

Impact Report | Jackal KinetiCore



LAZER
KINETICORE 
INTEGRATED ROTATIONAL
IMPACT PROTECTION

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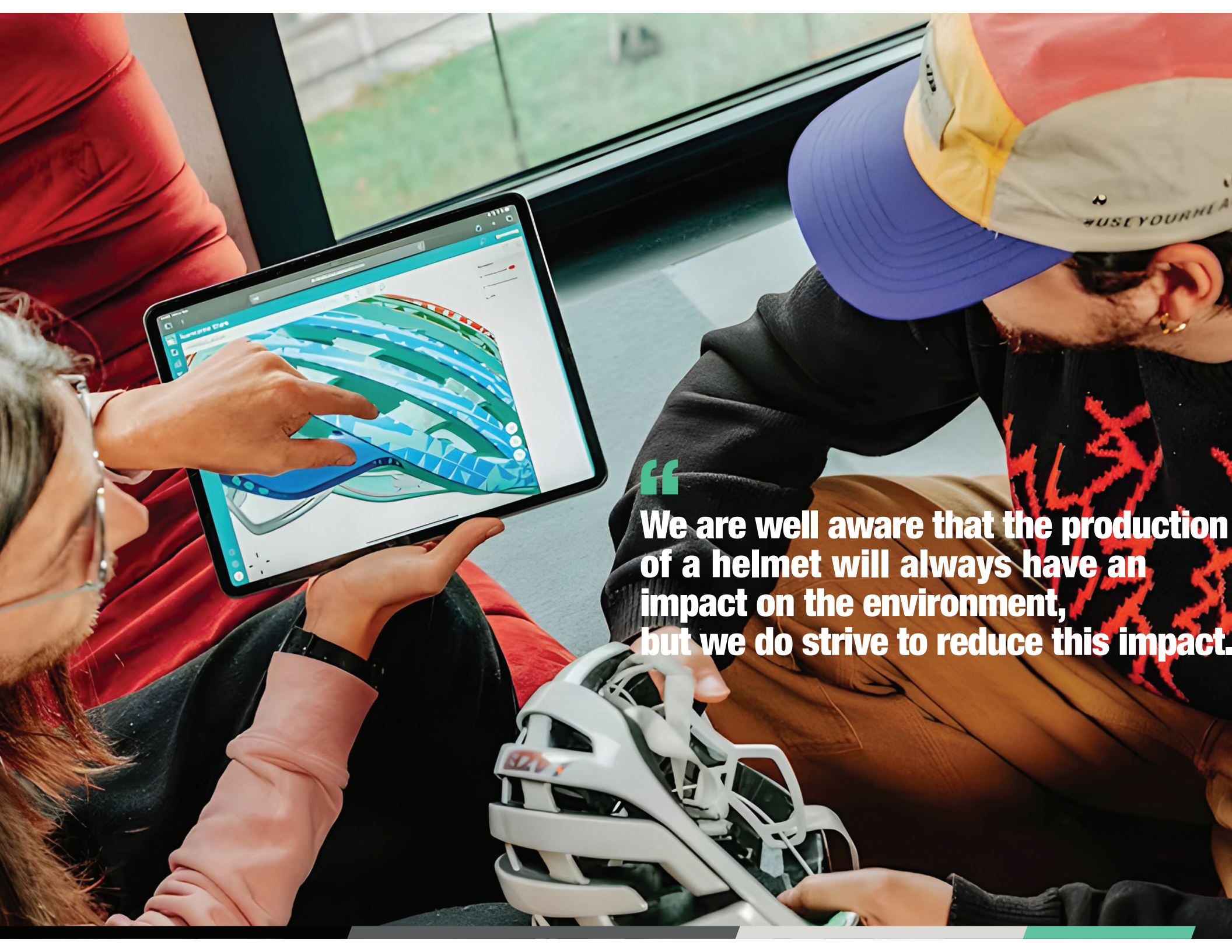
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53.200 kgCO2Eq



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We are well aware that the production of a helmet will always have an impact on the environment, but we do strive to reduce this impact.

Intro

With a goal to contribute to a society where cyclists can enjoy riding in safety, our main objective over the years is to benefit the cyclist. However, even products that benefit people have an impact on the environment.

It's high time to address this impact. To be able to address this, we first needed more knowledge.

Together with South Pole we started carrying out our first product life cycle assessment of one of our helmets in 2022. This to pinpoint the biggest contributors to climate change through a helmet's lifetime: from extraction of materials to production, distribution and end of life.

This allowed us to see where we can make meaningful changes and take it upon ourselves to make meaningful strides.

Our journey on this path – has just started. And we still have a long way to go. But we are riding towards a reduction of climate change impact in small but relevant and regular steps.

What follows in this report, is a clear look on the impact of a specific helmet's lifetime and what was improved to reduce this impact.

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To contribute to a society where all cyclists can enjoy riding in safety.



Phase I Jackal KinetiCore

Every helmet has an impact. So, where do we start? Jackal KinetiCore - Lazer's flagship mountain bike helmet and at the same time one of our most complicated helmets. With its many features to cater to mountain bikers such as a movable visor and camera mount, the helmet is made up of many different little parts. The more parts a helmet has, the harder it becomes to adjust and improve. A great place to start.

It's all in a name. Jackal KinetiCore (2022) is the successor of Jackal MIPS. Both helmets feature an added protection for rotational impact. However, Jackal KinetiCore is designed with a goal to reduce the quantity of materials required.

To better understand the result on the environment of introducing KinetiCore to Lazer helmets, we've conducted a lifecycle assessment (LCA).



A helmet's life

A helmet's life can be summarized in 6 large life cycle stages:

The use of:

raw materials

transport of materials

manufacturing

packaging

distribution

end-of-life

Through research we've come to understand that improvements in the material and manufacturing stage will be most influential – however each improvement even in the early stages is a step in the right direction.



What is kgCO2Eq!?

A man in a dark jacket is sitting on a grassy mountain peak, looking out at a vast mountain range. A bicycle and a helmet are lying on the ground next to him. The sky is overcast.

Step One. Understanding the number.

To understand the impact of a helmet through its lifetime, it needs to be made measurable. To do this we talk about the CO2Eq.

It may not say much to you at first glance. However, kgCO2Eq tells us something very important. The CO2-equivalent is a unit of measurement that is used to standardize the climate effects of various greenhouse gases. In short, it shows the global warming potential or the potential impact the product has on climate change.

Now, what exactly is climate change?

A term familiar to most. Climate change is the significant variation of average weather conditions becoming, for example, warmer, wetter, or drier—over several decades or longer. It is the longer-term trend that differentiates climate change from natural weather variability.

To summarize, the higher the CO2Eq, the higher the global warming potential.

Jackal KinetiCore in detail

Camera mount

Goggle-grip

Outershell parts

Snapbasket

Hanger cover & anchor

Visor

Fitsystem

EPS

Strapholder & steel pin

Visor screw & cover + ratchet for visor

Headband

Straps

Strap divider

Strap ring

Strap rubber

Magnetic buckle



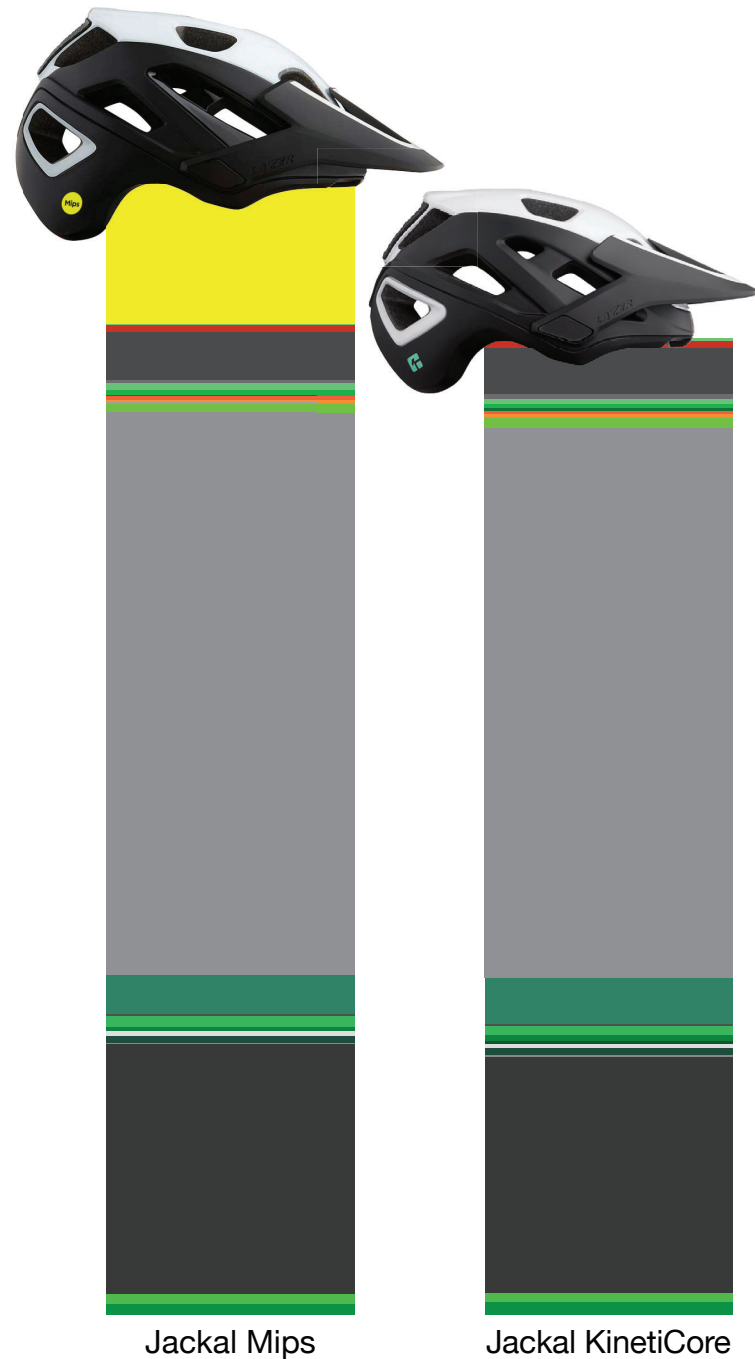
Results

Every helmet has an impact. A positive impact on a cyclist's safety. And a negative impact on climate change. The lifecycle assessment gives us a detailed picture of the latter.

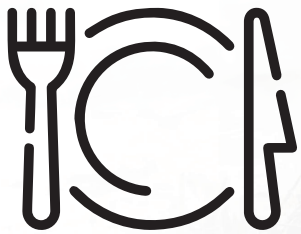
Manufacturing one Jackal MIPS comes at a cost of 16,1 kgCO2Eq. Understanding this number, and the biggest contributors towards this number gave us a baseline to reduce. In 2022, Jackal KinetiCore was introduced as replacement. Its design based on the previous Jackal now includes Lazer's own proprietary impact protection technology. With a goal to improve performance with a reduced amount of materials, a significant reduction is achieved. The production of one Jackal KinetiCore helmet now comes at a cost of 14,2 kgCO2Eq.

To put this 12% reduction into perspective. Since launch, close to 28.000 Jackal KinetiCore helmets were sold worldwide.

“Emission avoided: 53.200 kgCO2Eq”



53.200 kgCO2Eq?



35.467
meals of +/- 600cal



266 000 000
Google searches



26.600
hot showers of 10 min



665
car rides
from London to Paris



+/- 5
flights
from New York to Tokyo

Want to know all the details?

See the full life cycle assessment here:

https://qrco.de/Full_LCA_Jackal



Sources

<https://www.myclimate.org/en/information/faq/faq-detail/what-are-co2-equivalents/>

LCA of Jackal KinetiCore & Jackal MIPS – carried out by southpole

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