lifetime of 16 years and an estimated mileage of 240,000 km. The calculations are based on the current forecast about changing average energy mix of the 27 EU Member States and the UK.

The investigations are based on publicly available data about global generic supply chains and do not yet consider the production or recycling processes of specific vehicle manufacturer brands. By using high-level statistical data, vehicle types can be more easily compared, but some manufacturers may calculate results differently based on specific in-house car model data. More detailed information about Green NCAP's methodology and data can be found in the latest version of document "*Green-NCAP-Life-Cycle-*

Assessment-Methodology-and-Data", available in "[For Engineers – Technical Papers](#)" on Green NCAP's website.

The specific vehicle values on which the LCA Award is based are available in the *LCA-Fact Sheets*, presenting the total life cycle estimated greenhouse gas emissions in units of *g CO₂-equivalent/km* and *tons CO₂-equivalent/vehicle*. The threshold below or equal to which the "Greener Choice" LCA Award is given uses units of *g CO₂-equivalent/km*. Primary Energy Demand is currently not considered.

The threshold for the award is determined after analyses of the full set of tested vehicles' LCA results of the last two years, and aims to highlight around 10% of the rated cars, ensuring only the top vehicles qualify. The limits applied for each rating year are as follows:

Test Year	LCA GHG emissions (g CO ₂ -equivalent/km)	Comments
2022	120	Based on cars tested in 2022 and 2023 2022 background data
2023	120	Based on cars tested in 2022 and 2023 2022 background data
2024	tbd	Based on cars tested in 2022 and 2023 2023 background data
2025	tbd	Based on cars tested in 2023 and 2024 2024 background data

5. COMMUNICATION AND BRANDING

The "Greener Choice" LCA Award is published in conjunction with the star rating and highlighted on Green NCAP's website with a unique visual stamp. The rating year also applies to the LCA Award. Where conditions have changed and the car no longer qualifies for the award, Green NCAP reserves the right to remove the information from its website.

Green NCAP encourages the wide use and communication of the "Greener Choice" LCA Award by the manufacturer and other stakeholders. Upon receiving the award, stakeholders wishing to use the LCA Award official branding in their advertising campaigns are kindly asked to use Green NCAP's visual identity guidelines as a reference and make sure the following sentence is used in conjunction with the logo:

Green NCAP's LCA Award is given to recently tested five-star cars that make the lowest impact on climate-changing emissions over their entire life cycle.

Master artwork files of the Green NCAP LCA Award logo are available on request to media@greenncap.com.